MENTERI ENERGI DAN SUMBER DAYA MINERAL
REPUBLIK INDONESIA

KEPUTUSAN MENTERI ENERGI DAN SUMBER DAYA MINERAL
REPUBLIK INDONESIA
NOMOR 1846 K/18/MEM/2018
TENTANG
PENGGUNAAN STANDAR PADA KEGIATAN USAHA MINYAK DAN GAS BUMI

MENTERI ENERGI DAN SUMBER DAYA MINERAL,

Menimbang : a. bahwa guna menjamin keselamatan pada kegiatan usaha minyak dan gas bumi dan untuk melaksanakan amanat ketentuan Pasal 16 ayat (2) sebagaimana diatur dalam Peraturan Menteri Energi dan Sumber Daya Mineral Nomor 18 Tahun 2018 tentang Pemeriksaan Keselamatan Instalasi dan Peralatan Pada Kegiatan Usaha Minyak dan Gas Bumi perlu menetapkan standar yang digunakan pada kegiatan usaha minyak dan gas bumi;

b. bahwa berdasarkan pertimbangan sebagaimana dimaksud dalam huruf a perlu menetapkan Keputusan Menteri Energi dan Sumber Daya Mineral tentang Penggunaan Standar pada Kegiatan Usaha Minyak dan Gas Bumi;

Mengingat : 1. Undang-Undang Nomor 22 Tahun 2001 tentang Minyak dan Gas Bumi (Lembaran Negara Republik Indonesia Tahun 2001 Nomor 136, Tambahan Lembaran Negara Republik Indonesia Nomor 4152);

2. Buku Peraturan Kepolisian Pertambangan, Lembaga Negara 1930 Nomor 341 (*Mijn Politie Reglement, Staatsblad* 1930 Nomor 341);
3. Peraturan Pemerintah Nomor 17 Tahun 1974 tentang Pengawasan Pelaksana Eksplorasi dan Eksploitasi Minyak dan Gas Bumi di Daerah Lepas Pantai (Lembaran Negara Republik Indonesia Tahun 1974 Nomor 20, Tambahan Lembaran Negara Republik Indonesia Nomor 3031);
4. Peraturan Pemerintah Nomor 11 Tahun 1979 tentang Keselamatan Kerja pada Pemurnian dan Pengolahan Minyak dan Gas Bumi (Lembaran Negara Republik Indonesia Tahun 1979 Nomor 18, Tambahan Lembaran Negara Republik Indonesia Nomor 3135);
5. Peraturan Pemerintah Nomor 35 Tahun 2004 tentang Kegiatan Usaha Hulu Minyak dan Gas Bumi (Lembaran Negara Republik lndonesia Tahun 2004 Nomor 123, Tambahan Lembaran Negara Republik lndonesia Nomor 4435) sebagaimana telah beberapa kali diubah terakhir dengan Peraturan Pemerintah Nomor 55 Tahun 2009 tentang Perubahan Kedua atas Peraturan Pemerintah Nomor 35 Tahun 2004 tentang Kegiatan Usaha Hulu Minyak dan Gas Bumi (Lembaran Negara Republik lndonesia Tahun 2009 Nomor 128, Tambahan Lembaran Negara Republik lndonesia Nomor 5047);
6. Peraturan Pemerintah Nomor 36 Tahun 2004 tentang Kegiatan Usaha Hilir Minyak dan Gas Bumi (Lembaran Negara Republik Indonesia Tahun 2004 Nomor 124, Tambahan Lembaran Negara Republik Indonesia Nomor 4436) sebagaimana telah diubah dengan Peraturan Pemerintah Nomor 30 Tahun 2009 tentang Perubahan atas Peraturan Pemerintah Nomor 36 Tahun 2004 tentang Kegiatan Usaha Hilir Minyak dan Gas Bumi (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 59, Tambahan Lembaran Negara Republik Indonesia Nomor 4996);

Negara Republik Indonesia Tahun 2015 Nomor 132) sebagaimana telah diubah dengan Peraturan Presiden Nomor 105 Tahun 2016 tentang Perubahan atas Peraturan Presiden Nomor 68 Tahun 2015 tentang Kementerian Energi dan Sumber Daya Mineral (Lembaran Negara Republik Indonesia Tahun 2016 Nomor 289);

8. Peraturan Menteri Energi dan Sumber Daya Mineral Nomor 13 Tahun 2016 tentang Organisasi dan Tata Kerja Kementerian Energi dan Sumber Daya Mineral (Berita Negara Republik Indonesia Tahun 2016 Nomor 782);
9. Peraturan Menteri Energi dan Sumber Daya Mineral Nomor 18 Tahun 2018 tentang Pemeriksaan Keselamatan Instalasi dan Peralatan pada Kegiatan Usaha Minyak dan Gas Bumi (Berita Negara Republik Indonesia Tahun 2018 Nomor 356);

MEMUTUSKAN:

Menetapkan : KEPUTUSAN MENTERI ENERGI DAN SUMBER DAYA MINERAL TENTANG PENGGUNAAN STANDAR PADA KEGIATAN USAHA MINYAK DAN GAS BUMI.

KESATU : Kontraktor atau Pemegang Izin Usaha wajib menerapkan Standar Nasional Indonesia (SNI) Wajib dan Standar Kompetensi Kerja Nasional Indonesia (SKKNI) Wajib sesuai dengan ketentuan peraturan perundang-undangan untuk menjamin Keselamatan Instalasi dan Peralatan pada kegiatan usaha Minyak dan Gas Bumi.

KEDUA : Dalam hal Standar Nasional Indonesia (SNI) Wajib dan Standar Kompetensi Kerja Nasional Indonesia (SKKNI) Wajib belum ditetapkan, standar lain yang dapat digunakan pada Kegiatan Usaha Minyak dan Gas Bumi adalah sebagai berikut:

a. Standar Nasional Indonesia (SNI) dan Standar Kompetensi Kerja Nasional Indonesia (SKKNI) yang digunakan pada kegiatan usaha Minyak dan Gas Bumi selain standar wajib sebagaimana dimaksud dalam Diktum KESATU; atau

b. Standar lain sebagaimana tercantum dalam Lampiran yang merupakan bagian tidak terpisahkan dari Keputusan Menteri ini.

KETIGA : Penggunaan standar selain standar sebagaimana dimaksud dalam Diktum KEDUA, wajib mendapatkan persetujuan dari Direktur Jenderal yang membidangi Minyak dan Gas Bumi.

KEEMPAT : Dengan berlakunya Keputusan Menteri ini, Keputusan Direktur Jenderal Minyak dan Gas Bumi Nomor 37.K/70/DJM/1990 tentang Standar dalam Operasi Pertambangan Minyak dan Gas Bumi dan Pengusahaan Sumber Daya Panas Bumi sepanjang yang digunakan pada kegiatan usaha Minyak dan Gas Bumi, dicabut dan dinyatakan tidak berlaku.

KELIMA : Keputusan Menteri ini mulai berlaku pada tanggal ditetapkan.

Ditetapkan di Jakarta
pada tanggal 17 Mei 2018

MENTERI ENERGI DAN SUMBER DAYA MINERAL
REPUBLIK INDONESIA,

ttd.

IGNASIUS JONAN

Tembusan:
1. Sekretaris Jenderal Kementerian Energi dan Sumber Daya Mineral
2. Inspektur Jenderal Kementerian Energi dan Sumber Daya Mineral
3. Direktur Jenderal Minyak dan Gas Bumi

Salinan sesuai dengan aslinya
KEMENTERIAN ENERGI DAN SUMBER DAYA MINERAL
Kepala Biro Hukum,

Hufron Asrofi
NIP 19601015 19810 3 1002

LAMPIRAN
KEPUTUSAN MENTERI ENERGI DAN SUMBER DAYA MINERAL
REPUBLIK INDONESIA
NOMOR : 1846 K/18/MEM/2018
TANGGAL : 17 MEI 2018
TENTANG
PENGGUNAAN STANDAR PADA KEGIATAN USAHA MINYAK DAN GAS BUMI

STANDAR LAIN

A. Standar Rekayasa Sipil dan Struktur Umum

NO	URAIAN KEGIATAN	STANDAR	
1	Beban Minimum dan kombinasi beban pada desain Struktur Fasilitas di Darat (*Onshore*)	UBC 1997, Volume 2	*1997 Uniform Building Code : Volume 2 : Structural Engineering Design Provisions*
		ANSI/ASCE 7-95	*Minimum design loads for buildings and other Structures*
		BS 6399	*Loading for Buildings*
		BS 449	*Specification for the use of structural steel in building*
		BS EN 1990	*Basis of Structural Design*
		EN 1991	*Loads and ULS Load Combinations*
2	Penilaian (*Assessment*) bahaya pada Fasilitas di Darat (*Onshore*)	ASCE 7	*Minimum Design Loads for Buildings and Other Structure*
		NFPA 59A	*Standard for the production, storage and handling of liquefied natural gas*
		EN 1473	*Installation and equipment for liquefied natural gas*
		EN 1998	*Eurocode 8: Design of Structures for Earthquake Resistance*
		EN 14620	*Design and manufacture of site built, vertical, cylindrical, flatbottomed steel tanks for the storage of refrigerated, liquefied gases with operating temperatures between 0°C and -165°C*
		ASCE 4-98	*Seismic Analysis of Safety-Related Nuclear Structures*
		UBC 1997	*Uniform Building Code*
		ASCE	*Guidelines For Seismic Evaluation and Design of Petrochemical Facilities*
3	Desain dan Rekayasa Modul Tahan Ledak Portabel (*Portable Blast-Resistant Modules*)	ASCE 40265	*Design of blast resistant buildings in petrochemical facilities*
		ASTM A 36	*Standard specification for carbon strcutural steel*
		ASTM A 588	*Standard specification for high-strength lowalloy strcutural steel, uo to 50 ksi (345 Mpa) minimum yield point, with atmospheric corrosion resistance*
		API 753	*Management of hazard associated with location of process plant portable buildings*
		BS 476	*Fire tests on building material and structures*
		BS 476-3	*Fire tests on building materials and structures – Part 3: Classification and method of test for external fire exposure to roofs*
		BS 476-7	*Part 7: Method of test to determine the classification of the surface spread of flame of products*
		BS 4449	*Steel for the reinforcement of concrete – Weldable reinforcing steel – Bar, coil and decoiled product – Specification*

NO	URAIAN KEGIATAN	STANDAR	
		BS 5970	*Code of practice for thermal insulation of pipework and equipment in the temperature range –100 °C to +870 °C*
		EN 10025	*Hot rolled products of structural steel*
		IEC 60079-14	*Electrical apparatus for explosive gas atmospheres – Part 14: Electrical installations in hazardous areas (other than mines)*
		ISO 898-1	*Mechanical properties of fasteners made of carbon steel and alloy steel – Part 1: Bolts, screws and studs*
		ISO 7411	*Hexagon bolts for high-strength structural bolting with large width across flats (thread lengths according to ISO 888) – Product grade C – Property classes 8.8 and 10.9*
		ISO TR 11069	*Aluminium structures – Material and design – Ultimate limit state under static loading*
4	Penilaian Lokasi Fasitilas Darat (*Onshore Facilities*)	BS 1377	*Methods Of Test For Soils For Civil Engineering Purposes*
		BS 5930	*Code Of Practice For Site Investigations*
		ASTM D420	*Standard Guide To Site Characterization For Engineering Design And Construction Purposes*
		ASTM D1452	*Standard Test Method For Soil Exploration And Sampling By Auger Borings*
		ASTM D1586	*Standard Test Method For Standard Penetration Test (SPT) And Split Barrel Sampling Of Soils*
		ASTM D1587	*Standard Test Method For Thin-Walled Tube Sampling Of Soils For Geotechnical Purposes*
		ASTM D2573	*Standard Test Method For Field Vane Shear Test In Cohesive Soil*
		ASTM D3282	*Standard Practice For Classification Of Soils And Soil Aggregate Mixtures For Highway Construction Purposes*
		ASTM D3740	*Standard Practice For Minimum Requirement For Agencies Engaged In Testing And/Or Inspection Of Soil And Rock As Used In Engineering Design And Construction*
		ASTM D4719	*Standard Test Method For Prebored Pressuremeter Testing In Soils*
		ASTM D5778	*Standard Test Method For Electronic Friction Cone And Piezocone Penetration Testing Of Soils)*
5	Penyiapan Lokasi dan Pengerjaan Tanah (*Earth Work*)	BS 6031	*Code of practice for earthworks*
		BS 1377	*Soils for civil engineering purposes*
		BS 5607	*Code of Practice for Safe Use of Explosives*
		ASTM C33	*Standard Specification for Concrete Aggregates*
		ASTM D1556	*Standard Test Method for Density and Unit Weight of Soil in place by the Sand-Cone Method*
		ASTM D1557	*Standard Test Methods for Laboratory Compaction Characteristics of Soil using modified effort (2700KN-m/m3)*
		ASTM D2167	*Standard Test Method for density and unit weight of soil in place by the Rubber Balloon method*
		ASTM D5195	*Standard Test Method for Density of Soil and Rock In-Place at Depths Below Surface by Nuclear Methods*
		ASTM D6938	*Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)*

NO	URAIAN KEGIATAN	STANDAR	
		AASHTO T88, T89, T90, T180, T193	*American Association of State Highway and Transportation Officials*
6	Pengerjaan dan Pelapisan Jalan	AASHTO GDPS-4-M	*A Policy on Geometric Design of Highways and Streets*
		AASHTO GDHS-5	*Guide for Design of Pavement Structures*
		AASHTO MMS-1	*Guidelines for Maintenance Management Systems*
		ASTM Vol 4.03	*Road & Paving Materials*
		AASHTO VLVLR-1	*Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)*
		AASHTO GBF-4	*Guide for the Development of Bicycle Facilities*
		AASHTO GPF-1	*Guide for the Planning, Design, and Operation of Pedestrian Facilities*
		AASHTO MM-4	*Maintenance Manual for Roadway and Bridges*
		AASHTO RSDG-4	*Roadside Design Guide*
		BS 1722-10	*Specification for Anti-Intruder Fences in Chain Link and Welded Mesh*
7	Fondasi Tanki, Kompleks Tanki (*Tank Farm*), dan Fasilitas Penyimpanan Terpisah (*Remote Containment*)	API 620	*Design and construction of large, welded, low pressure tanks*
		API 650	*Welded tank for oil storage*
		API RP 652	*Linings of aboveground petroleum storage tank bottoms*
		API 653	*Tank inspection, repair, alteration and reconstruction*
		BS 8110	*Code of practice for structural use of concrete in buildings and structures*
8	Rekayasa Geoteknik Fasilitas di Darat (*Onshore*)	BS 6031:2009	*Code of Practice for Earthworks*
		BS 6349-1-3:2012	*Maritime Works. General. Code Of Practice For Geotechnical Design*
		BS 8004:1986	*Code of Practice For Foundation*
		BS 8002:2015	*Code of Practice For Earth Retaining Structures*
		BS 8081:1989	*Code of Practice For Ground Anchorages*
		BS 5896:1980	*Specification For High Tensile Steel Wire And Strand For The Prestressing Of Concrete*
		BS 5950-1:2000	*Structural Use Of Steelwork In Building. Code of Practice for Design. Rolled And Welded Sections*
		BS 4360:1990	*Specification for weldable structural steels*
		BS EN 1997-1:2004	*Geotechnical Design – Part 1: General Rules*
		BS EN 1998-1:2004	*Design of structures for earthquake resistance - Part 1 : General rules, seismic actions and rules for buildings*
		ASTM D5882	*Standard Test Method for Low Strain Impact Integrity Testing of Deep Foundations*
		ASTM D4945	*Standard Test Method for High-Strain Dynamic Testing of Deep Foundations*
9	Desain dan Rekayasa Bangunan	ASHRAE 52.1	*Gravimetric and Dust-Spot Procedures for Testing AirCleaning Devices Used in General Ventilation for Removing Particulate Matter (ANSI approved)*
		ASHRAE 55/55a	*Thermal Environmental Conditions for Human Occupancy and Addendum*
		ASHRAE 62/62a	*Ventilation for Acceptable Indoor Air Quality and Addendum*
		NFPA 90A	*Standard for the installation of air conditioning and ventilating systems*
		BS 6399	*Loading for Buildings*
		BS 5628	*Use of Masonry*

NO	URAIAN KEGIATAN	STANDAR	
		BS 4551	*Mortars, Screeds and Plaster*
		BS 6367	*Drainage of Roofs and Paved Areas*
		BSCP 144	*Roof Covering (Built-Up Bitumen Felt)*
		BS 151	*Doors and windows*
		BS 2021	*Code Of Practice For Tile Flooring*
		BS 204	*In-Situ Floor Finishes*
		BS 459	*Doors*
		BS 743	*Materials For Damp Proof Courses*
		BS 747	*Roofing Felts*
		BS 1191	*Gypsum Building Plasters*
		BS 1200	*Sands For Mortar For Plain And Reinforced Brickwork And Masonry*
		BS 3921	*Masonry Clay Brick*
		BS 1230	*Gypsum Plasterboard*
		BS 1245	*Metal Door Frames (Steel)*
		BS 1286	*Clay Tiles For Flooring*
		BS 3260	*PVC Floor Tile*
		BS 3827	*Buildings' Hardware*
		BS 4131	*Terrazzo Tiles*
		BS 4883	*Aluminium Alloy Windows*
		IEC 60364	*Electrical installation requirements*
		ISO 31/VII	*Quantities and units of acoustics*
		ISO 717-1	*Part 1: Airborne sound insulation in buildings and of interior building elements*
		ISO 717-3	*Part 3: Airborne sound insulation of facade elements and facades*
		NFPA 101	*Life Safety Code*
10	Desain Bangunan Tahan Ledak (*Blast Resistant*)	ASCE 40265	*Design of Blast Resistant Buildings in Petrochemical Facilities*
		SG22, CMA	*Siting and Construction of New Control Houses for Chemical Manufacturing Plants, Chemical Manufacturing Association*
		CIA 1992	*An Approach to The Categorization of Process Plant Hazard and Control Building Designs, Chemical Industries Association*
		API RP 752	*Management of Hazards Associated with Location of Process Plant Building, American Petroleum Institute*
		BS 476	*Fire tests on building materials and structures*
		BS 476-3	*Part 3: External fire exposure roof test*
		BS 476-7	*Part 7: Method of test to determine the classification of the surface spread of flame of products*
		BS 4449	*Thermal insulation of pipework and equipment in the temperature range – 100 Degrees C to + 870 Degrees C)*
		BS 5628	*Code of practice for the use of masonry*
		BS 5970	*Carbon steel bars for the reinforcement of concrete*
11	Perlindungan terhadap Kebakaran dan Kondisi Suhu Sangat Rendah (*Cryogenic*) pada Struktur Baja	ACI 216.1/ TMS-0216	*Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*
		ACI 318	*Building Code Requirements for Structural Concrete*
		ACI 506.2	*Specification for Materials, Proportioning, and Application of Shotcrete*

NO	URAIAN KEGIATAN	STANDAR	
		ACI 506.3	*Guide to Certification of Shotcrete Nozzlemen*
		ACI 506.4	*Guide to the Evaluation of Shotcrete*
		ASTM A1064/ A1064M	*Standard Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement*
		ASTM C 33	*Standard Specification for Concrete Aggregates*
		ASTM C 150	*Specification for Portland Cement*
		ASTM E 119	*Fire Tests of Building Construction and Materials*
		NFPA 59A	*Standard for the Production, Storage and Handling of Liquefied Natural Gas*
		API RP 2218	*Fireproofing Practices in Petroleum & Petrochemical Processing Plants.*
		API 2510A	*Fire Protection Considerations for the Design and Operation of LPG Storage Facilities*
		API RP14G	*Recommended Practice for Fire Prevention and Control on Open Type Offshore Production Platforms*
		API 2FB	*Recommended Practice for the Design of Offshore Facilities Against Fire and Blast Loading*
		BS 8110	*Structural use of concrete*
		BS EN 1473	*Installation & Equipment for Liquefied Natural Gas – Design of Onshore Installations*
		BS 476: Part 21	*Fire tests on building materials and structures.— Part 21: Methods for determination of the fire resistance of loadbearing elements of construction*
		BS 476: Part 21	*Structural use of steelwork in building - Code of practice for fire resistant design*
		BS 5950-8	*Structural use of steelwork in building - Code of practice for fire resistant design*
12	Struktur Baja	ASTM A307	*Standard Specification For Carbon Steel Bolts And Studs, 60000 Tensile Strength*
		AWS D1.1	*Structural Welding Code, Steel*
		AISC	*Steel Construction Manual*
		BS 4-1	*Structural Steel Sections: Part 1: Specification for Hot-rolled Sections.*
		BS 4190	*ISO Metric Black Hexagon Bolts, Crews and Nuts*
		BS 5950	*Structural Use Of Steelwork In Building*
		EN 499	*Welding Consumables. Covered Electrodes for Manual Metal Arc Welding of Non Alloy and Fine Grain Steels. Classification.*
		EN 10034	*Structural Steel I and H Sections. Tolerances on Shape and Dimensions.*
		EN 10056-1	*Specification for Structural Steel Equal and Unequel Angles. Dimensions*
		EN 10204	*Metallic Products. Types of Inspection Documents*
		EN 10210-2	*Hot Finished Structural Hollow Sections of Non-alloy and Fine Grain Steels. Tolerances, Dimensions and Sectional Properties.*
		EN 10219-2	*Cold Formed Welded Structural Hollow Sections of Non-alloy and Fine Grain Steels. Tolerances, Dimensions and Sectional Properties.*
		EN 1993	*Design of Steel Structures*
		EN 10025	*Hot rolled products of non-alloy structural steel*
		ISO 17025	*Competence of Testing and Calibration Laboratories*
		ISO 898-1	*Part 1: Bolts, Screws And Studs*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 898-2	*Part 2: Nuts With Specified Proof Load Values; Coarse Thread*
		ISO 4014	*Hexagon Head Bolts; Product Grades A and B*
		ISO 4032	*Hexagon Nuts, Style 1; Product Grades A and B*
		ISO 887	*Plain Washers For Metric Bolts, Screws and Nuts For General Purposes- Genaral Plan.*
		ISO 888	*Bolts, Screws and Studs; Nominal Lengths, and Thread Lengths For General Purpose Bolts*
		ISO 1461	*Metallic Coatings; Hot-Dip Galvanized Coatings On Fabricated Ferrous Products; Requirements*
13	Desain dan Konstruksi dari Fondasi Beton yang Diperkuat (*Reinforced Concrete*) dan Struktur Design and Construction of Reinforced Concrete Foundations and Structures	BS 8110	*The Structural Use of Concrete*
		BS 12	*Specification for Portland Cement*
		BS EN 197-1	*Cement, Composition, Specifications and Conformity Criteria for Common Cement*
		BS 882	*Specification for Aggregates From Natural Sources for Concrete*
		BS EN 12620	*Aggregates for Concrete*
		BS 812	*Testing Aggregates*
		BS EN 1008	*Tests for mechanical and physical properties of aggregates BS EN 1097 Mixing Water for Concrete. Specification For Sampling, Testing and Assessing the Suitability of Water, Including Water Recovered from Processes in the Concrete Industry, as Mixing Water for Concrete*
		BS 4449	*Carbon Steel Bars for the Reinforcement of Concrete*
		BS 8666	*Specifications for Scheduling, Dimensioning, Bending and Cutting of Steel Reinforcement for Concrete*
		BS 4483	*Steel Fabric for the Reinforcement of Concrete*
		BS EN 10080	*Steel Reinforcement of Concrete*
		BS 5896	*High Tensile Steel Wire And Strand for The Pre stressing of Concrete*
		BS EN 480	*Admixtures for Concrete, Mortar and Grout*
		BS 5075	*Concrete Admixtures*
		BS EN 445	*Grout for Pre stressing Tendons; Test Methods*
		BS EN 446	*Grout for Pre stressing Tendons; Grouting Procedures*
		BS EN 447	*Grout for Pre stressing Tendons; Basic Requirements*
		BS 8102	*Protection of Structures Against Water from the Ground*
		BS 5328-2	*Concrete. Methods for specifying concrete mixes*
		BS 8500-1	*Concrete. Complementary British Standard to BS EN 206. Method of specifying and guidance for the specifier*
		BS 8007	*Design of Retaining Structures for Retaining Aqueous Liquids*
		BS 5135	*Arc Welding of Carbon and Carbon Manganese Steels*
		BS 4466	*Specification for scheduling, dimensioning, bending and cutting of steel reinforcement for concrete*
		BS EN 12350	*Testing Fresh Concrete*
		BS EN 13670	*Execution of concrete structures*
		BS EN 1504	*Products and systems for the protection and repair of concrete structures*

NO	URAIAN KEGIATAN	STANDAR	
		BS 1881-115	*Specification for compression testing machines for concrete*
		BS 1881-120	*Testing concrete. Method for determination of the compressive strength of concrete cores*
		BS 1881-124	*Methods for analysis of hardened concrete*
		BS 1881-202	*Recommendations for surface hardness testing by rebound hammer.*
		BS 1881-203	*Recommendations for the measurement of velocity of ultrasonic pulses in concrete*
		ASTM C109	*Cement mortar Compression Testing*
		ASTM C1107	*Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Non shrink)*
		ASTM C827	*Standard Test Method for Change in Height at Early Ages of Cylindrical Specimens of Cementitious Mixtures*
		ASTM C191	*Standard Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle*
		ASTM C597	*Pulse Velocity through Concrete*
		ASTM C531	*Standard Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings*
		ASTM C1127	*Standard Guide for Use of High Solids Content, Cold LiquidApplied Elastomeric Waterproofing Membrane with an Integral Wearing Surface*
		ASTM D3393	*Standard Specification for Coated Fabrics—Waterproofness*
		ASTM D6135	*Standard Practice for Application of Self-Adhering Modified Bituminous Waterproofing*
		ASTM C876	*Standard test method for half-cell potentials of reinforcing steel in concrete*
		EN 1998 Eurocode 8	*Design of Structures for Earthquake Resistance*
		ISO 9000	*Quality Management*
14	Persyaratan Khusus Geoteknik pada Lapangan yang Digunakan untuk pengerjaan Fabrikasi (*Fabrication Yards*)	BS EN 19971	*Eurocode 7: Geotechnical Design – Part 1: General rules*
		ASTM D1143	*Standard Test Methods for Deep Foundations Under Static Axial Compressive Load*
		ASTM D4945	*Standard Test Method for High-Strain Dynamic Testing of Deep Foundations1*
		ISO 10693	*Soil quality — Determination of carbonate content — Volumetric method*
		ISO 10694	*Soil quality — Determination of organic and total carbon after dry combustion (elementary analysis)*
		ISO 14688-1	*Geotechnical investigation and testing — Identification and classification of soil — Part 1: Identification and description*
		ISO 14688-2	*Geotechnical investigation and testing — Identification and classification of soil — Part 2: Principles for a classification*
		ISO/TS 17892-1	*Geotechnical investigation and testing — Laboratory testing of soil — Part 1: Determination of water content*
		ISO/TS 17892-2	*Geotechnical investigation and testing — Laboratory testing of soil — Part 2: Determination of density of fine-grained soil*
		ISO/TS 17892-3	*Geotechnical investigation and testing — Laboratory testing of soil — Part 3: Determination of particle density — Pycnometer method*

NO	URAIAN KEGIATAN	STANDAR	
		ISO/TS 17892-4	*Geotechnical investigation and testing — Laboratory testing of soil — Part 4: Determination of particle size distribution*
		ISO/TS 17892-5	*Geotechnical investigation and testing — Laboratory testing of soil — Part 5: Incremental loading oedometer test*
		ISO/TS 17892-6	*Geotechnical investigation and testing — Laboratory testing of soil — Part 6: Fall cone test*
		ISO/TS 17892-7	*Geotechnical investigation and testing — Laboratory testing of soil — Part 7: Unconfined compression test on fine-grained soils*
		ISO/TS 17892-8	*Geotechnical investigation and testing — Laboratory testing of soil — Part 8: Unconsolidated undrained triaxial test*
		ISO/TS 17892-10	*Geotechnical investigation and testing — Laboratory testing of soil — Part 10: Direct shear tests*
		ISO/TS 17892-12	*Geotechnical investigation and testing — Laboratory testing of soil — Part 12: Determination of Atterberg limits*
		ASTM D422	*Standard Test Method for Particle-Size Analysis of Soils*
		ASTM D854	*Standard Test Methods for Specific Gravity of Soil Solids by Water Pycnometer*
		ASTM D2166	*Standard Test Method for Unconfined Compressive Strength of Cohesive Soil*
		ASTM D2216	*Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass*
		ASTM D2435	*Standard Test Methods for One-Dimensional Consolidation Properties of Soils Using Incremental Loading*
		ASTM D2487	*Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)*
		ASTM D2488	*Standard Practice for Description and Identification of Soils (VisualManual Procedure)*
		ASTM D2573	*Standard Test Method for Field Vane Shear Test in Cohesive Soil*
		ASTM D2850	*Standard Test Method for Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils*
		ASTM D2974	*Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils*
		ASTM D3080	*Standard Test Method for Direct Shear Test of Soils Under Consolidated Drained Conditions*
		ASTM D4186	*Standard Test Method for One-Dimensional Consolidation Properties of Saturated Cohesive Soils Using Controlled-Strain Loading*
		ASTM D4318	*Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils*
		ASTM D4373	*Standard Test Method for Rapid Determination of Carbonate Content of Soils*
		ASTM D4648	*Standard Test Method for Laboratory Miniature Vane Shear Test for Saturated Fine-Grained Clayey Soil*
		ASTM D4767	*Standard Test Method for Consolidated Undrained Triaxial Compression Test for Cohesive Soils*
		ASTM D5550	*Standard Test Method for Specific Gravity of Soil Solids by Gas Pycnometer*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM D5778	*Standard Test Method for Electronic Friction Cone and Piezocone Penetration Testing of Soils*
		ASTM D6913	*Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis.*
		BS 1377-3	*Methods of test for soils for civil engineering purposes — Part 3: Chemical and electro-chemical tests*
		BS 6349-1	*Maritime Structures – Part 1: Code of Practice for General Criteria*
		BS 6349-4	*Maritime Structures – Part 4: Code of Practice for design of fendering and mooring systems*
15	Penelaahan Rentang Bebas (*Free Span Analysis*) pada Pipa di Bawah Laut (*Submerged Pipeline*)	ASME B31.4	*Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids*
		ASME B31.8	*Gas Transmission and Distribution Piping Systems*
		DNV OS F101	*Submarine Pipeline Systems*
		DNV RP F105	*Free Spanning Pipelines*
16	Sistem Pemerangkap Pig (*Pig Trap System*) pada Jalur Pipa (*Pipeline*)	API STD 1104	*Welding Of Pipelines And Related Facilities*
		ASTM A 193	*Alloy Steel And Stainless Steel Bolting Materials For High-Temperature Service*
		ASTM A 194	*Carbon And Alloy Steel Nuts For Bolts For High Pressure And HighTemperature Service*
		ASME B31.4	*Liquid Transportation Systems For Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, And Alcohols*
		ASME B31.8	*Gas Transmission And Distribution Piping Systems*
		ASME BPVC Section VIII Div 1	*ASME Boiler And Pressure Vessel Code : Section VIII Rules For Construction Of Pressure Vessels Division 1*
		ASME BPVC Section VIII Div 2	*ASME Boiler And Pressure Vessel Code : Section VIII Rules For Construction Of Pressure Vessels Division 2 Alternative Rules*
		IEC 60529	*Degrees Of Protection Provided By Enclosures*
		ISO 13623	*Petroleum And Natural Gas Industries – Pipeline Transportation Systems*
		ISO 5208	*Industrial Valves – Pressure Testing Of Valves*
		ISO 9001	*Quality Management Systems – Requirements*
		NACE MR0103	*Materials Resistant To Sulfide Stress Cracking In Corrosive Petroleum Refining Environments*
		NACE MR 0175 / ISO 15156	*Petroleum And Natural Gas Industries Materials For Use In H2SContaining Environments In Oil And Gas Production*
		NACE TM0284	*Standard Test Method – Evaluation Of Pipeline And Pressure Vessel Steels For Resistance To Hydrogen – Induced Cracking*
17	Sistem Perlindungan Kathodik pada Jalur Pipa Tertanam di Darat dan Sekitar Daerah Bibir Pantai (*Shore Approach*) *Cathodic Protection Systems For Onshore Buried and Shore Approach Pipelines*	BS1377	*Methods of tests for soils for civil engineering purposes , Part 3 Chemical and electrochemical tests, Part 9 In-situ tests*
		NACE SP0169-2007	*Control of external corrosion on underground or submerged metallic piping systems*
		IEC 529	*Degrees of protection provided by enclosures (IP code)*
		IEC 146	*Semiconductor convertors*
		ISO 8501-1	*Preparation of steel substrates before application of paints and related products; visual assessment of surface cleanliness*
18	Perlindungan Katoda dengan Anoda yang	DNV-RP-F103	*Cathodic Protection of Submarine Pipelines by Galvanic Anodes*

NO	URAIAN KEGIATAN	STANDAR	
	Dikorbankan (*Sacrificial Anode*) pada Jalur Pipa Lepas Pantai (Offshore)	ISO 15589-2	*Petroleum, Petrochemical and Natural Gas Industries – Cathodic Protection of Pipeline Transportation Systems – Part 2: Offshore Pipelines*
		API RP 5L1	*Recommended practice for railroad transportation of line pipe*
		API RP 5LW	*Recommended practice for transportation of line pipe on barges and marine vessels*
		ASTM D 3418	*Standard guide for locating combustion test methods for polymeric materials*
		ASTM G 14	*Standard test method for impact resistance of pipeline coatings (falling weight test)*
		DIN 30670	*Polyethylene coatings of steel pipes and fittings; requirements and testing*
		DIN 30678 Plastics	*Polypropylene coatings for steel pipes*
		ISO 527	*Determination of tensile properties*
		ISO 1133	*Plastics - Determination of the melt mass flow rate (MFR) and the melt volume flow rate (MVR) of thermoplastics*
		ISO 2808	*Paints and Varnishes - Determination of film thickness*
		ISO 8501-1	*Preparation of steel substrates before application of paints and related products - visual assessment of surface cleanliness - Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*
		ISO 8502-2	*Preparation of steel substrates before application of paints and related products - tests for the assessment of surface cleanliness - Part 2: Laboratory determination of chloride on cleaned surfaces*
		ISO 8502-3	*Preparation of steel substrates before application of paints and related products - Tests for the assessment of surface cleanliness - Part 3: assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method)*
		ISO 8503-1	*Preparation of steel substrates before application of paints and related products - surface roughness characteristics of blast cleaned steel substrates - Part 1: Specifications and definitions for ISO surface profile comparators for the assessment of abrasive blast cleaned surfaces*
		ISO 8503-2	*Preparation of steel substrates before application of paints and related products - surface roughness characteristics of blast cleaned steel substrates Part 2: Method for the grading of surface profile of abrasive blast-cleaned steel - comparator procedure*
		ISO 8503-3	*Preparation of steel substrates before application of paints and related products - surface roughness characteristics of blast cleaned steel substrates Part 3: Methods for the calibration of ISO surface profile comparators and for the determination of surface profile - focusing microscope procedure*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 8503-4	*Preparation of steel substrates before application of paints and related products - surface roughness characteristics of blast cleaned steel substrates Part 4: Methods for the calibration of ISO surface profile comparators and for the determination of surface profile - stylus instrument procedure*
19	Pelapisan Epoksi Fusi Terikat (*Fusion Bonded Epoxy*) pada Pipa (*Linepipe*)	ISO 21809-2	*Petroleum and natural gas industries - External coatings for buried or submerged pipelines used in pipeline transportation systems - Part 2: Single layer fusion-bonded epoxy coatings*
		ISO 8503-2	*Preparation of steel substrates before application of paints and related products - Surface roughness characteristics of blastcleaned steel substrates – Part 2: Method for the grading of surface profile of abrasive blast-cleaned steel - Comparator procedure*
		ISO 8503-3	*Preparation of steel substrates before application of paints and related products - Surface roughness characteristics of blastcleaned steel substrates – Part 3: Method for the calibration of ISO surface profile comparators and for the determination of surface profile - Focusing microscope procedure*
20	Pelapisan (*Coating*) Enamel Bituminous (*Bituminous Enamel*) pada Pipa (*Linepipe*)	API RP 5L1	*Recommended practice for railroad transportation of linepipe*
		API RP 5LW	*Recommended practice for transportation of linepipe on barges and marine vessels*
		ASTM D 737	*Porosity of glass fabric*
		ASTM E 337	*Standard test method for measuring humidity with a psychrometer (the measurement of wet- and dry-bulb temperatures)*
		BS EN 10300	*Steel tubes and fittings for onshore and offshore pipelines — Bituminous hot applied materials for external coating*
		BS 4164	*Coal-tar-based hot applied coating materials for protecting iron and steel, including suitable primers where required*
		EN 1427	*Bitumen and bituminous binders – Determination of softening point – ring and ball method*
		EN 1426	*Bitumen and bituminous binders – Determination of needle penetration*
		EN 1849-1	*Flexible sheets for waterproofing. Part 1: Bitumen sheets for roof waterproofing. Determination of thickness and mass per unit area*
		ISO 719	*Glass - Hydrolytic resistance of glass grains at 98 °C - Method of test and classification*
		ISO 2431	*Paints and varnishes - Determination of flow time by use of flow cups*
		ISO 2591-1	*Test sieving. Part 1: Methods using test sieves of woven cloth and perforated metal plate*
		ISO 2592	*Petroleum products – Determination of flash and fire points - Cleveland open cup method*
		ISO 2808	*Paints and varnishes - Determination of film thickness*
		ISO 3251	*Paints and varnishes – Determination of non-volatile matter of paints, varnishes and binders for paints and varnishes*
		ISO 5256	*Steel line pipes and fittings for buried or submerged pipelines - External and internal coating by bitumen or coal tar derived materials*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 8501-1	*Preparation of steel substrates before application of paints and related products - visual assessment of surface cleanliness. Part 1: rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*
		ISO 8503	*Preparation of steel substrates before application of paints and related products - Surface roughness characteristics of blast-cleaned steel substrates*
		ISO 8503-1	*Part 1: Specifications and definitions for ISO surface profile comparators for the assessment of abrasive blast-cleaned surfaces*
		ISO 8503-2	*Part 2: Method for the grading of surface profile of abrasive blast-cleaned steel - Comparator procedure*
		ISO 8503-3	*Part 3: Methods for the calibration of ISO surface profile comparators and for the determination of surface profile - Focusing microscope procedure*
		ISO 8503-4	*Part 4: Methods for the calibration of ISO surface profile comparators and for the determination of surface profile - Stylus instrument procedure*
		ISO 13736	*Petroleum products and other liquids - Determination of flash point - Abel closed cup method*
21	Jalur Pipa (*Pipelines*) yang dilapisi Material Termoplastik	ASME B 16.5	*Pipe flanges and flanged fittings NPS 1/2 through NPS 24*
		ASME B 16.47	*Large diameter steel flanges NPS 26 through NPS 60*
		API Spec 15 LE	*Specification for polyethylene line pipe (PE)*
		API RP 5L1	*Recommended practice for railroad transportation of line pipe*
		API RP 5LW	*Recommended practice for transportation of line pipe on barges and marine vessels*
		ASTM A 106	*Standard specification for seamless carbon steel pipe for hightemperature service*
		ASTM A 193	*Standard specification for alloy-steel and stainless steel bolting materials for high-temperature service*
		ASTM A 194	*Standard specification for carbon and alloy steel nuts for bolts for highpressure or high-temperature service, or both*
		ASTM C 581	*Standard practice for determining chemical resistance of thermosetting resins used in glass fiber-reinforced structures intended for liquid service*
		ASTM D 256	*Standard test methods for determining the Izod pendulum impact resistance of plastics*
		ASTM D 618	*Standard practice for conditioning plastics for testing*
		ASTM D 638	*Standard test method for tensile properties of plastics*
		ASTM D 648	*Standard test method for deflection temperature of plastics under flexural load*
		ASTM D 746	*Standard test method for brittleness temperature of plastics and elastomers by impact*
		ASTM D 790	*Standard test methods for flexural properties of unreinforced and reinforced plastics and electrical insulating materials*
		ASTM D 792	*Standard test methods for density and specific gravity (relative density) of plastics by displacement*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM D 1044	*Standard test method for resistance of transparent plastics to surface abrasion*
		ASTM D 1238	*Standard test method for flow rates of thermoplastics by extrusion plastometer*
		ASTM D 1505	*Standard test method for density of plastics by the density-gradient technique*
		ASTM D 1599	*Standard test method for short-time, hydraulic failure pressure of plastic pipe, tubing and fittings*
		ASTM D 2657	*Standard test method for carbon black in olefin plastics ASTM D 1603 Standard test method for environmental stress-cracking of ethylene plastics ASTM D 1693 Standard test method for determining dimensions of thermoplastic pipe and fittings ASTM D 2122 Standard test method for rubber property – Durometer hardness ASTM D 2240 Standard specification for thermoplastic gas pressure pipe, tubing and fittings ASTM D 2513 Standard practice for heat fusion joining of polyolefin pipe and fittings*
		ASTM D 2990	*Standard test methods for tensile, compressive, and flexural creep and creep-rupture of plastics*
		ASTM D 3350	*Standard specification for unmodified polyvinylidenefluoride (PVDF) molding extrusion and coating materials*
		ASTM D 4060	*Standard Specification for polyethylene plastic pipe and fitting materials ASTM D 3895 Standard test method for oxidative-induction time of polyolefins by differential scanning calorimetry*
		ASTM D 4066	*Standard test method for abrasion resistance of organic coatings by the taberabraser*
		ASTM D 4101	*Standard classification system for nylon injection and extrusion materials (PA)*
		ASTM E 328	*Standard specification for propylene plastic injection and extrusion materials*
		ASTM E 831	*Standard test methods for stress relaxation tests for materials and structures*
		ASTM D 3222	*Standard test method for linear thermal expansion of solid materials by thermomechanical analysis*
		ASTM E 1356	*Standard test method for assignment of the glass transition temperatures by differential scanning calorimetry or differential thermal analysis*
		ASTM F 491	*Standard specification for polyvinylidenefluoride (PVDF) plastic-lined ferrous metal pipe and fittings*
		ASTM F 492	*Standard specification for propylene and polypropylene (PP) plastic-lined ferrous metal pipe and fittings*
		ASTM F 1733	*Standard specification for butt heat fusion polyamide (PA) plastic fitting for polyamide (PA) plastic pipe and tubing*
		ISO 180	*Plastics – Determination of Izod impact strength*
		ISO 527 R	*Plastics – Determination of tensile properties*
		ISO 868	*Plastics and ebonite – Determination of indentation hardness by means of a durometer (Shore hardness)*
		ISO 1133	*Plastics – Determination of the melt mass-flow rate (MFR) and the melt volume-flow rate (MVR) of thermoplastics*
		ISO 4427	*Polyethylene (PE) pipes for water supply - Specifications*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 9969	*Thermoplastics pipes – Determination of ring stiffness*
22	Pelapisan Dalam pada Pipa untuk Penyaluran Gas Bersifat Tidak Korosif	ISO 15741	*Paints and varnishes-Friction-reduction coatings for the itnerior of on-and offshore steel pipelines for non-corrosive gases*
		API RP 5L1	*Recommended practice for railroad transportation of line pipe*
		API RP 5L2	*Recommended practice for internal coating of line pipe for non-corrosive gas transmission service*
		API RP 5LW	*Recommended practice for transportation of linepipe on barges and marine vessels*
		ASTM D 4285	*Standard test method for indicating oil or water in compressed air*
		ISO 2808	*Paints and varnishes – determination of film thickness*
		ISO 8501-1	*Preparation of steel substrates before application of paints and related products – Visual assessment of surface cleanliness – Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*
		ISO 8502-2	*Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness – Part 2: Laboratory determination of chloride on cleaned surfaces*
		ISO 8502-3	*Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness – Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method)*
		ISO 8502-4	*Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness – Part 4: Guidance on the estimation of the probability of condensation prior to paint application*
		ISO 8503-2	*Preparation of steel substrates before application of paints and related products – Surface roughness characteristics of blastcleaned steel substrates – Part 2: Method for the grading of surface profile of abrasive blastcleaned steel – Comparator procedure*
		ISO 8503-4	*Preparation of steel substrates before application of paints and related products – Surface roughness characteristics of blastcleaned steel substrates – Part 4: Method for the calibration of ISO surface profile comparators and for the determination of surface profile – Stylus instrument procedure*
		ISO 8504-2	*Preparation of steel substrates before application of paints and related products – Surface preparation methods – Part 2: Abrasive blast-cleaning*
		ISO 9001	*Quality management systems - Requirements*
		ISO 9002	*Quality systems – Model for quality assurance in production, installation and servicing*
		ISO 10005	*Quality management systems – Guidelines for quality plans*
		ISO 10012	*Measurement management systems – Requirements for measurement processes and measuring equipment*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 11124-1	*Preparation of steel substrates before application of paints and related products – Specifications for metallic blast-cleaning abrasives – Part 1: General introduction and classification*
		ISO 11126	*Preparation of steel substrates before application of paints and related products – Specifications for non-metallic blast-cleaning abrasives*
23	Pelapisan (*Coating*) Beton Pada Pipa (Linepipe)	ASTM A 82	*Standard specification for steel wire, plain, for concrete reinforcement*
		ASTM A 185	*Standard specification for steel welded wire fabric, plain, for concrete reinforcement*
		ASTM A 390	*Standard specification for zinc coated (galvanized) steel poultry fence fabric (hexagonal and straight line)*
		ASTM A 615M	*Standard specification for deformed and plain billet-steel bars for concrete reinforcement (metric)*
		ASTM A 641	*Standard specification for zinc coated (galvanized) carbon steel wire*
		ASTM C 33	*Standard specification for concrete aggregates*
		ASTM C 39	*Standard test method for compressive strength of cylindrical concrete specimens*
		ASTM C 42	*Standard test method for obtaining and testing drilled cores and sawed beams of concrete*
		ASTM C 150	*Standard specification for Portland cement*
		ASTM C 171	*Standard specification for sheet materials for curing concrete*
		ASTM C 309	*Standard specification for liquid membrane-forming compounds for curing concrete*
		ASTM C 595	*Standard specification for blended hydraulic cements*
		ASTM C 642	*Test method for specific gravity, absorption and voids in hardened concrete*
		ASTM E 92	*Standard test method for Vickers hardness testing of metallic materials*
		ASTM E 165	*Standard test method for liquid penetrant examination*
		ASTM E 709	*Standard guide for magnetic particle examination*
		BS EN 197-1	*Cement Part 1 : Composition, Specification and Conformity criteria for common cements*
		BS EN 197-4	*Cement Part 4 : Composition, Specification and Conformity criteria for early strength blast furnace cements*
		BS EN 933-1	*Testing aggregates*
		BS EN 12620	*Aggregates for concrete*
		BS 1305	*Specification for batch type concrete mixers*
		BS EN 12390-2	*Testing hardened concrete – Part 2 : Making and curing specimens for strength tests*
		BS EN 12390-3	*Testing hardened concrete – Part 3 : Compressive strength of test specimens*
		BS EN 12504-1	*Testing hardened in structures – Part 1 : Core specimen – Taking, Examining and Testing in Compression*
		BS EN 1008	*Methods of test for water for making concrete (including notes on the suitability of the water)*
		BS 3963	*Method for testing the mixing performance of concrete mixers*
		BS 4449	*Specification for the reinforcement of concrete*

NO	URAIAN KEGIATAN	STANDAR	
		BS 4482	*Specification for steel wire for the reinforcement of concrete product*
		BS 4483	*Steel fabric for the reinforcement of concrete*
24	Pelapisan (*Coatings*) Daerah Sambungan (*Field Joint*)	ISO 21809-3	*Part 3:Field joint coatings*
		ISO 13623	*Petroleum and natural gas industries - Pipeline transportation systems*
		ISO/IEC 17025	*General requirements for the competence of testing and calibration laboratories*
		ISO/TS 29001	*Petroleum, petrochemical and natural gas industries – Sectorspecific quality management systems – Requirements for product and service supply organisations*
		ISO 8503-3	*Preparation of steel substrates before application of paints ad related products – Surface roughness characteristics of blastcleaned steel substrates – Part 3: Method for the calibration of ISO surface profile comparators and for the determination of surface profile – Focussing microscope procedure*
		ISO 10474	*Steel and steel products - Inspection documents*
		ASTM E 29	*Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications*
25	Sistem Pendeteksi Kebocoran Pada Jalur Pipa (*Pipeline*)	API RP 1130	*Computational Pipeline Monitoring for Liquids*
26	Pengujian Tekanan Hidrostatik pada Jalur Pipa (*Pipeline*)	ASME B31.4	*Pipelines Transport System for Liquid Hydrocarbons and other Liquids*
		ASME B31.8	*Gas Transmission and Distribution Piping Systems*
		API RP 1110	*Recommended Practice for the Pressure Testing of Liquid Petroleum Pipelines*
27	Konstruksi Jalur Pipa (*Pipeline*) di Darat	ASME B31.8	*Gas Transmission and Distribution Piping Systems*
		ASME B31.4	*Pipeline Transformation Systems for Liquids and Slurries*
28	Penggunaan *Pig* pada Kegiatan *Pigging*	API Standard 1160	*Managing System Integrity for Hazardous Liquid Pipelines*
		ASME B31.8S	*Managing System Integrity of Gas Pipelines*
29	Spesifikasi dan Syarat pada Inspeksi dalam Pipa (*In-Line*) di Jalur Pipa (Pipeline)	NACE RP0102	*In-line Inspection of Pipelines, NACE RP0102*
30	Perbaikan Jalur Pipa (*Pipeline*)	ISO 9712	*Non-destructive testing -- Qualification and certification of NDT personnel*
		ISO 13623	*Petroleum and natural gas industries -- Pipeline transportation systems*
		ISO/TS 24817	*Petroleum, petrochemical and natural gas industries -- Composite repairs for pipework -- Qualification and design, installation, testing and inspection*
		ASME B31.4	*Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids*
		ASME B31G	*Gas Transmission and Distribution Piping System ASME B31.8 Manual for Determining the Remaining Strength of Corroded Pipelines : Supplement to the ASME B31 code for Pressure Piping*
		ASME PCC-2	*Repair of Pressure Equipment and Piping*
		API RP 2200	*Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines*

NO	URAIAN KEGIATAN	STANDAR	
31	Pengelolaan Integritas Sistem pada Jalur Pipa (*Pipelines*) Gas	ASME B31.8S	*Managing System Integrity of Gas Pipelines*
	Pengelolaan Integritas Sistem pada Jalur Pipa (*Pipelines*) Hidrokarbon Cair	DNV-OS-F101	*Offshore Standards*
		B31.8S	*Managing System Integrity of Gas Pipelines ASME*

B. Standar Rekayasa Sipil dan Struktur Lepas Pantai

NO	URAIAN KEGIATAN	STANDAR	
1	Desain Fondasi untuk Perairan Dalam (*Deepwater*) dan Bawah Laut (*Subsea*)	ISO 19901-4	*Petroleum And Natural Gas Industries — Specific Requirements for Offshore Structures — Part 4: Geotechnical and Foundation Design Considerations*
		ISO 19901-7	*Petroleum And Natural Gas Industries – Specific Requirements for Offshore Structures – Part 7: Stationkeeping Systems for Floating Offshore Structures and Mobile Offshore Units*
		ISO 19903	*Petroleum And Natural Gas Industries – Fixed Concrete Offshore Structures*
		API RP-2SK	*American Petroleum Institute – Design and Analysis of Stationkeeping Systems for Floating Structures*
		API RP-2T	*American Petroleum Institute – Planning, Designing, and Constructing Tension Leg Platforms*
		API RP-2GEO	*American Petroleum Institute – Geotechnical and Foundation Design Considerations*
		DNV-OS-C101	*Det Norske Veritas – Design of Offshore Steel Structures, General*
2	Perlindungan Sementara (*Temporary Refuge*) Fasilitas Lepas Pantai (*Offshore*)	ISO 13702	*Petroleum and natural gas industries — Control and mitigation of fires and explosions on offshore production installations — Requirements and guidelines*
		ISO 15544	*Petroleum and natural gas industries — Offshore production installations — Requirements and guidelines for emergency response*
		ISO 15138	*Petroleum and natural gas industries — Offshore production installations — Heating, ventilation and air-conditioning*
3	Persyaratan pada Analisis Gempa (*Earthquake Requirement for Analysis*) untuk Struktur Fasilitas Lepas Pantai Permanen (*Fixed Offshore Structure*)	ISO 19902	*Petroleum and Natural Gas Industries – Fixed Offshore Structures*
		ISO 19901-2	*Petroleum and Natural Gas Industries – Specific Requirement for Offshore Structures – Part 1 :Seismic Design Procedures and Criteria*
4	Pengaturan Posisi (*Positioning*) dan Peninjauan (*Survey*) Penilaian Geo-Bahaya (*Geohazards Investigation*) pada Rekayasa Fasilitas Lepas Pantai	IMCA S 003	*The Guidelines for the use of Multibeam Echosounders for Offshore Surveys*
		IMCA M 200, IMCA S 013	*Deep Water Acoustic Positioning*
		IMCA S017	*Guidance on Vessel USBL Systems for Use in Offshore Survey and Positioning Operations*
		IOGP 373-18	*OGP Guidelines for the conduct of offshore drilling hazard site survey*

NO	URAIAN KEGIATAN	STANDAR	
	(*Offshore*) dan Pekerjaan Konstruksi	IOGP 373-19	*Guidelines for GNSS positioning in the oil & gas industry IMCA S 015,*
		IMCA S 022	*An Introduction to Inertial Navigation Systems*
		IMCA S 006	*Inter-Vessel Survey Data Standard Telemetry Protocol*
		IMCA S 011	*Considerations for The Safe Operation of AUVs*
		IMCA M 199, IMCA S 012	*Guidelines on Installation and Maintenance of DGNSS-Based Positioning Systems*
		IMCA S 019	*Guidance on Subsea Metrology*
6	Penilaian Lokasi Spesifik (*Site Specific Assessment*) Unit *Mobile Offshore Jack-Up*	ISO 19902	*Petroleum and natural gas industries – Fixed Steel Offshore Structures*
		ISO 19901-1	*Petroleum and natural gas industries – Specific requirements for offshore structures – Part 1: Metocean design and operating considerations*
7	Desain Struktur Fasilitas Lepas Pantai Permanen (*Fixed Offshore Structures*)	API RP 2A	*Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms-Working Stress Design*
		AISC ASD	*Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings*
		AWS	*Structural Welding Code*
		ASTM	*American Society for Testing and Materials*
		DNV RP C204	*Design against Accidental Loads (BOAT IMPACT ONLY)*
8	Desain Ruang untuk Tempat Tinggal (*Living Quarters*) pada Fasilitas Lepas Pantai (*Offshore*)	ISO 13702	*Petroleum and natural gas industries — Control and mitigation of fires and explosions on offshore production installations — Requirements and guidelines*
		IS0 15544	*Petroleum and natural gas industries — Offshore production installations — Requirements and guidelines for emergency response*
		ISO 17776	*Petroleum and natural gas industries – Offshore production installations – Guidelines on tools and techniques for hazard identification and risk assessment*
9	Bangunan Fasilitas Lepas Pantai (*Offshore*)	AISC ASD	*Specification for Structural Steel Buildings – Allowable Stress Design and Plastic Design*
		API RP 2A	*Recommended Practice for Planning, Designing, and Constructing Fixed Offshore Platforms*
		API RP 14F	*Design, Installation and Maintenance of Electrical Systems for Offshore Production Platforms*
		API RP 14G	*Recommended Practice for Fire Prevention and Control on Open Type Offshore Production Platforms*
		BSI-BS 476	*Fire Tests on Building Materials and Structures*
		SOLAS 1992	*Safety Life at Sea*
		ASCE 7	*Minimum Design Loads for Buildings and Other Structures*
		ASTM E119	*Standard Test Methods for Fire Test of Building Construction and Materials*
		ASHRAE – STD 62	*American Society of Heating, Refrigerating and Air Conditioning Engineers Handbook – Ventilation for Acceptable Indoor Air Quality*
10	Tata Letak pada Fasiltias Lepas Pantai (*Offshore*)	IP15	*Volume 15, Model Code of Safe Practice in the Petroleum Institute, Institute of Petroleum*
		API 521	*Guide for Pressure-relieving and Depressuring Systems*
		CAP 437	*Civil Aviation Authority - Offshore Helicopter Landing Areas: Guidance on Standards*

NO	URAIAN KEGIATAN	STANDAR	
11	Desain Pengangkat yang beroperasi di Laut (*Marine Lifting*)	ISO 19901-6: 2009	*Petroleum and natural gas industries - Specific requirements for offshore structures - Part 6: Marine operations.*
		ISO 19902: 2007	*Petroleum and natural gas industries - Fixed steel offshore structures.*
		AISC-ASD(13th Edition)	*American Institute of Steel Construction*
		API RP 2A-WSD 22nd Edition	*Planning, Designing, and Constructing Fixed Offshore Platforms—Working Stress Design*
		API 2MOP 1st Edition	*Petroleum and natural gas industries - Specific requirements for offshore structures, Part 6-Marine operations*
12	Penilaian Kelelahan akibat Transportasi (*Transportation Fatique Assessment*) pada Struktur Fasilitas Lepas Pantai (*Offshore*)	API-RP-2A (WSD) 2010-21st edition	*Recommended Practice for Planning, Designing and Construction Fixed Offshore Platform, Working Stress Design*
		ISO 19902 - 2007 or latest edition	*Petroleum and Natural Gas Industries – Fixed Offshore Structures*
		ISO 19901-1 - 2005 or latest edition	*Petroleum and Natural Gas Industries – Specific Requirement for offshore structures – Part 1 : Metocean Design and operating considerations*
		DNV-RP-C203	*Fatigue Design of Offshore Steel Structures*
		DNV-RP-C205	*Environmental Conditions and Environmental Loads*
		ISO 19905-1; 2012	*Site Specific Assessment of Mobile Offshore Units – Part 1 Jack-ups*
13	Penilaian Kelelahan Spektral pada Struktur Fasilitas Lepas Pantai (*Offshore*) Permanen	ISO 19902	*Petroleum and Natural Gas Industries – Fixed Offshore Structures*
		ISO 19901-1	*Petroleum and Natural Gas Industries – Specific Requirement for offshore structures – Part 1 :Metocean Design and operating considerations*
		DNV-RP-C203	*Fatigue Design of Offshore Steel Structures,*
		DNV-RP-C205	*Environmental Conditions and Environmental Loads*
14	Pemasangan Struktur Fasilitas Lepas Pantai (*Offshore*) Permanen	ISO 19902	*Petroleum and natural gas industries – Fixed Steel Offshore Structures*
		API RP 2A-WSD	*Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms – Working Stress Design*
15	Penilaian (*survey*) Lokasi Fasilitas Lepas Pantai Untuk Peron (*platform*) Lepas Pantai (*offshore*) dan Lokasi *Jack Up*	ISO 19901-8	*Specific requirements for offshore structures - Marine soil investigations*
		ISO 10693	*Soil quality — Determination of carbonate content — Volumetric method*
		ISO 10694	*Soil quality — Determination of organic and total carbon after dry combustion (elementary analysis)*
		ISO/TR 14685	*Hydrometric determinations — Geophysical logging of boreholes for hydrogeological purposes — Considerations and guidelines for making measurements*
		ISO 14688-1	*Geotechnical investigation and testing — Identification and classification of soil — Part 1: Identification and description*
		ISO 14688-2	*Geotechnical investigation and testing — Identification and classification of soil — Part 2: Principles for a classification*
		ISO 14689-1	*Geotechnical investigation and testing — Identification and classification of rock — Part 1: Identification and description*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 17312	*Soil quality — Determination of hydraulic conductivity of saturated porous materials using a rigid-wall permeameter*
		ISO 17313	*Soil quality — Determination of hydraulic conductivity of saturated porous materials using a flexible-wall permeameter*
		ISO/TS 17892-1	*Geotechnical investigation and testing — Laboratory testing of soil — Part 1: Determination of water content*
		ISO/TS 17892-2	*Geotechnical investigation and testing — Laboratory testing of soil — Part 2: Determination of density of fine-grained soil*
		ISO/TS 17892-3	*Geotechnical investigation and testing — Laboratory testing of soil — Part 3: Determination of particle density — Pycnometer method*
		ISO/TS 17892-4	*Geotechnical investigation and testing — Laboratory testing of soil — Part 4: Determination of particle size distribution*
		ISO/TS 17892-5	*Geotechnical investigation and testing — Laboratory testing of soil — Part 5: Incremental loading oedometer test*
		ISO/TS 17892-6	*Geotechnical investigation and testing — Laboratory testing of soil — Part 6: Fall cone test*
		ISO/TS 17892-7	*Geotechnical investigation and testing — Laboratory testing of soil — Part 7: Unconfined compression test on fine-grained soils*
		ISO/TS 17892-8	*Geotechnical investigation and testing — Laboratory testing of soil — Part 8: Unconsolidated undrained triaxial test*
		ISO/TS 17892-9	*Geotechnical investigation and testing — Laboratory testing of soil — Part 9: Consolidated triaxial compression tests on water-saturated soils*
		ISO/TS 17892-10	*Geotechnical investigation and testing — Laboratory testing of soil — Part 10: Direct shear tests*
		ISO/TS 17892-11	*Geotechnical investigation and testing — Laboratory testing of soil — Part 11: Determination of permeability by constant and falling head*
		ISO/TS 17892-12	*Geotechnical investigation and testing — Laboratory testing of soil — Part 12: Determination of Atterberg limits*
		ISO 19901-4	*Petroleum and natural gas industries — Specific requirements for offshore structures — Part 4: Geotechnical and foundation design considerations*
		ISO 19901-6	*Petroleum and natural gas industries – Specific requirements for offshore structures – Part 6: Marine operations*
		ISO 22475-1	*Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 1: Technical principles for execution*
		ISO/TS 22475-2	*Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 2: Qualification criteria for enterprises and personnel*
		ISO/TS 22475-3	*Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 3: Conformity assessment of enterprises and personnel by third party*
		ISO 31000	*Risk management — Principles and guidelines*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM International (Latest Edition)	*ASTM Standards on Disc, Vol. 04.08: Soil and Rock (I): D420 to D5611, Vol. 04.09: Soil and Rock (II): D5714 to Latest*
		ASTM D422	*Standard Test Method for Particle-Size Analysis of Soils*
		ASTM D854	*Standard Test Methods for Specific Gravity of Soil Solids by Water Pycnometer*
		ASTM D2166	*Standard Test Method for Unconfined Compressive Strength of Cohesive Soil*
		ASTM D2216	*Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass*
		ASTM D2434	*Standard Test Method For Permeability Of Granular Soils (Constant Head)*
		ASTM D2435	*Standard Test Methods for One-Dimensional Consolidation Properties of Soils Using Incremental Loading*
		ASTM D2487	*Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)*
		ASTM D2488	*Standard Practice for Description and Identification of Soils (VisualManual Procedure)*
		ASTM D2573	*Standard Test Method for Field Vane Shear Test in Cohesive Soil*
		ASTM D2845	*Standard Test Method for Laboratory Determination of Pulse Velocities and Ultrasonic Elastic Constants of Rock*
		ASTM D2850	*Standard Test Method for Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils*
		ASTM D2936	*Standard Test Method for Direct Tensile Strength of Intact Rock Core Specimens*
		ASTM D2974	*Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils*
		ASTM D3080	*Standard Test Method for Direct Shear Test of Soils Under Consolidated Drained Conditions*
		ASTM D3740	*Standard Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction*
		ASTM D3967	*Standard Test Method for Splitting Tensile Strength of Intact Rock Core Specimens*
		ASTM D3999	*Standard Test Methods for the Determination of the Modulus and Damping Properties of Soils Using the Cyclic Triaxial Apparatus*
		ASTM D4015	*Standard Test Methods for Modulus and Damping of Soils by Resonant-Column Method*
		ASTM D4083	*Standard Practice for Description of Frozen Soils (Visual Manual Procedure)*
		ASTM D4186	*Standard Test Method for One-Dimensional Consolidation Properties of Saturated Cohesive Soils Using Controlled-Strain Loading*
		ASTM D4186	*Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table*
		ASTM D4254	*Standard Test Methods For Minimum Index Density And Unit Weight Of Soils And Calculation Of Relative Density*
		ASTM D4318	*Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM D4373	*Standard Test Method for Rapid Determination of Carbonate Content of Soils*
		ASTM D4452	*Standard Practice for X-Ray Radiography of Soil Samples*
		ASTM D4542	*Standard Test Method for Pore Water Extraction and Determination of the Soluble Salt Content of Soils by Refractometer*
		ASTM D4543	*Standard Practices for Preparing Rock Core as Cylindrical Test Specimens and Verifying Conformance to Dimensional and Shape Tolerances*
		ASTM D4611	*Standard Test Method for Specific Heat of Rock and Soil*
		ASTM D4648	*Standard Test Method for Laboratory Miniature Vane Shear Test for Saturated Fine-Grained Clayey Soil*
		ASTM D4767	*Standard Test Method for Consolidated Undrained Triaxial Compression Test for Cohesive Soils*
		ASTM D5079	*Standard Practices for Preserving and Transporting Rock Core Samples*
		ASTM D5084	*Standard Test Methods For Measurement Of Hydraulic Conductivity Of Saturated Porous Materials Using A Flexible Wall Permeameter*
		ASTM D5334	*Standard Test Method for Determination of Thermal Conductivity of Soil and Soft Rock by Thermal Needle Probe Procedure*
		ASTM D5550	*Standard Test Method for Specific Gravity of Soil Solids by Gas Pycnometer*
		ASTM D5607	*Standard Test Method for Performing Laboratory Direct Shear Strength Tests of Rock Specimens Under Constant Normal Force*
		ASTM D5731	*Standard Test Method for Determination of the Point Load Strength Index of Rock and Application to Rock Strength Classifications*
		ASTM D5778	*Standard Test Method for Electronic Friction Cone and Piezocone Penetration Testing of Soils*
		ASTM D5856	*Standard Test Method For Measurement Of Hydraulic Conductivity Of Porous Materials Using A Rigid-Wall, Compaction-Mold Permeameter*
		ASTM D5878	*Standard Guides for Using Rock-Mass Classification Systems for Engineering Purposes*
		ASTM D5311	*Standard Test Method for Load Controlled Cyclic Triaxial Strength of Soil*
		ASTM D5720	*Standard Practice for Static Calibration of Electronic TransducerBased Pressure Measurement Systems for Geotechnical Purposes*
		ASTM D6032	*Standard Test Method for Determining Rock Quality Designation (RQD) of Rock Core*
		ASTM D6027	*Standard Practice for Calibrating Linear Displacement Transducers for Geotechnical Purposes*
		ASTM D6467	*Standard Test Method for Torsional Ring Shear Test to Determine Drained Residual Shear Strength of Cohesive Soils*
		ASTM D6528	*Standard Test Method for Consolidated Undrained Direct Simple Shear Testing of Cohesive Soils*
		ASTM D6913	*Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis.*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM D7012	*Standard Test Method for Compressive Strength and Elastic Moduli of Intact Rock Core Specimens under Varying States of Stress and Temperatures*
		ASTM D7070	*Standard Test Methods for Creep of Rock Core Under Constant Stress and Temperature*
		ASTM D7400	*Standard Test Methods for Downhole Seismic Testing*
		BS 1377-3:1990	*Methods of test for soils for civil engineering purposes — Part 3: Chemical and electro-chemical tests*
		BS 1377-7	*Methods of test for soils for civil engineering purposes — Part 7: Shear strength tests (total stress)*
		BS 5930:1999	*Code of practice for site investigations*
		NORSOK G-001	*NORSOK Standard. Marine Soil Investigations, G-001, Rev. 2, October 2004.*
16	Peninjauan (*Survey*) Jalur Pipa (*Pipeline*) Lepas Pantai (*Offshore*)	ISO 19901-8	*Specific requirements for offshore structures - Marine soil investigations*
		ISO 10693	*Soil quality — Determination of carbonate content — Volumetric method*
		ISO 10694	*Soil quality — Determination of organic and total carbon after dry combustion (elementary analysis)*
		ISO 13623	*Petroleum and Natural Gas Industries - Pipeline Transportation Systems*
		ISO/TR 14685	*Hydrometric determinations — Geophysical logging of boreholes for hydrogeological purposes — Considerations and guidelines for making measurements*
		ISO 14688-1	*Geotechnical investigation and testing — Identification and classification of soil — Part 1: Identification and description*
		ISO 14688-2	*Geotechnical investigation and testing — Identification and classification of soil — Part 2: Principles for a classification*
		ISO 14689-1	*Geotechnical investigation and testing — Identification and classification of rock — Part 1: Identification and description*
		ISO 17312	*Soil quality — Determination of hydraulic conductivity of saturated porous materials using a rigid-wall permeameter*
		ISO 17313	*Soil quality — Determination of hydraulic conductivity of saturated porous materials using a flexible-wall permeameter*
		ISO/TS 17892-1	*Geotechnical investigation and testing — Laboratory testing of soil — Part 1: Determination of water content*
		ISO/TS 17892-2	*Geotechnical investigation and testing — Laboratory testing of soil — Part 2: Determination of density of fine-grained soil*
		ISO/TS 17892-3	*Geotechnical investigation and testing — Laboratory testing of soil — Part 3: Determination of particle density — Pycnometer method*
		ISO/TS 17892-4	*Geotechnical investigation and testing — Laboratory testing of soil — Part 4: Determination of particle size distribution*
		ISO/TS 17892-5	*Geotechnical investigation and testing — Laboratory testing of soil — Part 5: Incremental loading oedometer test*
		ISO/TS 17892-6	*Geotechnical investigation and testing — Laboratory testing of soil — Part 6: Fall cone test*

NO	URAIAN KEGIATAN	STANDAR	
		ISO/TS 17892-7	*Geotechnical investigation and testing — Laboratory testing of soil — Part 7: Unconfined compression test on fine-grained soils*
		ISO/TS 17892-8	*Geotechnical investigation and testing — Laboratory testing of soil — Part 8: Unconsolidated undrained triaxial test*
		ISO/TS 17892-9	*Geotechnical investigation and testing — Laboratory testing of soil — Part 9: Consolidated triaxial compression tests on watersaturated soils*
		ISO/TS 17892-10	*Geotechnical investigation and testing — Laboratory testing of soil — Part 10: Direct shear tests*
		ISO/TS 17892-11	*Geotechnical investigation and testing — Laboratory testing of soil — Part 11: Determination of permeability by constant and falling head*
		ISO/TS 17892-12	*Geotechnical investigation and testing — Laboratory testing of soil — Part 12: Determination of Atterberg limits*
		ISO 19901-4	*Petroleum and natural gas industries — Specific requirements for offshore structures — Part 4: Geotechnical and foundation design considerations*
		ISO 19901-6	*Petroleum and natural gas industries – Specific requirements for offshore structures – Part 6: Marine operations*
		ISO 22475-1	*Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 1: Technical principles for execution*
		ISO/TS 22475-2	*Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 2: Qualification criteria for enterprises and personnel*
		ISO/TS 22475-3	*Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 3: Conformity assessment of enterprises and personnel by third party*
		ASTM International (2007)	*ASTM Standards on Disc, Vol. 04.08: Soil and Rock (I): D420 to D5611, Vol. 04.09: Soil and Rock (II): D5714 to Latest*
		ASTM D422	*Standard Test Method for Particle-Size Analysis of Soils*
		ASTM D854	*Standard Test Methods for Specific Gravity of Soil Solids by Water Pycnometer*
		ASTM D2166	*Standard Test Method for Unconfined Compressive Strength of Cohesive Soil*
		ASTM D2216	*Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass*
		ASTM D2434	*Standard Test Method For Permeability Of Granular Soils (Constant Head)*
		ASTM D2435	*Standard Test Methods for One-Dimensional Consolidation Properties of Soils Using Incremental Loading*
		ASTM D2487	*Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)*
		ASTM D2488	*Standard Practice for Description and Identification of Soils (VisualManual Procedure)*
		ASTM D2573	*Standard Test Method for Field Vane Shear Test in Cohesive Soil*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM D2845	*Standard Test Method for Laboratory Determination of Pulse Velocities and Ultrasonic Elastic Constants of Rock*
		ASTM D2850	*Standard Test Method for Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils*
		ASTM D2936	*Standard Test Method for Direct Tensile Strength of Intact Rock Core Specimens*
		ASTM D2974	*Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils*
		ASTM D3080	*Standard Test Method for Direct Shear Test of Soils Under Consolidated Drained Conditions*
		ASTM D3740	*Standard Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction*
		ASTM D3967	*Standard Test Method for Splitting Tensile Strength of Intact Rock Core Specimens*
		ASTM D3999	*Standard Test Methods for the Determination of the Modulus and Damping Properties of Soils Using the Cyclic Triaxial Apparatus*
		ASTM D4015	*Standard Test Methods for Modulus and Damping of Soils by Resonant-Column Method*
		ASTM D4083	*Standard Practice for Description of Frozen Soils (Visual Manual Procedure)*
		ASTM D4186	*Standard Test Method for One-Dimensional Consolidation Properties of Saturated Cohesive Soils Using Controlled-Strain Loading*
		ASTM D4253	*Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table*
		ASTM D4254	*Standard Test Methods For Minimum Index Density And Unit Weight Of Soils And Calculation Of Relative Density*
		ASTM D4318	*Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils*
		ASTM D4373	*Standard Test Method for Rapid Determination of Carbonate Content of Soils*
		ASTM D4452	*Standard Practice for X-Ray Radiography of Soil Samples*
		ASTM D4542	*Standard Test Method for Pore Water Extraction and Determination of the Soluble Salt Content of Soils by Refractometer*
		ASTM D4543	*Standard Practices for Preparing Rock Core as Cylindrical Test Specimens and Verifying Conformance to Dimensional and Shape Tolerances*
		ASTM D4611	*Standard Test Method for Specific Heat of Rock and Soil*
		ASTM D4648	*Standard Test Method for Laboratory Miniature Vane Shear Test for Saturated Fine-Grained Clayey Soil*
		ASTM D4767	*Standard Test Method for Consolidated Undrained Triaxial Compression Test for Cohesive Soils*
		ASTM D5079	*Standard Practices for Preserving and Transporting Rock Core Samples*
		ASTM D5084	*Standard Test Methods For Measurement Of Hydraulic Conductivity Of Saturated Porous Materials Using A Flexible Wall Permeameter*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM D5334	*Standard Test Method for Determination of Thermal Conductivity of Soil and Soft Rock by Thermal Needle Probe Procedure*
		ASTM D5550	*Standard Test Method for Specific Gravity of Soil Solids by Gas Pycnometer*
		ASTM D5607	*Standard Test Method for Performing Laboratory Direct Shear Strength Tests of Rock Specimens Under Constant Normal Force*
		ASTM D5731	*Standard Test Method for Determination of the Point Load Strength Index of Rock and Application to Rock Strength Classifications*
		ASTM D5778	*Standard Test Method for Electronic Friction Cone and Piezocone Penetration Testing of Soils*
		ASTM D5856	*Standard Test Method For Measurement Of Hydraulic Conductivity Of Porous Materials Using A Rigid-Wall, Compaction-Mold Permeameter*
		ASTM D5878	*Standard Guides for Using Rock-Mass Classification Systems for Engineering Purposes*
		ASTM D5311	*Standard Test Method for Load Controlled Cyclic Triaxial Strength of Soil*
		ASTM D5720	*Standard Practice for Static Calibration of Electronic TransducerBased Pressure Measurement Systems for Geotechnical Purposes*
		ASTM D6032	*Standard Test Method for Determining Rock Quality Designation (RQD) of Rock Core*
		ASTM D6027	*Standard Practice for Calibrating Linear Displacement Transducers for Geotechnical Purposes*
		ASTM D6467	*Standard Test Method for Torsional Ring Shear Test to Determine Drained Residual Shear Strength of Cohesive Soils*
		ASTM D6528	*Standard Test Method for Consolidated Undrained Direct Simple Shear Testing of Cohesive Soils*
		ASTM D6913	*Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis.*
		ASTM D7012	*Standard Test Method for Compressive Strength and Elastic Moduli of Intact Rock Core Specimens under Varying States of Stress and Temperatures*
		ASTM D7070	*Standard Test Methods for Creep of Rock Core Under Constant Stress and Temperature*
		ASTM D7400	*Standard Test Methods for Downhole Seismic Testing*
		ASTM G51	*Standard Test Method for Measuring pH of Soil for Use in Corrosion Testing*
		ASTM G57	*Standard Test Method for Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method*
		BS 1377-3:1990	*Methods of test for soils for civil engineering purposes — Part 3: Chemical and electro-chemical tests*
		BS 1377-7	*Methods of test for soils for civil engineering purposes — Part 7: Shear strength tests (total stress)*
		BS 5930:1999	*Code of practice for site investigations*
		NORSOK G-001	*Marine soil investigation*
		DNV-OS-F101	*Submarine Pipeline Systems*
17	Desain Rekayasa (*engineering design*)	ASME B31.4	*Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids, 2012*

NO	URAIAN KEGIATAN	STANDAR	
	Jalur Pipa (*Pipeline*) dan Pipa Vertikal (*Riser*)	ASME B31.8	*Gas Transmission and Distribution Piping Systems, 2014*
		ASME B31.8S	*Managing System Integrity of Gas Pipelines, 2012*
		ASME B31.G	*Manual for Determining Remaining Strength of Corroded Pipeline, 2009*
		ASME B16.5	*Pipe Flanges n Flanged Fittings (NPS 0.5 to 24")*
		ASME B16.47	*Large Diameter Steel Flanges, 2011*
		ASME B36.10	*Welded and Seamless Wrought Steel Pipe, 2010*
		API RP 1111	*Design, Construction, Operation, and Maintenance of Offshore Hydrocarbon Pipeline (Limit State Design), 2011*
		API RP 2A-WSD	*Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms, 2014*
		API RP 15S	*Qualification of Spoolable Reinforced Plastic Line Pipe, 2006*
		API RP 17B	*Recommended Practice for Flexible Pipe, 2008*
		API RP 17L2	*Recommended Practice for Flexible Pipe Ancillary Equipment, 2013*
		API SPEC 5L	*Specification for Linepipe, 2007*
		API SPEC 5LC	*CRA Line Pipe, 2015*
		API SPEC 5LD	*CRA Clad or Lined Steel Pipe, 2015*
		API RP 5LW	*Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels, 2009*
		API SPEC 6D	*Specification for Pipeline Valves, 2011*
		API SPEC 17J	*Specification for unbonded Flexible Pipe, 2014*
		API SPEC 17L1	*Specification for Flexible Pipe Ancillary Equipment, 2015*
		API STD 1104	*Steel Pipelines Crossing Railroads and Highways, 2013*
		API STD 2RD	*Dynamic Risers for Floating Production Systems, 2013*
		DNV OS F101	*Submarine Pipeline Systems, 2013*
		DNV OS F201	*Dynamic Risers, 2010*
		DNV RP F102	*Pipeline Field Joint Coating and Field Repair of Line Pipe Coating, 2011*
		DNV RP F103	*Cathodic Protection of Submarine Pipelines by Galvanic Anodes, 2010*
		DNV RP F105	*Free Spanning Pipelines, 2006*
		DNV RP F107	*Risk Assessment of Pipeline Protection, 2010*
		DNV RP F109	*DNV Recommended-Practice for On-Bottom Stability Design of Submarine Pipelines, 2011*
		DNV RP F110	*Global Buckling of Submarine Pipelines Structural Design Due to High Temperature High Pressure, 2007*
		DNV RP F111	*Interference Between Trawl Gear and Pipelines, 2010*
		DNV RP J202	*Design and Operations of CO2 Pipelines, 2010*
		ISO 14313	*Petroleum and Natural Gas Industries - Pipeline transportation Systems - Pipeline Valves, 2007*
		ISO 15590-1	*Petroleum and Natural Gas Industries - Induction Bends, Fittings and Flanges for Pipeline Transportation Systems - Part 1: Induction Bends, 2009*
		ISO 15590-2	*Petroleum and Natural Gas Industries - Induction Bends, Fittings and Flanges for Pipeline Transportation Systems - Part 2: Fittings, 2009*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 15590-3	*Petroleum and Natural Gas Industries - Induction Bends, Fittings and Flanges for Pipeline Transportation Systems - Part 3: Flanges, 2004*
		ISO 15741	*Paints and Varnishes - Friction-Reduction Coatings for the Interior of on-and Offshore Steel Pipelines for Non-Corrosive Gases*
		MSS SP-44	*Steel Pipeline Flanges, 2006*
		MSS SP-75	*Specification For High-Test, Wrought, Butt Welding Fittings, 2008*
		NACE MR-0175/ISO 15156 (1/2/3)	*Sulphide Stress Cracking Materials for Oil Field Equipment, 2009*
18	Desain Pipa Vertikal Dinamis (*Dynamic Riser*) *Dynamic Riser Design (Amendments/ Supplements to DNV-OS-F201 and API STD 2RD)*	DNV-OS-F201	*Dynamic Risers*
		DNV-OS-F101	*Submarine Pipeline Systems*
		API STD 2RD	*Dynamic Risers for Floating Production Systems*
		API 6DSS	*Specification for Subsea Pipeline Valves*
		PD 5500	*Specification for unfired Fusion welded Pressure Vessels*
		ASME BPVC VIII	*Rules for Construction of Pressure Vessels Division 1*
19	Interaksi Pipa Lepas Pantai (*Offshore*) pada Tanah (*Pipe to Soil Interaction*)	DNV-OS-F101	*Submarine Pipeline System, October 2013*
		DNV-RP-F105	*Free Spanning Pipelines, February 2006*
		DNV-RP-F109	*On-Bottom Stability Design Of Submarine Pipeline, October 2010*
		DNV-RP-F110	*Global Buckling Of Submarine Pipelines (Structural Design Due To High Temperature/ High Pressure), October 2007*
20	Pipa Fleksibel Lentur (*Flexible Pipe*) *Unbonded* untuk Jalur Pipa (*Pipelines*) dan Pipa Vertikal (*Risers*)	ASME 16.47	*Large Diameter Steel Flanges, 2013*
		ASME 16.5	*Pipe Flanges and Flanged Fittings, 2011*
		ASME B31.4	*Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids, 2012*
		ASME B31.8	*Gas Transmission and Distribution Piping Systems, 2014*
		API RP 2A-WSD	*Fixed Offshore Platforms, 2014*
		API RP 17B	*Recommended Practice for Flexible Pipe, 2008*
		API RP 17L2	*Recommended Practice for Flexible Pipe Ancillary Equipment, 2013*
		API SPEC 17J	*Specification for Unbonded Flexible Pipe, 2014*
		API SPEC 17L1	*Specification for Flexible Pipe Ancillary Equipment, 2015*
		API TR 17TR2	*The Ageing of PA-11 in Flexible Pipes, 2003*
		BS EN 10204:2004	*Metallic products — Types of inspection documents, 2004*
		ISO 10474:1991	*Steel and steel products – Inspection documents, 1991*
		ISO 15589-2	*Petroleum, petrochemical and natural gas industries -- Cathodic protection of pipeline transportation systems -- Part 2: Offshore pipelines, 2012*
21	Penilaian (*assessment*) Tekuk Lateral (*Lateral Buckling*) Jalur Pipa (*Pipeline*) Bawah Laut (Subsea)	DNV-OS-F110	*Global Buckling of Submarine Pipelines and all other references therein.*
		DNV-OS-F101	*Submarine Pipeline Systems*
22		ASME B31.3	*Process Piping*

NO	URAIAN KEGIATAN	STANDAR	
	Perlindungan Pelapisan (*Protection Coating*) pada bagian terguyur (*Splash Zone*) Pipa Vertikal (*Riser*) Lepas Pantai (*Offshore*)	ASME ll-C-SFA5.11	*ASME BPVC Section II – Materials Part C – Specifications for welding rods, electrodes, and filler metals SFA-5.11: Specification for nickel and nickel-alloy welding electrodes for shielded metal arc welding*
		ASTM A 380	*Standard practice for cleaning, descaling, and passivation of stainless steel parts, equipment and systems*
		ASTM B 127	*Standard specification for nickel-copper alloy (UNS NO4400) Plate, sheet, en strip*
		ASTM B 151	*Standard specification for copper-nickel-zinc alloy (nickel silver) and copper-nickel rod and bar*
		ASTM D 257	*Standard test methods for DC resistance or conductance of insulating materials*
		ASTM D 429	*Standard test methods for rubber property – Adhesion to rigid substrates*
		ASTM D 1141	*Standard practice for the preparation of substitute ocean water*
		ASTM D 4285	*Standard test method for indicating oil or water in compressed air*
		ASTM D 4417	*Standard test methods for field measurement of surface profile of blast cleaned steel*
		ASTM D 5162	*Standard practice for discontinuity (holiday) testing of nonconductive protective coating on metallic substrates*
		ASTM E 337	*Standard method for measuring humidity with a psychrometer (the measurement of wet- and dry-bulb temperatures)*
		ASTM G 42	*Standard test method for cathodic disbonding of pipeline coatings subjected to elevated temperatures*
		AWS A5.11	*Specification for nickel and nickel-alloy welding electrodes for shielded metal arc welding*
		BS EN 1652	*Copper and copper alloys – Plate, sheet, strip and circles for general purposes.*
		BS EN 10204	*Metallic products – Types of inspection documents*
		DIN 17743	*Wrought nickel-alloys with copper – chemical composition*
		DIN 17750	*Plates, strips and sheets of wrought nickel and nickel-alloys – Properties*
		ISO 34-1	*Rubber, vulcanized or thermoplastic – Determination of tear strength – Part 1: Trouser, angle and crescent test pieces*
		ISO 37	*Rubber, vulcanized or thermoplastic – Determination of tensile stress-strain properties*
		ISO 48	*Rubber, vulcanised or thermoplastic – Determination of hardness (hardness between 10 IRHD and 100 IRHD)*
		ISO 813	*Rubber, vulcanized or thermoplastic – Determination of adhesion to a rigid substrate – 90 degree peel method*
		ISO 1431-1	*Rubber, vulcanized or thermoplastic – Resistance to ozone cracking – Part 1: Static and dynamic strain testing*
		ISO 1629	*Rubbers and latices – Nomenclature*
		ISO 1817	*Rubber, vulcanized – Determination of the effect of liquids*
		ISO 2178	*Non-magnetic coatings on magnetic substrates – Measurement of coating thickness – Magnetic method*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 2781	*Rubber, vulcanized – Determination of density*
		ISO 6502	*Rubber – Guide to the use of curemeters*
		ISO 7619-1	*Rubber, vulcanized or thermoplastic – Determination of indentation hardness – Part 1: Durometer method (Shore hardness)*
		ISO 8501-1	*Preparation of steel substrates before application of paints and related products – Visual assessment of surface cleanliness – Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*
		ISO 8502-3	*Part 3: Assessment of Dust on Steel Surfaces Prepared for Painting (Pressure-Sensitive Tape Method)*
		ISO 8502-4	*Part 4: Guidance on the Estimation of the Probability of Condensation Prior to Paint Application*
		ISO 8502-6	*Part 6: Extraction of soluble contaminants for analysis The Bresle method*
		ISO 8502-9	*Part 9: Field Method for the conductometric determination of water-soluble salts*
		ISO 8503	*Preparation of steel substrates before application of paints and related products – Surface roughness characteristics of blastcleaned steel substrates*
		ISO 8504-2	*Preparation of steel substrates before application of paints and related products – Surface preparation methods – Part 2: Abrasive blast-cleaning*
		ISO 9001	*Quality management systems – Requirements*
		ISO 10474	*Steel and steel products – inspection documents*
		ISO 11124	*Preparation of steel substrates before application of paints and related products – Specifications for metallic blast-cleaning abrasives*
		ISO 11126	*Preparation of steel substrates before application of paints and related products – Specifications for non-metallic blast-cleaning abrasives*
		ISO 11127	*Preparation of steel substrates before application of paints and related products – Test methods for non- metallic blast-cleaning abrasives*

C. Standar Rekayasa Sipil dan Struktur Fasilitas Laut

NO	URAIAN KEGIATAN	STANDAR	
1	Desain *Mooring* untuk Sistem Produksi Terapung	API RP 2SK	*Recommended Practice for Design and Analysis of Stationkeeping Systems for Floating Structures*
		DNV-OS-E301	*Position Mooring*
		ISO 19901-7	*Stationkeeping Systems for Floating Structures and Mobile Offshore Units*
		BV-NR-493	*Mooring System for Permanent Offshore Unit*
		ABS FPI	*Rules for Building and Classing – Floating Production Installations*
		DNV-OS-H101	*DNV Marine Operations, General*
		ISO 19901-6	*Marine Operations*
		DNV-OS-E302	*Offshore Mooring Chain*
		DNV-OS-E303	*Offshore Mooring Fibre Ropes*
		API-RP-2SM	*Synthetic Fiber Ropes for Offshore Mooring*

NO	URAIAN KEGIATAN	STANDAR	
2	Desain rekayasa (*Engineering Design*) terapung (*Float Over*) dan Instalasi	ISO 19901-6	*Marine Operations*
		ISO 19901-7	*Stationkeeping Systems for Floating Offshore Structures and Mobile Offshore Units*
		DNV-OS-E301	*Position Mooring*
		DNV-OS-H101	*Marine Operations, General*
		DNV-OS-H102	*Marine Operations, Design and Fabrication*
		DNV-OS-H201	*Load Transfer Operation*
		API RP 2SK	*Design and Analysis of Stationkeeping Systems for Floating Structures*
		API RP2A-WSD	*Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms – Working Stress Design*
		ASTM D395	*Standard Test Methods for Rubber Property – Compression Set*
		ASTM D412	*Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers – Tension*
		ASTM D429	*Standard Test Method for Rubber Property – Adhesion to Rigid Substrates*
		ASTM A480	*Standard Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip*
		ASTM D573	*Standard Test Method For Rubber – Deterioration in an Air Oven*
		ASTM D624	*Standard Test Methods for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers*
		ASTM D945	*Standard Test Methods for Rubber Properties in Compression or Shear (Mechanical Oscillograph)*
		ASTM D2240	*Standard Test Methods for Rubber Property – Durometer Hardness*
		ASTM D4014	*Standard Specification for Plain and Steel-Laminated Elastomeric Bearings for Bridges*
3	Pengubahan Lambung Kapal (*Hull Conversion*) *FPSO/FSO*	ABS	*Guide for Building and Classing Floating Production Installations*
		API RP 2FPS	*Recommended Practice for Planning, Designing and Constructing Floating Production System*
		IALA O-139, Dec 2013	*Recommendations on the Marking of Man-Made Offshore Structures*
		ILO, 2006	*Maritime Labour Convention*
		ILO Convention No. 92	*Accommodation of Crews*
		ILO Convention No. 133	*Accommodation of Crews (Supplementary Provisions) Convention*
		IMO, Resolution A.328 (IX), Nov 1975	*Code for the Construction and Equipment of Ships Carrying Liquefied Gas in Bulk*
		IMO Resolution A.495 (XII)	*Revised Specification for Oil Tankers with Dedicated Clean Ballast Tanks*
		IMO Resolution A.468 (XII)	*Rules and Recommendations of Permissible Noise Level*
		IMO, 2001	*Code for The Construction and Equipment of Mobile Offshore Drilling Units*
		IMO, 2010	*International Life-Saving Appliances (LSA Code)*
		IMO, 2010	*International Code for the Application of Fire Test Procedures (FTP Code)*
		MARPOL ANNEX I, Regulation 13G	*Prevention of Oil Pollution in the Event of Collision of Stranding – Measures for Existing Tankers*
		MARPOL ANNEX I, Chapter 4, Regulation 18	*Requirement for the Cargo Area of Oil Tankers, Part A, Construction*

NO	URAIAN KEGIATAN	STANDAR	
		MARPOL, 1973	*International Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978, all Resolutions and Amendments thereto, including MEPC 406*
		SOLAS, 2014	*Safety of Life at Sea*
4	Desain Struktur Terapung	ABS	*Guide for Building and Classing Floating Production Installations*
		ABS	*Guide for Fatigue Assessment of Offshore Structures*
		ABS MODU Rules	*Rules for Building and Classing Mobile Offshore Drilling Units*
		API 2F	*Specification for Mooring Chain*
		API 14J	*Recommended Practice for Design and Hazards Analysis for Offshore Production Facilities*
		API 75L	*Guidance Document For The Development Of A Safety And Environmental Management System For Onshore Oil And Natural Gas Production Operations And Associated Activities*
		API RP 2FPS	*Recommended Practice for Planning, Designing and Constructing Floating Production System*
		API RP-2A	*Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms*
		API RP 2SK	*Recommended Practice for Design and Analysis of Station Keeping Systems for Floating Structures*
		API RP-2T	*Recommended Practice for Planning, Designing and Constructing Tension Leg Platform*
		AWS D1.1	*Structural Welding Code*
		BV Rule NR 216	*Rules on Materials and Welding for the Classification of Marine Unit*
		DNV Rules	*Rules for Classification Mobile Offshore Units*
		DNV OS-B101	*Metallic Materials*
		DNV OS-C101	*Design of Offshore Steel Structures, General (LRFD Method)*
		DNV OS-C105	*Structural Design of TLPs (LRFD Method)*
		DNV-OS-E301	*Position Mooring*
		IMO MODU Code	*IMO Code for the Construction and Equipment of Mobile Offshore Drilling Units*
		IMO SOLAS	*IMO SOLAS, Consolidated Edition*
		IMO Resolution A.749 (18)	*Code on Intact Stability for all types of ships*
		NACE RP0176	*Corrosion Control of Steel Fixed Offshore Structures Associated with Petroleum Production*
		ISO 19901-7	*Station Keeping Systems for Floating Offshore Structures and Mobile Offshore Units (with Norwegian Annex)*
		ISO 19904-1	*Petroleum and Natural Gas Industries - Floating Offshore Structures - Part 1: Monohulls, Semi-Submersibles And Spars*
		ISO 19901 (all parts)	*Petroleum and Natural Gas Industries - Specific Requirements For Offshore Structures*
		ISO 19904-2	*Petroleum and Natural Gas Industries - Floating Offshore Structures - Part 2: Tension Leg Platforms*
5	Desain *Jetty*	BS 6349	*Maritime Structures*
6	Penentuan Beban pada Struktur dan Pengikatan Laut (*Sea Fastening*)	AISC ASD	*Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings*
		API RP 2A	*Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms-Working Stress Design*

NO	URAIAN KEGIATAN	STANDAR	
	Selama Transportasi Tongkang (*Barge Transportation*)	API RP 5LW	*Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels*
		AWS	*Structural Welding Code*
		DNV	*Rules for the Classification of Ships*
		EEMUA 158	*Construction Specification for Fixed Offshore Structures in the North Sea*
		Eurocode 3	*Design of steel structures - Part 1-8: Design of Joints (BS EN 11993-18:2005)*
		IACS	*Requirements concerning Polar Class*
		IMO	Code of Safe Practice for Cargo Securing and Stowing

D. Standar Rekayasa Mekanikal

NO	URAIAN KEGIATAN	STANDAR	
1	Simbol dan Sistem Identifikasi Mekanikal	IEC 60617	*Graphical symbols for diagrams*
		ISO 561	*Coal Preparation Plant – Graphical Symbols*
2	Stasiun Pengisian Bahan Bakar CNG	ISO 9809-1	*Gas cylinders — Refillable seamless steel gas cylinders — Design, construction and testing*
		API 618	*Reciprocating compressors*
		API SPEC6FA	*Specification for Fire Test for Valves*
		API PUB 520 PART I	*Sizing, Selection, and Installation of Pressure-relieving Devices in Refineries Part I - Sizing and Selection*
		ASME/BPVC SEC VIII-1	*Rules for Construction of Pressure Vessels*
3	Instalasi Peralatan Putar	BS 4082: Part 1	*External dimensions for vertical in-line centrifugal pumps*
		API Std 614	*Lubrication, shaft-sealing, and control- oil systems and auxiliaries for petroleum, chemical and gas industry services*
		API Std 617	*Axial and centrifugal compressors and expander-compressors for petroleum, chemical and gas industry services*
		API RP 686; 1st Edition, April 1996	*Recommended practices for machinery installation and installation design*
		ASME B16.5	*Pipe flanges and flanged fittings NPS, 1/2 through NPS 24*
4	Pengandalian Kebisingan	ISO 15664:2001	*Acoustics – Noise control design procedures for open plant*
5	Evaluasi Getaran dan Kriteria Penerimaan dari Peralatan Putar	ISO 13709	*Centrifugal Pumps*
		API 611	*General Purpose Steam Turbines*
		API 613	*High Speed, Special Purpose Gear Units*
		API 616	*Combustion Gas Turbines*
		API 617	*Centrifugal Compressors*
		API 618	*Reciprocating Compressors*
		API 670	*Machinery Protection Systems*
		API 673	*Special-Purpose Centrifugal Fans*
		API-RP541	*Recommended Practice for Form- Wound Squirrel-Cage Induction Motors 200 HP and Larger*
		IEC-60222	*Methods For Specifying The Characteristics Of Auxiliary Equipment For Shock And Vibration Measurement*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 10816	*Mechanical Vibration – Evaluation of machine vibration by measurement on non-rotating parts*
		ISO 7919	*Mechanical Vibration of non-reciprocating machines – Measurement on rotating shafts and evaluation criteria*
6	Inspeksi Lapangan Sebelum Serah Terima (*Commissioning*) Peralatan Mekanikal	API 614	*Lubrication, shaft-sealing, and control-oil systems and auxiliaries for petroleum, chemical and gas industry services*
		ASME B 31.4	*Process piping*
7	Persyaratan Minimal untuk Impelemtasi Kegiatan Kritis Tidak Rutin (*Non-Routine Critical Activities*)	ASME Sect. VIII Div. 1	*Rules for Construction of Pressure Vessels*
		ASME B31.3	*Process Piping*
		ASME B30.4	*Portal Tower and Pedestal Cranes*
		ASME B30.5	*Mobile and Cranes*
		ASME B30.6	*Derricks*
		ASME B30.8	*Floating Cranes and Floating Derricks*
		ASME Section IX	*Welding and Brazing*
		ASME B31.4	*Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids*
		ASME B31.8	*Gas Transmission and Distribution Piping Systems*
		ASME PCC- 2	*Repair of Pressure Equipment and Piping*
		API 510	*Pressure Vessel Inspection Code: In-Service Inspection, Rating, Repair, and Alteration*
		API 520	*Sizing, Selection and Installation of Pressure-Relieving Devices in Refineries*
		API 521	*Standard Guide for Pressure- Relieving and Depressuring System*
		API 526	*Flanged Steel Pressure Relief Valves*
		API 527	*Seat Tightness of Pressure Relief Valves*
		API RP 576	*Inspection of Pressure Relieving Devices*
		API RP 2201	*Safe Hot Tapping Practices in the Petroleum & Petrochemical Industries*
8	Tata Letak Fasilitas di Darat (*Onshore Facilities*)	API STD 620	*Design and construction of large, welded, low pressure storage tanks*
		API 2510	*Design and construction of LPG installations*
		API 752	*Management of Hazards Associated with Location of Process Plant Buildings*
		NFPA 30	*Flammable and combustible liquids code*
		NFPA 58	*Liquefied petroleum gas code*
		NFPA 59	*Utility-LP gas code*
		NFPA 59A	*Standard for the production, storage, and handling of Liquefied Natural Gas (LNG)*
		BS 8007	*Code of practice for design of concrete structures for retaining aqueous liquids*
		IP15	*Area classification Code for Petroleum Installations, Model Code of Safe Practice in the Petroleum Industry, Institute of Petroleum, Part 15*
		IP19	*Fire precautions at petroleum refineries and bulk storage installations, Model Code of Safe Practice in the Petroleum Industry, Institute of Petroleum, Part 19*
		EN 1473	*Installation and equipment for liquefied natural gas - design of onshore installations.*
		IEC 60079	*Part 14 - Electrical installations in explosive gas atmospheres (other than mines)*
		IEC 61241	*Electrical apparatus for use in the presence of combustible dust*

NO	URAIAN KEGIATAN	STANDAR	
9	Bata Tahan Panas dan Bentuknya	BS 1640	*Steel butt-welding pipe fittings for the petroleum industry*
		ISO 2245	*Shaped insulating refractory products – Classification*
		ISO 2477	*Determination of permanent change in dimensions on heating*
		ISO 5016	*Determination of bulk density and true –porosity*
		ISO 5017	*Dense shaped refractory products – Determination of bulk density, apparent porosity and true porosity*
		ISO 5019	*Refractory bricks; Dimensions*
		ISO 8890	*Dense shaped refractory products – Determination of resistance to sulphuric acid*
		ISO 10080	*Refractory products - Classification of dense, shaped acid-resisting products*
		ISO 12678	*Refractory products - Measurement of dimensions and external defects of refractory bricks*
		ISO 12678-1	*Part 1: Dimensions and conformity to drawings*
		ISO 12678-2	*Part 2: Corner and edge defects and other surface imperfections*
10	Turbin Gas Bakar	API 611	*General-Purpose Steam Turbines Petroleum, Chemical, And Gas Industry Services*
		API 612	*Special-Purpose Steam Turbines For Petroleum, Chemical, And Gas Industry Services*
		API 613	*Special-Purpose Gear Units For Petroleum, Chemical, And Gas Industry Services*
		API 614	*Lubrication, Shaft-Sealing And Control Oil Systems For Special-Purpose Applications*
		API 616	*Gas Turbines For The Petroleum, Chemical, And Gas Industry Services*
		API 670	*Machinery Protection System*
		ASME VIII, Division 1	*ASME Boiler and Pressure Vessel Code: Section VIII, Division 1, Rules For Construction Of Pressure Vessels*
		ASTM A 193	*Alloy Steel And Stainless Steel Bolting Materials For High- Temperature Service*
		ASTM A 770	*Through-Thickness Tension Testing Of Steel Plates For Special Applications*
		ASTM D 2880	*Gas Turbine Fuel Oils*
		ASTM D4378-08	*Standard Practice for In Service Monitoring of Mineral Turbine Oils for Steam and Gas Turbines*
		ASTM D4057-06	*Standard Practice for Manual Sampling of Petroleum and Petroleum Products*
		NACE MR0103	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		NACE MR0175	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
		API RP 11 PGT	*Packaged Combustion Gas Turbines*
		ASME PTC 22	*Performance test code for Gas Turbine*
		ASTM D 2880	*Specification for Gas Turbine Fuel Oils*
		EEMUA 140	*Noise Procedure Specification*
		ISO 2314	*Gas Turbines - Acceptance Tests*
11	Turbin Uap Umum (*General-Purpose*)	API 611	*General-purpose steam turbines for petroleum, chemical and gas industry services*
		API 617	*Axial and centrifugal compressors and expander-compressors for petroleum, chemical and gas industry services*
		API RP 686	*Recommended practices for machinery installation and installation design*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A 802	*Standard practice for steel castings, surface acceptance standards, visual examination*
		ISO 8501-1	*Preparation of steel substrates before application of paints and related products - Visual assessment of surface cleanliness - Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*
		ISO 10437	*Petroleum, petrochemical and natural gas industries - Steam turbines -Special-purpose applications*
12	Turbin Uap Khusus (*Special Purpose*)	API 617	*Axial and centrifugal compressors and expander-compressors for petroleum, chemical and gas industry services*
		API RP 686	*Recommended practices for machinery installation and installation design*
		ISO 8501-1	*Preparation of steel substrates before application of paints and related products - Visual assessment of surface cleanliness - Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*
		ISO 10437	*Petroleum, petrochemical and natural gas industries - Steam turbines -Special-purpose applications*
13	Mesin Percikan Gas (*Spark Ignited Gas Fueled Engine*)	ASHRAE 52.1	*Gravimetric and dust-spot procedures for testing air-cleaning devices used in general ventilation for removing particulate matter*
		ASME B1.20.1	*Pipe threads, general purpose (inch)*
		ASME B16.5	*Pipe flanges and flanged fittings*
		ASME B31.3	*Process piping*
		SAE J 342	*Spark arrester test procedure for large size engines*
		SAE J 350	*Spark arrester test procedure for medium size engines*
		SAE J 997	*Spark arrester test carbon*
		BS 7244	*Flame arresters for general use*
		EEMUA 107	*Recommendations for the protection of diesel engines for use in zone 2 hazardous areas*
		IEC 60079-10	*Electrical apparatus for explosive gas atmospheres: Part 10 - Classification of hazardous areas*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60898	*Electrical accessories – Circuit breakers for overcurrent protection for household and similar installations*
		IEC 60947	*Low-voltage switchgear and control gear*
		ISO 155	*Belt drives – Pulleys – Limiting values for adjustment of centres*
		ISO 254	*Belt drives – Pulleys – Quality, finish and balance*
		ISO 1813	*Belt drives – V ribbed belts, joined V-belts and V-belts including wide section belts and hexagonal belts – Electrical conductivity of antistatic belts: characteristics and methods of test*
		ISO 2710	*Reciprocating internal combustion engines – Vocabulary*
		ISO 3046	*Reciprocating internal combustion engines – Performance*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 3046-1	*Part 1: Standard reference conditions, declarations of power, fuel and lubricating oil consumptions and test methods*
		ISO 3046-3	*Part 3: Test measurements*
		ISO 3046-4	*Part 4: Speed governing*
		ISO 3046-5	*Part 5: Torsional vibrations*
		ISO 3046-6	*Part 6: Overspeed protection*
		ISO 3046-7	*Part 7: Codes for engine power*
		ISO 4183	*Belt drives – Classical and narrow V-belts – Grooved pulleys (system based on datum width)*
		ISO 4184	*Belt drives – Classical and narrow V-belts – Lengths in datum system*
		ISO 5292	*Belt drives – V-belts and ribbed belts – Calculation of power ratings*
14	Mesin Diesel	BS EN 590	*Automotive fuels – Diesel – Requirements and test methods*
		ASME B1.20.1	*Pipe threads, general purpose (inch)*
		ASME B16.5	*Pipe flanges and flanged fittings*
		ASME B31.3	*Process piping*
		NFPA 20	*Standard for the installation of stationary pumps for fire protection*
		ASHRAE 52.1	*Gravimetric and dust-spot procedures for testing air-cleaning devices used in general ventilation for removing particulate matter*
		BS 2869	*Specification for fuel oils for agricultural, domestic and industrial engines and boilers*
		BS 7244	*Flame arresters for general use*
		EEMUA 107	*Recommendations for the protection of Diesel engines for use in zone 2 hazardous areas*
		IEC 60050	*International electrotechnical vocabulary*
		IEC 60079	*Electrical apparatus for explosive gas atmospheres*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60898	*Electrical accessories – Circuit breakers for overcurrent protection for household and similar installations*
		IEC 60947	*Low-voltage switchgear and control gear*
		ISO 155	*Belt drives – Pulleys – Limiting values for adjustment of centres*
		ISO 254	*Belt drives – Pulleys – Quality, finish and balance*
		ISO 1813	*Belt drives – V ribbed belts, joined V-belts and V-belts including wide section belts and hexagonal belts – Electrical conductivity of antistatic belts: characteristics and methods of test*
		ISO 2710	*Reciprocating internal combustion engines – Vocabulary*
		ISO 3046-1	*Part 1:Standard reference conditions, declarations of power, fuel and lubricating oil consumptions, and test methods*
		ISO 3046-3	*Part 3: Test measurements*
		ISO 3046-4	*Part 4: Speed governing*
		ISO 3046-5	*Part 5: Torsional vibrations*
		ISO 3046-6	*Part 6: Overspeed protection*
		ISO 3046-7	*Part 7: Codes for engine power*
		ISO 4183	*Belt drives – Classical and narrow V-belts – Grooved pulleys (system based on datum width)*
		ISO 4184	*Belt drives – Classical and narrow V-belts – Lengths in datum system*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 5292	*Belt drives – V-belts and V-ribbed belts – Calculation of power ratings*
15	Tipe Pemilihan dan Persyaratan Dasar Desain Pompa	API 610	*Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries*
		API 671	*Special-Purpose Couplings for Petroleum, Chemical, and Gas Industry Services*
		API 674	*Positive Displacement Pumps, Reciprocating*
		API 675	*Positive Displacement Pumps, Controlled Volume*
		API 676	*Positive Displacement Pumps, Rotary*
		API 685	*Sealless Centrifugal Pumps For Petroleum, Heavy Duty Chemical, and Gas Industry Services*
		ISO 10441	*Petroleum and Natural Gas Industries - Flexible Couplings Mechanical Power Transmission - Special Purpose Applications*
		ISO 13709	*Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries*
		ISO 13710	*Petroleum, Petrochemical and Natural Gas Industries – Reciprocating Positive Displacement Pumps*
		ISO 14691	*Petroleum and Natural Gas Industries - Flexible Couplings For Mechanical Power Transmission - General Purpose Applications*
		ISO 21049:2004	*Pumps – Shaft Sealing Systems for Centrifugal And Rotary Pumps*
16	Pompa Sentrifugal	API 610	*Centrifugal pumps for petroleum, petrochemical and natural gas industries*
		API 670	*Machinery protection systems*
		API 671	*Special-purpose couplings for petroleum, chemical, and gas industry services*
		ASME II.	*Section II : Material specifications*
		ASME V	*Section V: Non-destructive examination*
		ASTM A 48	*Standard specification for gray iron castings*
		ASTM A 193	*Standard specification for alloy-steel and stainless steel bolting materials for high-temperature or high pressure service and other special purpose applications*
		ASTM A 216	*Standard specification for carbon steel castings, suitable for fusion welding, for high temperature service*
		ASTM A 216	*Standard specification for carbon steel castings, suitable for fusion welding, for high temperature service*
		ASTM A 217	*Standard specification for steel castings, martensitic stainless and alloy for pressure containing parts suitable for high-temperature service*
		ASTM A 276	*Standard specification for stainless steel bars and shapes*
		ASTM A 320	*Standard specification for alloy steel bolting materials for low-temperature service*
		ASTM A 322	*Standard specification for steel bars, alloy, standard grades*
		ASTM A 351	*Standard specification for castings, austenitic, austenitic ferric (duplex) for pressure containing parts*
		ASTM A 352	*Standard specification for steel castings, ferritic and martensitic, for pressure containing parts suitable for low temperature service*
		ASTM A 395	*Standard specification for ferritic ductile iron pressure-retaining castings for use at elevated temperatures*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A 487	*Standard specification for steel castings suitable for pressure service*
		ASTM A 494	*Standard specification for castings, nickel and nickel alloy*
		ASTM A 516	*Standard specification for pressure vessel plates, carbon steel, for moderate and lower temperature service*
		ASTM A 743	*Standard specification for castings, iron-chromium, iron-chromium-nickel and nickel base corrosion resistant, for general application*
		ASTM A 744	*Standard specification for castings, iron-chromium-nickel, corrosion resistant, for severe service*
		ASTM A 890	*Standard specification for castings, iron-chromium-nickel-molybdenum corrosion-resistant, duplex (austenitic/ferritic) for general application*
		ASTM B 148	*Standard specification for aluminium bronze sand castings*
		ASTM B 150	*Standard specification for aluminium bronze rod, bar and shapes*
		ASTM F 467	*Standard specification for non-ferrous nuts for general use*
		ASTM F 468	*Standard specification for nonferrous bolts, hex-cap screws and studs for general use*
		NACE MR0103	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		NACE MR0175	*Petroleum and natural gas industries Materials for use in H2S-containing environments in oil and gas production*
		BS 4082-1	*External dimensions for vertical in-line centrifugal pumps – Part 1: "I" type*
		EEMUA 140	*Noise procedure specification*
		EEMUA 107	*Recommendations for the protection of diesel engines for use in zone 2 hazardous areas*
		ISO 10441	*Petroleum and natural gas industries — Flexible couplings for mechanical power transmission — Special purpose applications*
		ISO 10474	*Steel and steel products — inspection documents*
		ISO 13709:2009	*Centrifugal pumps for petroleum, petrochemical and natural gas industries*
		ISO 14691	*Petroleum and natural gas industries – Flexible couplings for mechanical power transmission – General purpose applications*
		ISO 15156	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
17	Pompa *Reciprocating Positive Displacement* dan Pompa *Metering*	API 671	*Special service couplings for petroleum, chemical and gas industry services*
		API 674	*Positive displacement pumps - reciprocating*
		API 675	*Positive displacement pumps - controlled volume*
		API 677	*General-purpose gear units for petroleum, chemical and gas industry services*
		ASTM A 278	*Standard specification for gray iron castings for pressure-containing parts for temperatures up to 650 °F*
		ASTM A 395	*Standard specification for ferritic ductile iron pressure-retaining castings for use at elevated temperatures*
		ASTM A 488	*Standard practice for steel castings, welding, qualifications of procedures and personnel*
		ASTM A 536	*Standard specification for ductile iron castings*
		ASME II	*Materials*

NO	URAIAN KEGIATAN	STANDAR	
		ASME V	*NDE*
		ASME VIII	*Pressure Vessel*
		MSS SP-55	*Quality standard for steel castings for valves, flanges and fittings and other piping components - visual method for evaluation of surface irregularities*
		NACE MR0103	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		NACE MR0175	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
		ISO 10474	*Steel and steel products - inspection documents*
		ISO 15156	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
18	Pompa *Vakum Liquid Ring* dan Kompresor	API 670	*Machinery protection systems*
		API 681	*Liquid ring vacuum pumps and compressors for petroleum, chemical and gas industry services*
		ISO 9001	*Quality management systems – Requirements*
		ISO 10474	*Steel and steel products – Inspection documents*
		ISO 13706	*Petroleum and natural gas industries – Air-cooled heat exchangers*
		ISO 13709	*Centrifugal pumps for petroleum, petrochemical and natural gas industries*
		ISO 17945/NACE MR 0103	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		ISO 15156/NACE 0175	*Petroleum and natural gas industries – Materials for use in H2S-containing environments in oil and gas production*
19	Pompa *Firewater*	IEC 60529	*Degrees of protection provided by enclosures*
		ISO 1940	*Mechanical vibration. Balance quality requirements for rigid motors*
		ISO 2892	*Austenitic cast iron*
		ISO 2954	*Mechanical vibration of rotating and reciprocating machinery – requirements for instruments for measuring vibration severity*
		ISO 9001	*Quality systems – Model for quality assurance in design, development, production, installation and servicing*
		ISO 13709/ API 610	*Centrifugal pumps for petroleum, petrochemical and natural gas industries*
		ISO 3046-5	*Reciprocating internal combustion engines: Performance Part 5 - Torsional vibrations*
		NFPA 20	*Firewater Pump*
		BS 970/ ISO 683	*Specification for wrought steels for mechanical and allied engineering*
		BS 1133-8	*wooden containers*
		BS 1133-15	*tensional strapping*
		BS 1133-19	*use of dessicants in packaging*
		BS 1400	*Copper alloy ingots and copper alloy and high conductivity copper castings*
		BS 3076	*Nickel and nickel alloys: Bar*
		BS 4884 – 1	*Part 1- Content*
		BS 4884 - 2	*Part 2 - Presentation*
		BS 4999-143/ EN60034	*General requirements for rotating electrical machines: Part 143 - Specification for tests*
		BS:EN 13835	*Founding — Austenitic cast irons*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A 278	*Gary Iron castings for pressure-containing parts for temperatures up to 650° F (350 °C)*
		ASTM A 395	*Ferritin ductile iron pressure-retaining castings for use at elevated temperatures*
		ASTM A 439	*Austenitic ductile iron castings*
		ASTM A 488	*Steel castings, welding, qualifications of procedures and personnel*
		ASTM A 536	*Ductile iron castings*
		ASTM B 148	*Aluminium-bronze sand castings*
		ASME	*General purpose metric screw threads-selected sizes for screws, bolts and nuts*
		AGMA 6110-F97	*Standard for spur, helical, herringbone and bevel enclosed drives metric edition of ANSI/AGMA 6010-F97*
20	Sistem Penggerak (*Drive System*), Peralatan *Downhole*, Sistem Pompa *Progressing Cavity* untuk *Artificial Lift*	ISO 15136-2:2006	*Downhole Equipment – Progressing Cavity Pump Systems For Artificial Lift – Surface – Drive System*
21	Pemilihan, Pengujian, dan Pemasangan Kompressor	ISO 5801	*Industrial fans – Performance testing using standardized airways*
		BS 848-1	*Fans for general purposes - Part 1: Performance testing using standardized airways*
		IGC 27/01/E	*Centrifugal compressors for oxygen service*
		API 614	*Lubrication, shaft-sealing, and control-oil systems and auxiliaries for petroleum, chemical and gas industry services*
		API 617	*Axial and centrifugal compressors and expander-compressors for petroleum, chemical and gas industry services*
		API 672	*Packaged, integrally geared centrifugal air compressors for petroleum, chemical, and gas industry services*
		ASME PTC 10	*Performance test code on compressors and exhausters*
		ASTM A 182	*Standard specification for forged or rolled alloy and stainless steel pipe flanges, forged fittings, and valves and parts for high-temperature service*
22	Kompresor Aksial, Sentrifugal, dan Ekspander	API 614	*Lubrication, shaft-sealing, and control-oil systems and auxiliaries for petroleum, chemical and gas industry services*
		API 617	*Axial and centrifugal compressors and expander-compressors for petroleum, chemical and gas industry services*
		API 670	*Machinery protection systems*
		API 671	*Special-purpose couplings for petroleum, chemical, and gas industry services*
		ASME PTC 10	*Performance test code on compressors and exhausters*
		ASME V	*Section V: Non-destructive examination*
		ASME VIII	*Section VIII: Pressure vessels*
		ASME IX	*Section IX: Welding and brazing qualifications*
		ASTM A 193	*Standard specification for alloy-steel and stainless steel bolting materials for high-temperature or high pressure service and other special purpose applications*
		ASTM A 388	*Standard practice for ultrasonic examination of heavy steel forgings*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A 395	*Standard specification for ferritic ductile iron pressure-retaining castings for use at elevated temperatures*
		ASTM A 488	*Standard practice for steel castings, welding, qualifications of procedures and personnel*
		ASTM A 571	*Standard specification for austenitic ductile iron castings for pressure-containing parts suitable for low-temperature service*
		ASTM A 577	*Standard specification for ultrasonic angle-beam examination of steel plates*
		ASTM A 578	*Standard specification for straight-beam ultrasonic examination of plain and clad steel plates for special applications*
		ASTM A 745	*Standard practice for ultrasonic examination of austenitic steel forgings*
		ASTM A 770	*Standard specification for through-thickness tension testing of steel plates for special applications*
		ASTM A 802	*Standard practice for steel castings, surface acceptance standards, visual examination*
		ASTM E 213	*Standard practice for ultrasonic examination of metal pipe and tubing*
		NACE MR0103	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		NACE MR0175	*Petroleum and natural gas industries Materials for use in H2S-containing environments in oil and gas production – Part 1: General principles for selection of cracking-resistant materials; Part 2: Cracking-resistant carbon and low alloy steels, and the use of cast irons; Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys*
		EEMUA 140	*Noise procedure specification*
		EN 287	*Approval testing of welders — Fusion welding*
		EN 288	*Specification and qualification of welding procedures for metallic materials*
		ISO 1940-1	*Mechanical vibration — Balance quality requirements for rotors in a constant (rigid) state — Part 1: Specification and verification of balance tolerance*
		ISO 9001	*Quality management systems — Requirements*
		ISO 9606	*Approval testing of welders — Fusion welding*
		ISO 10441	*Petroleum and natural gas industries — Flexible couplings for mechanical power transmission — Special purpose applications*
		ISO 10474	*Steel and steel products — inspection documents*
		ISO 15156	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
		ISO 15607	*Specification and qualification of welding procedures for metallic materials — General rules*
23	Kompresor *Reciprocating*	API 618:2007	*Reciprocating Compressor for Petroleum, Chemical, and Gas Industry Services*
		API 1B	*Oil field V-belting*
		ASTM A 48	*Standard specification for gray iron castings*
		ASTM A 216	*Standard specification for steel castings, carbon, suitable for fusion welding, for high- temperature service*
		ASTM 278	*Standard specification for gray iron castings for pressure-containing parts for temperature up to 650 degrees*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A 395	*Standard specification for ferritic ductile iron pressure-retaining castings for use at elevated temperatures*
		ASTM A 435	*Standard specification for straight-beam ultrasonic examination of steel plates*
		ASTM A 436	*Standard specification for austenitic gray iron castings*
		ASTM A 439	*Standard specification for austenitic ductile iron castings*
		ASME B16.5	*Pipe flanges and flanged fittings NPS ½ through NPS 24*
		ASME B16.47	*Large diameter steel flanges NPS 26 through NPS 60*
		ASME B31.3	*Process piping*
		ASME B36.10	*Welded and seamless wrought steel pipe*
		ASME B36.19	*Stainless steel pipe*
		ASME VIII, Div. 1	*ASME Boiler and Pressure Vessel Code: Rules for construction of pressure vessels*
		MSS SP-55	*Quality standard for steel castings for valves, flanges and fittings and other piping components - visual method for evaluation of surface irregularities*
		NACE MR0103	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		NACE MR0175	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
		TEMA C	*Standards of the Tubular Exchanger Manufacturers Association*
		BS 903	*Methods of testing vulcanised rubber*
		BS 3790	*Specification for endless wedge belt drives and endless V-belt drives*
		ISO 1813	*Belt drives - V-ribbed belts, joined V-belts and V-belts including wide section belts and hexagonal belts - Electrical conductivity of antistatic belts: Characteristics and methods of test*
		ISO 1217	*Displacement compressors - acceptance tests*
		ISO 10474	*Steel and steel products inspection documents*
		ISO 15156	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
24	Cerobong Baja (*Steel Stacks*)	ASME STS-1	*Steel Stacks*
		ISO 1461	*Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods*
25	Rincian Terkait *Flare*	ISO 25457 : 2008	*Flare details for general refinery and petrochemical service*
		ISO 2408	*Steel wire ropes for general purposes – Minimum requirements*
		ASME STS-1	*Steel stacks*
26	Sistem Produksi Bawah Laut	API 17V	*Recommended Practice for Analysis, Design, Installation, and Testing of Safety System for Subsea Application*
		API 17W	*Recommended Practice for Subsea Capping Stack*
		API 17R	*Recommended Practice for Flowline Connectors and Jumpers*
		API 17U	*Recommended Practice for Wet and Dry Thermal Insulation of Subsea Flowlines and Equipment*
		API 17S	*Recommended Practice for Design, Testing and Operation of Subsea Multiphase Flow Meter*

NO	URAIAN KEGIATAN	STANDAR	
		API 17N	*Recommended Practice for Subsea production System Reliability and Technical Risk Management*
		ISO 13628-1	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 1: General requirements and recommendations*
		ISO 13628-2	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 2: Unbonded flexible pipe systems for subsea and marine applications*
		ISO 13628-3	*Petroleum and Natural Gas Industries – Design and operation of subsea production systems – Part 3: Through Flowline (TFL) Systems*
		ISO 13628-4	*Petroleum and Natural Gas Industries – Design and operation of subsea production systems – Part 4: Subsea Wellhead and Tree Equipment*
		ISO 13628-5	*Petroleum and Natural Gas Industries – Design and operation of subsea production systems – Part 5: Subsea Umbilicals*
		ISO 13628-6	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 6: Subsea production control systems*
		ISO 13628-7	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 7: Completion/workover riser systems*
		ISO 13628-8	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 8: Remotely Operated Vehicle (ROV) interfaces on subsea production systems*
		ISO 13628-9	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 9: Remotely Operated Tool (ROT) Intervention Systems*
		ISO 13628-10	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 10: Specification for bonded flexible pipe*
		ISO 13628-11	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 11: Flexible pipe systems for subsea and marine applications*
		ISO 13628-12	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 12: Dynamic production risers*
		ISO 13628-13	*Petroleum and natural gas industries – Design and operation of subsea production systems - Part 13: Remotely Operated Tool and interfaces on subsea production systems*
		ISO 13628-14	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 14: Subsea high integrity pressure protection systems (HIPPS)*
		ISO 13628-15	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 15: Subsea structures and manifolds*
		ISO 13628-16	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 16: Specification for flexible pipe ancillary equipment*
		ISO 13628-17	*Petroleum and natural gas industries – Design and operation of subsea production systems – Part 17: Recommended practice for flexible pipe ancillary equipment.*

NO	URAIAN KEGIATAN	STANDAR	
27	Kualifikasi Teknologi untuk Pengembangan Proyek Bawah Laut	ISO 13628-1	*Petroleum, petrochemical and natural gas industries: Design and operation of subsea production systems – General Requirements and Recommendations*
		API 17N	*Subsea Production System Reliability and Technical Risk Management*
		API 17Q	*Subsea Equipment Qualification—Standardized Process for Documentation*
		DNV RP A203	*Qualification Procedures for New Technology*
28	Sistem *Wellhead* Bawah Laut	API RP 17A	*Petroleum and natural gas industries. Design and operation of subsea production systems. General requirements and recommendations, 2006.*
		API SPEC 17D	*Specification for Subsea Wellhead and Christmas Tree, 2011*
		API SPEC 53	*Blowout Prevention Equipment Systems for Drilling Wells, 2012*
		API RP 17H	*Recommended Practice for Remotely Operated Vehicle (ROV) Interfaces on Subsea Production Systems, 2013*
		API RP 17N	*Subsea Production System Reliability and Technical Risk Management, 2009*
		API SPEC 6A	*Specification for Wellhead and Christmas Tree, 2003*
		API RP 16Q	*Design, Selection, Operation and Maintenance of Marine Drilling Riser Systems, 2010*
		API RP 17Q	*Subsea Equipment Qualification – Standardized Process for Documentation, 2010*
		DNV 2.7-1	*Offshore Container*
		DNV 2.7-3	*Portable Offshore Units, 2013*
		ISO 13628-7	*Completion/ workover riser system, 2006*
		ISO 13628-8	*Remotely operated tools and interfaces on subsea production systems, 2010*
		ISO 13628-9	*Remotely Operated Tool (ROT) intervention systems, 2000*
		NACE MR 0175 / ISO 15156 (Part I,II,III)	*Materials for use in H2S-containing environments in oil and gas production, 2009*
		NORSOK M501	*Surface preparation and protective coating, 2004*
29	Struktur Pelindung untuk Fasilitas Bawah Laut	ANSI/AISC 360-10	*Specification for Structural Steel Buildings, 2010*
		ISO 19902	*Petroleum and natural gas industries - Fixed steel offshore structures, 2007*
		DNV-RP-F111	*Interference Between Trawl Gear And Pipelines, October 2010*
		ISO 13628-1	*Petroleum and natural gas industries. Design and operation of subsea production systems. General requirements and recommendations, 2005.*
		ISO 13628-15	*Petroleum and natural gas industries. Design and operation of subsea production systems. Subsea Structures and Manifolds, 2011.*
		NORSOK U-001	*Subsea Production System, Rev 3 - October 2002*
		NORSOK U-002	*Subsea Structures and Piping System, Rev 2 - June 1998.*
		API RP 2A WSD	*Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms—Working Stress Design, October 2010.*
		NORSOK U-004	*Design of Steel Structures, Rev 2 – October 2004.*
30	Sistem *Tree* Bawah Laut	ISO 13628-1	*Petroleum and natural gas industries. Design and operation of subsea production systems. General requirements and recommendations, 2006.*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 13628-4	*Specification for Subsea Wellhead and Tree Equipment, 2011*
		API SPEC 53	*Blowout Prevention Equipment Systems for Drilling Wells, 2012*
		ISO 13628-8	*Recommended Practice for Remotely Operated Vehicle (ROV) Interfaces on Subsea Production Systems, 2013*
		API RP 17N	*Subsea Production System Reliability and Technical Risk Management, 2009*
		ISO 10423	*Specification for Wellhead and Christmas Tree, 2010*
		API RP 16Q	*Design, Selection, Operation and Maintenance of Marine Drilling Riser Systems, 2010*
		API RP 17Q	*Subsea Equipment Qualification – Standardized Process for Documentation, 2010*
		DNV 2.7-1	*Offshore Container*
		DNV 2.7-3	*Portable Offshore Units, 2013*
		ISO 13628-7	*Completion/workover riser system, 2006*
		ISO 13628-8	*Remotely operated tools and interfaces on subsea production systems, 2010*
		ISO 13628-9	*Remotely Operated Tool (ROT) intervention systems, 2000*
		NACE MR 0175 / ISO 15156 (Part I,II,III)	*Materials for use in H2S-containing environments in oil and gas production, 2015*
		NORSOK M 501	*Surface Preparation and Protective Coating*
		DNVGL-SE-0045	*Certification for Subsea Equipment and Components*
31	Desain *Template* Bawah Laut, Manifold, dan Sistem Perpipaan	ANSI/AISC 360-10	*Specification for Structural Steel Buildings*
		API 6DSS	*Specification on Subsea Pipeline Valves*
		API RP 17D	*Specification for Design and Operation of Subsea Production Systems—Subsea Wellhead and Tree Equipment*
		API RP 17A	*Design and Operation of Subsea Production Systems—General Requirements and Recommendations.*
		ISO 13628-1	*Petroleum and natural gas industries. Design and operation of subsea production systems. General requirements and recommendations, 2005.*
		ISO 13628-4	*Design and operation of subsea production systems — Subsea wellhead and tree equipment*
		ISO 13628-8	*Petroleum and natural gas industries. Design and operation of subsea production systems. Remotely Operated Vehicle (ROV) interfaces on Subsea Production System.*
		ISO 13628-9	*Petroleum and natural gas industries. Design and operation of subsea production systems. Remotely Operated Tool (ROT) intervention systems.*
		ASME B 31.3	*Process Piping*
		ASME B 31.4	*Pipeline Transportation Systems for Liquids and Slurries*
		ASME B 31.8	*Gas Transmission and Distribution Piping System*
		ASME Sect. V	*Boiler and Pressure Vessel Code Section V – Non Destructive Examination*
		ASME Section VIII Division 1	*Boiler and Pressure Vessel Code Rules for Construction*
		ASME Sect. IX	*Welding and Brazing Qualification*
		ASTM A 262	*Inter-granular Corrosion Testing and Analysis*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A 923	*Standard Test Methods for Detecting Detrimental Intermetallic Phase in Duplex Austenitic/Ferritic Stainless Steels*
		ASTM G 48	*Standard Test Methods for Pitting and Crevice Corrosion Resistance of Stainless Steels and Related Alloys by Use of Ferric Chloride Solution*
		ASTM E 562	*Standard Test Method for Determining Volume Fraction by Systematic Manual Point Count*
		AWS D1.1	*American Welding Society*
		DNV RP B-401	*Cathodic Protection Design*
		DNV OS F-101	*Submarine Pipeline Systems*
		API RP 2A WSD	*Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms— Working Stress Design, October 2010.*
		DNVGL-SE-0045	*Certification Of Subsea Equipment and Components*
		DNV OS H-201	*Load Transfer Operations*
		DNV OS H-205	*Lifting Operations (VMO Standard - Part 2-5)*
		DNV OS H-206	*Load-out, Transport and Installation of Subsea Object (VMO – Part 2-6)*
		EN 10025	*Hot rolled products of structural steels.*
		IMCA D 044	*Isolation and intervention: Diver access to subsea systems*
		ISO 15156	*Petroleum and natural gas industries— Materials for use in H2S-containing Environments in oil and gas production*
		ISO 10423	*Petroleum and natural gas industries - Drilling and production equipment - Wellhead and Christmas tree equipment*
		NACE MR 0175	*Petroleum And Natural Gas Industries - Materials For Use In H2s-Containing Environments In Oil And Gas Production*
		NORSOK M-001	*Material Selection*
		NORSOK M-120	*Material Data Sheets for Structural Steel*
		NORSOK M-501	*Surface Preparation and Protective Coating*
		NORSOK M 601	*Welding and Inspection of Piping*
		NORSOK M-630	*Material Data Sheets for Piping*
32	Alat Penukar Panas *Plate and Frame*	ASME VIII	*ASME Boiler and Pressure Vessel Code: Rules for construction of pressure vessels*
		ISO 15547-1:2005	*Petroleum and natural gas industries - Plate-and-frame heat exchangers*
33	Alat Penukar Panas *Brazed Alumunium Plate*	ISO 10474	*Steel and Steel Products – Inspection documents*
		ISO 15547-2:2005	*Petroleum, Petrochemical and Natural Gas Industries – Plate-type Heat Exchangers – Part 2: Brazed Aluminium Plate-fin Heat Exchangers*
		ASME Section VIII Division 1	*ASME Boiler and Pressure Vessel Code – Rules for Construction of Pressure Vessels – Division 1*
		ASME Section Division 2	*ASME Boiler and Pressure Vessel Code – Rules for Construction of Pressure Vessels – Div. 2:Alternative Rules*
		ASME B16.5	*Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 24 Metric/Inch Standard*
		ASME B16.47	*Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard*
		ASME B31.3	*Process Piping*
		AWS D1.1	*Structural Welding Code-Steel*
34		API RP 521	*Pressure-relieving and Depressurization Systems*

NO	URAIAN KEGIATAN	STANDAR	
	Alat Penukar Panas *Printed Circuit (PCHE)*	ASME Section VIII Div. 1 & 2	*ASME Boiler and Pressure Vessel Code – Rules for construction of pressure vessels*
		ASME B16.5	*Pipe flanges and flanged fittings NPS 1/2 through NPS 24*
		ASME B16.47	*Large diameter steel flanges NPS 26 Through NPS 60*
		ISO 15156/ NACE MR0175	*Petroleum and natural gas industries—Materials for use in H2S-containing environments in oil and gas production.*
		ISO 17945/ NACE MR0103	*Petroleum, petrochemical and natural gas industries -- Metallic materials resistant to sulfide stress cracking in Corrosive Petroleum Refining Environments*
35	Inspeksi, Perawatan, dan Perbaikan Tanki Penyimpanan Baja Vertikal	API 575	*Inspection of atmospheric and low-pressure storage tanks*
		API 650	*Welded steel tanks for oil storage*
		API RP 651	*Cathodic protection of above ground petroleum storage tanks*
		API 653	*Tank inspection, repair, alteration and reconstruction*
		API 2000	*Venting atmospheric and low-pressure storage tanks*
		EEMUA 159	*User's Guide to Inspection, Maintenance and Repair of Aboveground Vertical Cylindrical Steel Storage Tanks*
		BS EN 14015	*Specification for the design and manufacture of site built, vertical, cylindrical, flat-bottomed, above ground, welded, steel tanks for the storage of liquids at ambient temperature and above .*
36	*Mixers* Bukaan Samping Untuk Tanki Penyimpanan	API 677	*Special purpose gear units for refinery services.*
		API 682	*Shaft sealing systems for centrifugal and rotary pumps*
		ASME B16.5	*Pipe flanges and flanged fittings*
		ASTM A 609	*Ultrasonic examination of carbon and low-alloy steel castings*
		ASTM E 94	*Radiographic testing*
		ASTM E 186	*Heavy walled (51 to 114 mm) steel castings*
		ASTM E 280	*Heavy walled (114 to 305 mm) steel castings*
		ASTM E 446	*Steel castings up to 51 mm in thickness*
37	Pembongkaran Tanki *Storage* dan *Sphere*	EEMUA 154	*Guidance to owners on demolition of vertical cylindrical steel storage tanks*
38	Tanki *Fiberglass Reinforced Platic*	API 12P	*Specification for Fiberglass Reinforced Plastic Tanks*
39	Tanki Penyimpanan Baja Berbentuk Persegi Panjang	AISC 360	*Specification for Structural Steel Buildings*
		API 650	*Welded Tanks for Oil Storage*
		API 2000	*Venting Atmospheric and Low-pressure Storage Tanks*
		API RP2A	*Recommended Practice for Planning, Designing and Constricting Fixed Offshore Platforms*
		ASCE 7	*Minimum Design Loads for Buildings And Other Structures*
		ASME SEC IX	*Welding, Brazing and Fusing Qualifications*
		ASME B16.5	*Pipe Flanges and Flanged Fittings NPS ½ through NPS 24*
		ASME B16.47	*Large Diameter Steel Flanges*
		EN 10204	*Metallic Products – Type of Inspection Documents*

NO	URAIAN KEGIATAN	STANDAR	
40	Pesawat Angkat (*Crane*) *Pedestal Mounted* pada Lepas Pantai (*Offshore*)	API RP 2A WSD	*Recommended practice for planning, designing and constructing fixed offshore platforms – Working stress design*
		API Spec 2C (7th edition, 2012)	*Specification for offshore pedestal mounted cranes*
		API Spec 9A	*Specification for Wire Rope*
		ASME VIII	*Boiler and pressure vessel code, Section VIII – Rules for construction of pressure vessels*
		ASTM E 92	*Standard test method for Vickers hardness of metallic materials*
		AWS D1.1	*Structural welding code - steel*
		NFPA 70	*National electrical code*
		PD 5500	*Specification for unfired fusion welded pressure vessels*
		IEC 60079-10	*Electrical apparatus for explosive gas atmospheres – Part 10: Classification of hazardous areas*
		IEC 60529	*Degrees of protection provided by enclosures (IP code)*
		ISO 2408	*Steel wire ropes for general purposes – Minimal requirements*
		ISO 9001	*Quality management systems – Requirements*
		ISO 10474	*Steel and steel products – Inspection documents*
41	Fasilitas Pengangkat dan Perlindungan Cuaca pada Peralatan Putar	API Std 610	*Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries*
		API Std 611	*General-purpose steam turbines for Petroleum, Petrochemical and Natural Gas Industries*
		API Std 612	*Petroleum, Petrochemical and Natural Gas Industries – Steam Turbines – Special Purpose Applications*
		API Std 616	*Gas Turbines for the Petroleum, Chemical, and Gas Industry Services*
		API Std 617	*Axial and Centrifugal Compressors and Expander-compressors for Petroleum, Chemical, and Gas Industry Services*
		API Std 618	*Reciprocating compressors for Petroleum, Chemical, and Gas Industry Services*
		ISO 10437	*Petroleum, Petrochemical and Natural Gas Industries – Steam Turbines – Special Purpose Applications*
		ISO 13709	*Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries*
42	Inspeksi, Perawatan, Perbaikan, dan Produksi Ulang (*Remanufacture*) Peralatan Pengangkat (*Hoisting*)	ISO 13534 : 2000	*Petroleum and natural gas industries — Drilling and production equipment — Inspection, maintenance, repair and remanufacture of hoisting equipment.*
43	Peralatan Angkat (*Hoisting*) untuk Pengeboran dan Produksi	ISO 13535 : 2000	*Petroleum and natural gas industries — Drilling and production equipment — Hoisting equipment*
44	Sistem *Heating, Ventilation and AirConditioning (HVAC)* pada Fasilitas di Darat (*Onshore*)	ANSI/ASHRAE 52.1	*Method of testing air-cleaning devices used in general ventilation for removing particulate matter*
		ANSI/ASHRAE 55	*Thermal environmental conditions for human occupancy*
		ANSI/ASHRAE 62	*Ventilation for Acceptable Indoor Quality*
		NFPA 90A	*Standard for the installation of air conditioning and ventilating systems*

NO	URAIAN KEGIATAN	STANDAR	
		DIN VDE 0510	*Specification for electric storage batteries and battery plants*
		IEC 60079-14	*Electrical apparatus for explosive gas atmospheres Part 14: Electrical installations in hazardous areas (other than mines)*
		IEC 60654-1	*Industrial-process measurement and control equipment; operating conditions Part 1: Climatic conditions*
		IEC 60654-4	*Industrial-process measurement and control equipment; operating conditions Part 4: Corrosive and erosive influence*
		ISO 7726	*Thermal environments – Instruments and methods for measuring physical quantities*
		ISO 7730	*Moderate thermal environments – Determination of the PMV and PPD indices and specification of the conditions for thermal comfort*
45	Sistem *Heating, Ventilation and AirConditioning (HVAC)* pada Fasilitas Lepas Pantai (*Offshore*)	ISO 15138	*Petroleum and natural gas industries – Offshore production*
		HVCA DW/143	*Ductwork leakage testing*
		HVCA DW/144	*Specification for sheet metal ductwork*
		ASHRAE 62.1	*Ventilation for acceptable indoor air quality*
46	Instalasi, Pengujian, dan Penyerahan (*Commissioning*) Sistem HVAC	ASHRAE Standard 111	*Practices for measurement, testing, adjusting and balancing of building heating, ventilation, air-conditioning and refrigeration systems*
		ASHRAE Guideline 1	*The HVAC commissioning process*
		ASHRAE Guideline 4	*Preparation of operating and maintenance documentation for building systems*
		ASHRAE Guideline 5	*Commissioning smoke management systems*
		NFPA 90A	*Standard for the installation of air conditioning and ventilating systems*
		NFPA 90B	*Standard for the installation of warm air heating and air-conditioning systems*
		SMACNA 1143	*HVAC air duct leakage test manual*
		ASME B31.3	*Process piping*
		ISO 11201	*Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Engineering method in an essentially free field over a reflecting plane*
		ISO 11202	*Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Survey method in situ*
47	Basis Desain Kelas Pipa	ASME B16.5, 2013 edition	*Pipe flanges and flanged fittings, steel, nickel alloys and other special alloys.*
		ASME B31.3, 2010 edition	*Process Piping*
		ASME B36.10M	*Welded and seamless wrought steel pipe*
		ASME B36.19M	*Stainless Steel Pipe*
		ASME VIII Div 1	*ASME Boiler and pressure vessel code: Section VIII Division 1 - Rules for construction of pressure vessels*
		MSS-SP-44	*Manufacturers Standardization Society -Steel Pipeline Flanges*
48	Dudukan Pipa (*Pipe Support*)	MSS SP 58	*Pipe hangers and supports - Materials, design and manufacture*
		MSS SP 69	*Pipe hangers and supports - Selection and application*

NO	URAIAN KEGIATAN	STANDAR	
		BS 3974	*Specification for pipe supports*
49	Fabrikasi Perpipaan Bengkel dan Lapangan	ISO 10474	*Steel and steel products – Inspection documents*
		ASME B16.11	*Forged fittings, socket-welded and threaded*
		ASME B16.25	*Buttwelding ends*
		ASME B16.9	*Factory-made wrought buttwelding fittings*
		ASME B31.3	*Process piping*
		ASTM A 193	*Standard specification for alloy-steel and stainless steel bolting materials for high-temperature service*
		ASTM A 320	*Standard specification for alloy/ steel bolting materials for low-temperature service*
		ASTM A 353	*Standard specification for pressure vessel plates, alloy steel, 9-percent nickel, double-normalized and tempered*
		ASTM E 110	*Standard test method for indentation hardness of metallic materials by portable hardness testers*
		ASTM E 112	*Standard test methods for determining average grain size*
		ASTM E 140	*Standard hardness conversion tables for metals relationship among Brinell hardness, Vickers hardness, Rockwell hardness, superficial hardness, Knoop hardness, and scleroscope hardness*
		ASTM E 165	*Standard test method for liquid penetrant examination*
		ASTM E 709	*Standard guide for magnetic particle examination*
		BS 381C	*Specification for colours for identification, coding and special purposes*
		EN 1043-1	*Destructive tests on welds in metallic materials - Hardness testing – Part 1: Hardness test on arc welded joints*
		EN 10204	*Metallic products – types of inspection documents*
50	Pelindung Uap Pemanas Sistem Perpipaan	ASME B16.5	*Pipe flanges and flanged fittings*
		ASME B31.3	*Process Piping*
		ASME Sec. VIII Div.1	*Boiler and Pressure Vessel Code*
		BS 5500	*Unfired fusion welded pressure vessels*
		ISO 6704	*Automatic steam traps – classification*
		ISO 10474	*Steel and steel products, inspection documents*
51	*Hot-Tapping* pada Jalur Pipa (*Pipelines*), Perpipaan, dan Peralatan	ISO 3183	*Petroleum and natural gas industries – Steel pipe for pipelines – Technical delivery conditions*
		ISO 6507-1	*Metallic materials – Vickers hardness test Part 1: Test method*
		ISO 9712	*Non-destructive testing – Qualification and certification of personnel*
		ISO 13623	*Petroleum and natural gas industries – Pipeline transportation systems*
		BS 6990	*Code of practice for welding on steel pipes containing process fluids or their residuals*
		API Spec 5L	*Specification for linepipe*
		API RP 2201	*Safe hot-tapping practices in the petroleum & petrochemical industries*
		API RP 2200	*Repairing crude oil, liquefied petroleum gas and product pipelines.*
		ASME B31.4	*Pipeline transportation systems for liquid hydrocarbons and other liquids*
		ASME B31.8	*Gas transmission and distribution piping systems*
		ASME B16.5	*Pipe flanges and flanged fittings NPS ½ through nps 24 metric/inch standard*

NO	URAIAN KEGIATAN	STANDAR	
		ASME VIII	*ASME Boiler and Pressure Vessel Code: Section VIII, Division 1 Rules for construction of pressure vessels*
		ASME IX	*Section IX - Welding and Brazing Qualifications*
52	Kelengkapan (*Fittings*) yang Melekat Secara Mekanikal pada Sistem Perpipaan (*Piping*) dan Jalur Pipa (*Pipeline*)	ASME B 31.3	*Process Piping*
		ASME B 31.4	*Pipeline Transportation System for Liquids and Slurries*
		ASME B 31.8	*Gas Transmission and Distribution Piping System*
		ASTM F 1387	*Standard Specification for Performance of Piping and Tubing Mechanically Attached Fittings*
		ISO 9001	*Quality Management*
		EN 10204	*Metallic Products – Types of Inspection Document*
		ISO 10474	*Steel and Steel Products – Inspection Documents*
		ISO 21329	*Petroleum and Natural Gas Industries – Pipeline Transportation Systems – Test Procedures for Mechanical Connectors*
		NACE MR 0175 / ISO 15156	*Petroleum and natural gas industries -- Materials for use in H2S-containing environments in oil and gas production*
		NACE MR 0103	*Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments*
		DNV OS F101	*Submarine Pipeline Systems*
53	Kelas Pipa pada Fasilitas Pemurnian Minyak Bumi, Pengolahan Kimia, dan Pengolahan Gas	ASME B31.3	*Process piping*
		ASTM A 106	*Standard specification for seamless carbon steel pipe for high-temperature service*
		ASTM A 312	*Standard specification for seamless, welded, and heavily cold worked austenitic stainless steel pipes*
		ASTM A 333	*Standard specification for seamless and welded steel pipe for low-temperature service*
		ASTM A 335	*Standard specification for seamless ferritic alloy-steel pipe for high-temperature service*
		ASTM A 358	*Standard specification for electric-fusion-welded austenitic chromium-nickel stainless steel pipe for high-temperature service and general applications*
		ASTM A 790	*Standard specification for seamless and welded ferritic/ austenitic stainless steel pipe*
		ISO 17292	*Metal ball valves for petroleum, petrochemical and allied industries*
54	Kelas Pipa pada Eksplorasi dan Produksi Lepas Pantai (*Offshore*)	ASME B31.3	*Process piping*
		ASTM A 106	*Standard specification for seamless carbon steel pipe for high-temperature service*
		ASTM A 312	*Standard specification for seamless, welded, and heavily cold worked austenitic stainless steel pipes*
		ASTM A 358	*Standard specification for electric-fusion-welded austenitic chromium-nickel stainless steel pipe for high-temperature service and general applications*
		ASTM A 790	*Standard specification for seamless and welded ferritic/ austenitic stainless steel pipe*
		ISO 13703	*Petroleum and natural gas industries - Design and installation of offshore production platform piping systems*
		ISO 17292	*Metal ball valves for petroleum, petrochemical and allied industries*

NO	URAIAN KEGIATAN	STANDAR	
55	Layanan dan Indeks Pemilihan Material Kelas Pipa	ASME B31.3:2012	*Process piping*
		ASTM A 106	*Standard specification for seamless carbon steel pipe for high-temperature service*
		ASTM A 312	*Standard specification for seamless, welded, and heavily cold worked austenitic stainless steel pipes*
		ASTM A 333	*Standard specification for seamless and welded steel pipe for low-temperature service*
		ASTM A 335	*Standard specification for seamless ferritic alloy-steel pipe for high-temperature service*
		ASTM A 358	*Standard specification for electric-fusion-welded austenitic chromium-nickel stainless steel pipe for high-temperature service and general applications*
		ASTM A 790	*Standard specification for seamless and welded ferritic/ austenitic stainless steel pipe*
		ISO 17292	*Metal ball valves for petroleum petrochemical and allied industries*
56	Pemilihan, Ukuran, Spesifikasi, Inspeksi, dan Pengujian Kerangan Pelepas Tekanan (*Relief Valve*)	API STD. 520 Part I	*Sizing, selection and installation of pressure-relieving devices in refineries, Part II - Installation*
		API RP 520 Part II	*Sizing, selection and installation of pressure-relieving devices in refineries*
		API STD. 521	*Pressure-relieving and depressuring systems*
		API STD. 526	*Flanged steel pressure relief valves*
		API STD. 527	*Seat Tightness of pressure relief valves*
		API RP 576	*Inspection of Pressure-Relieving Devices*
		API STD. 650	*Welded steel tanks for oil storage*
		API 2000	*Venting atmospheric and low-pressure storage tanks*
		ASME B16.5	*Pipe flanges and flanged fittings, NPS 1 /2 through NPS 24*
		ASME Sec. I	*ASME boiler and pressure vessel code: Rules for construction of power boilers*
		ASME IV	*ASME boiler and pressure vessel code: Rules for construction of heating boilers*
		ASME VIII	*ASME boiler and pressure vessel code: Rules for construction of pressure vessels*
		NACE MR0103	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		NACE MR0175	*Petroleum and natural gas industries – Materials for use in H2S-containing environments in oil and gas production*
		OSHA 1910.106	*Occupational Safety and Health Standards – Hazardous Materials – Flammable and combustible liquids*
		PD 5500	*Unfired fusion welded pressure vessels*
		ISO 4126	*Safety devices for protection against excessive pressure*
		ISO 15156	*Petroleum and natural gas industries – Materials for use in H2S-containing environments in oil and gas production*
		ISO 23251	*Petroleum, petrochemical and natural gas industries – Pressure-relieving and depressuring systems*
		ISO 28300	*Petroleum, petrochemical and natural gas industries — Venting of atmospheric and low-pressure storage tanks*
57		API SPEC 15LR	*Specification for Low Pressure Fiberglass Line Pipe*
		ASME B31.3	*Process Piping*

NO	URAIAN KEGIATAN	STANDAR	
	Sistem Perpipaan *Glass Fibre Reinforced Plastic*	ASME RTP 1	*Reinforced Thermoset Plastic Corrosion Resistant*
		ASTM D1599	*Standard Test Method For Resistance To Short-Time Hydraulic Pressure Of Plastic Pipe, Tubing and Fittings , Burst Pressure, Plastic Fittings*
		ASTM D1598	*Standard Test Method for Time-to-Failure of Plastic Pipe Under Constant Internal Pressure*
		ASTM D2105	*Longitudinal Tensile Properties of "Fibreglass" (Glass-Fibre-Reinforced Thermosetting-Resin) Pipe and Tube*
		ASTM D2310	*Standard Classification for Machine-Made "Fibreglass" (Glass-Fibre-Reinforced Thermosetting-Resin) Pipe*
		ASTM D2343	*Standard Test Method for Tensile Properties of Glass Fibre Strands, Yarns, and Rovings Used in Reinforced Plastics*
		ASTM D2412	*Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading*
		ASTM D2563	*Standard Practice for Classifying Visual Defects in Glass-Reinforced Plastic Laminate Parts*
		ASTM D2583	*Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor*
		ASTM D2996	*Standard Specification for Filament-Wound "Fibreglass" (Glass-Fibre-Reinforced Thermosetting-Resin) Pipe*
		ASTM D3517	*Standard Specification for "Fibreglass" (Glass-Fibre-Reinforced Thermosetting-Resin) Pressure Pipe*
		ASTM D4024	*Standard Specification for Machine Made "Fibreglass" (Glass-Fibre-Reinforced Thermosetting Resin) Flanges*
		ASTM D5421	*Standard Specification for Contact Molded "Fibreglass" (Glass-Fibre-Reinforced Thermosetting Resin) Flanges*
		ISO 14692:2002	*Petroleum and Natural Gas Industries – Glass-Reinforced Plastics (GRP) Piping*
		ISO 11357	*Plastics – Differential Scanning Calorimetry (DSC)*
		ISO 13703	*Petroleum and Natural Gas Industries - Design and Installation Of Piping Systems On Offshore Production Platforms*
58	Perpipaan Termoplastik	ASME B31.3	*Process Piping*
		ASME IX	*Boiler & Pressure Vessel Code, Section IX, Welding and Brazing Qualifications*
		ASTM D1599	*Standard test method for resistance to short-time hydraulic pressure of plastic pipe, tubing, and fittings , burst pressure, plastic fittings*
		ASTM D3035	*Standard Spec for PE Pipe (DR-PR) Based on Controlled Outside Diameter*
		ASTM D3261	*Butt Heat Fusion PE Fittings for PE Pipe & Tubing*
		ASTM D3350	*Standard Specification for PE Pipe & Fittings Materials*
		ASTM D1238	*Melt Flow Index*
		ASTM D1505	*Density of Plastics*
		ASTM D2837	*Hydrostatic Design Basis*
		ASTM D570	*Standard Test Method for Water Absorption of Plastics*
		ASTM D638	*Standard Test Method for Tensile Properties of Plastics*
		ASTM D1598	*Standard Test Method for Time-to-Failure of Plastic Pipe Under Constant Internal Pressure*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM D1599	*Standard Test Method for Resistance to Short-Time Hydraulic Pressure of Plastic Pipe, Tubing, and Fittings*
		ASTM D2412	*Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading*
		ASTM D2583	*Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor*
		ASTM D2657	*Standard Practice for Heat Fusion Joining of Polyolefin Pipe and Fittings*
		ISO 15493	*Plastics piping systems for industrial applications -- Acrylonitrile-butadiene-styrene (ABS), unplasticised poly(vinyl chloride) (PVC-U) and chlorinated poly(vinyl chloride) (PVC-C) -- Specifications for components and the system -- Metric series*
		ISO 1452	*Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure -- Unplasticized poly(vinyl chloride) (PVC-U)*
		ISO 4427	*Plastics piping systems -- Polyethylene (PE) pipes and fittings for water supply*
		ISO/TS 18226:2006	*Plastics pipes and fittings -- Reinforced thermoplastics pipe systems for the supply of gaseous furls for pressures up to 4 Mpa (40 bar)*
59	Analisis Tegangan (*Stress Analysis*) Pipa untuk desain Perpipaan	ASME B31.1	*Power Piping Code*
		ASME B31.3	*Process Piping Code*
		ASME B31.8	*Gas Transportation and Distribution Piping Systems*
		ASME B16.5	*Pipe Flanges and Flanged Fittings*
		ASME B16.47	*Large Diameter Steel Flanges*
		ASME Section VIII	*Pressure Vessels*
		API 520	*Sizing, Selection and Installation of Pressure Relieving Devices in Refineries*
		API 610	*Centrifugal Pumps for Petroleum, Heavy Duty Chemical and Gas Industry Services.*
		API 617	*Centrifugal Compressors for Petroleum, Chemical and Gas Industry Services.*
		API 618	*Reciprocating Compressors for Petroleum, Chemical and Gas Industry Services.*
		API 650	*Welded Steel Tanks for Oil Storage.*
		API 660	*Shell and Tube Heat Exchangers for General Refinery Services*
		API 661	*Air Cooled Heat Exchangers for General Refinery Services*
		API 6AF	*Technical Report on Capabilities of API Flanges under Combinations of Load*
		NORSOK L-002	*Piping System Layout, Design and Structural Analysis*
		NORSOK R-001	*Lifting Equipment*
60	Boiler Buluh (*Tube*) Air	ASME B31.1	*Power piping*
		ASME Section I	*ASME Boiler and pressure vessel code: Section I -Power Boilers*
		ASME IX	*Section IX- Qualification standard for welding and brazing procedures, welders, brazers, and welding and brazing operators*
		ASME PTC 4	*ASME Performance Test Codes – Fired steam generators*
		ASTM A 123	*Standard specification for zinc (hot-dip galvanised) coatings on iron and steel products*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A 312	*Standard specification for seamless, welded, and heavily cold worked austenitic stainless steel pipes*
		ASTM D 1066	*Standard practice for sampling steam*
		ASTM D 3370	*Standard practices for sampling water from closed conduits*
		NFPA 85	*Boiler and combustion systems hazards code*
		IEC 60617	*Graphical symbols for diagrams (database)*
		ISO 1461	*Copies can also be obtained from national standards organizations.* *Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test method*
		ISO 9001	*Quality management systems – Requirements*
		ISO 10474	*Steel and steel products – Inspection documents*
		ISO 13705	*Petroleum, petrochemical and natural gas industries – Fired heaters for general refinery service*
61	Generator Uap *Heat Recovery* Turbin Gas	API RP 534	*Heat recovery steam generators*
		ASME I	*ASME Boiler and Pressure Vessel Code:* *Section I – Rules for construction of power boilers*
		ASME IX	*Section IX – Qualification standard for welding and brazing procedures, welders, brazers, and welding and brazing operators*
		ASME B16.9	*Factory-made wrought buttwelding fittings*
		ASME B16.28	*Wrought steel buttwelding short radius elbows and returns*
		ASME B31.1	*Power piping*
		ASME PTC 4.4	*ASME performance test code for gas turbine heat recovery steam generators*
		ASTM A 123	*Standard specification for zinc (hot-dip galvanized) coatings on iron and steel products*
		ASTM A 312	*Standard specification for seamless, welded and heavily cold worked austenitic stainless steel pipes*
		ASTM A 578	*Standard specification for straight-beam ultrasonic examination of plain and clad steel plates for special applications*
		ASTM A 770	*Standard specification for through-thickness tension testing of steel plates for special applications*
		ASTM D 1066	*Standard practice for sampling steam*
		ASTM D 3370	*Practices for sampling water from closed conduits*
		EN 10160	*Ultrasonic testing of steel flat product of thickness equal or greater than 6 mm (reflection method)*
		EN 10164	*Steel products with improved deformation properties perpendicular to the surface of the product – Technical delivery conditions*
		EN 12952	*Water-tube boilers and auxiliary installations*
		EN 12952-12	*Water-tube boilers and auxiliary installations – Part 12: Requirements for boiler feedwater and boiler water quality*
		ISO 1461	*Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods*
		ISO 13704	*Petroleum and natural gas industries – calculation of heater-tube thickness in petroleum refineries*
		ISO 13705	*Petroleum, petrochemical and natural gas industries – Fired heaters for general refinery service*
		ISO 10474	*Steel and steel products – inspection documents*

NO	URAIAN KEGIATAN	STANDAR	
62	*Fired Heaters*	API 560	*Fired heaters for general refinery services*
		ISO 13705	*Petroleum, petrochemical and natural gas industries- Fired heaters for general refinery service*
		API RP 941	*Steels for hydrogen service at elevated temperatures and pressures in petroleum refineries and petrochemical plants*
		ASME B16.9	*Factory-made wrought buttwelding fittings*
		ASME B16.28	*Wrought steel buttwelding short radius elbows and returns*
		ASME B31.3	*Process Piping*
		ASME B36.10M	*Welded and seamless wrought steel pipe*
		ASME I	*ASME Boiler and Pressure Vessel Code: Section I – Rules for construction of power boilers*
		ASME V	*Section V - Non destructive Testing*
		ASME VIII Divisions 1 & 2	*Section VIII - Pressure Vessels*
		ASME IX	*Section IX - Welding and Brazing Qualifications*
		ASTM A 216	*Specification for steel castings, carbon suitable for fusion welding for high-temperature service*
		ASTM A 217	*Specification for steel castings, martensitic stainless and alloy, for pressure-containing parts suitable for high-temperature*
		ASTM A 450	*Standard specification for general requirements for Carbon, ferritic alloy and austenitic alloy steel tubes*
		ASTM A 530	*Standard specification for general requirements for specialized carbon and alloy steel pipe*
		ASTM C 27	*Standard classification of fireclay and high-alumina refractory brick*
		ASTM C 155	*Standard classification of insulating firebrick*
		ASTM C 401	*Standard classification of alumina and alumina-silicate castable refractories*
		ASTM C 612	*Standard specification for mineral fiber block and board thermal insulation*
		MSS SP-55	*Quality standard for steel castings for valves, flanges, fittings and other piping components – visual method for evaluation of surface irregularities*
		BS 1640	*Steel butt-welding pipe fittings for the petroleum industry*
		ISO 1927	*Prepared unshaped refractory materials (dense and insulating) – Classification*
		ISO 2245	*Shaped insulating refractory products - Classification*
		ISO 3187	*Refractory products - Determination of creep in compression*
		ISO 10059	*Dense, shaped refractory products – Determination of cold compressive strength*
		ISO 10081	*Classification of dense shaped refractory products*
		ISO 10474	*Steel and steel products - Inspection documents*
		ISO 13705:2001	*Petroleum and natural gas industries – Fired heaters for general refinery service*
		ISO 13704:2001	*Petroleum and natural gas industries – Calculation of heater tube thickness in petroleum refineries*
63	Perhitungan Ketebalan Buluh *(Tube) Fired Heater*	ISO 13704:2007(E)	*Petroleum, petrochemical and natural gas industries – Calculation of heater-tube thickness in petroleum refineries*
64	Pemilihan, Desain, dan Fabrikasi Tanki	ASTM D 323	*Standard test method for vapour pressure of petroleum products (Reid method)*

NO	URAIAN KEGIATAN	STANDAR	
	Penyimpanan Vertikal Standar	API 650	*Welded steel tanks for oil storage*
		ASME B16.5	*Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 24 Metric/Inch Standard*
		EN 10415	*Part 19 – Fire precautions at petroleum refineries and bulk storage installations*
		EEMUA 159	*User's Guide to Inspection, Maintenance and Repair of Aboveground Vertical Cylindrical Steel Storage Tanks*
		EEMUA 180	*Guide for designers and users on frangible roof joints for fixed roof storage tanks*
		EN 1991-1-3	*Eurocode 1 – Actions on structures – Part 1-3: General actions – Snow loads*
		EN 10204	*Metallic Products – Type of Inspection Documents*
		EN 14015:2004	*Specification for the design and manufacture of site built, vertical, cylindrical, flat-bottomed, above ground, welded, steel tank for the storage of liquids at ambient temperature and above*
		DIN 22100	*Synthetic materials for use in underground mines; textile-reinforced conveyor belts; safety requirements; testing; marking*
		ISO 28300	*Petroleum, petrochemical and natural gas industries — Venting of atmospheric and low-pressure storage tanks*
		ISO 14122	*Safety of machinery - Permanent means of access to machinery*
65	Persyaratan Umum Perpipaan	API 5L	*Specification for line pipe*
		API 6D	*Pipeline valves*
		API 6FA	*Specification for fire test for valves*
		API 6FB	*Specification for fire test and end connections*
		API TR 6AF	*Capabilities of API flanges under combinations of load*
		API 15LE	*Specification for polyethylene line pipe (PE)*
		API RP 521	*Pressure-relieving and Depressurization Systems*
		API RP 621	*Reconditioning of metallic gate, globe and check valves.*
		API 598	*Valve inspection and testing*
		API 607	*Fire test for soft-seated quarter turn valves*
		API 618	*Reciprocating Compressors for Petroleum, Chemical and Gas Industry Services.*
		API 674	*Positive displacement pumps – reciprocating*
		API 675	*Positive displacement pumps - controlled volume*
		ASME I	*ASME Boiler and Pressure Vessel Code: Section I – Rules for construction of power boilers*
		ASME II	*ASME Boiler and Pressure Vessel Code, Section II - Materials*
		ASME IX	*Section IX - Welding and Brazing Qualifications*
		ASME VIII	*ASME Boiler and Pressure Vessel Code: Rules for construction of pressure vessels*
		ASME B1.20.1	*Pipe threads*
		ASME B16.5	*Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 24 Metric/Inch Standard*
		ASME B16.9	*Factory-made wrought buttwelding fittings*
		ASME B16.20	*Metallic gaskets for pipe flanges - ring-joint, spiral-wound and jacketed*
		ASME B16.21	*Nonmetallic flat gaskets for pipe flanges*
		ASME B16.24	*Cast copper alloy pipe flanges and flanged fittings*
		ASME B16.25	*Buttwelding ends*

NO	URAIAN KEGIATAN	STANDAR	
		ASME B16.47	*Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard*
		ASME B31.3	*Process Piping*
		ASME B31.4	*Pipeline transportation systems for liquid hydrocarbons and other liquids*
		ASME B31.5	*Refrigeration piping*
		ASME B31.8	*Gas transmission and distribution piping systems*
		ASME B36.10	*Welded and seamless wrought steel pipe*
		ASME B36.19	*Stainless steel pipe*
		ASME PTC-10	*Performance test code on compressors and exhausters*
		ASTM A 105	*Standard Specification for Forgings, Carbon Steel for Piping Components*
		ASTM A 106	*Standard specification for seamless carbon steel pipe for high-temperature service*
		ASTM A 193	*Standard specification for alloy-steel and stainless steel bolting materials for high-temperature service*
		ASTM A 194	*Standard specification for carbon and alloy steel nuts for bolts for high pressure and high temperature service*
		ASTM A 234	*Standard specification for piping fittings of wrought carbon steel and alloy steel for moderate and elevated temperatures*
		ASTM A 266	*Standard Specification for Carbon Steel Forgings for Pressure Vessel Components*
		ASTM A 320	*Standard specification for alloy/steel bolting materials for low-temperature service*
		ASTM A 350	*Standard Specification for Carbon and Low-Alloy Steel Forgings, Requiring Notch Toughness Testing for Piping Components*
		ASTM A 333	*Standard specification for seamless and welded steel pipe for low-temperature service*
		ASTM A 420	*Standard specification for piping fittings of wrought carbon steel and alloy steel for low-temperature service*
		ASTM A 453	*Standard specification for high temperature bolting materials, with expansion coefficients comparable to austenitic stainless steels*
		ASTM A 516	*Standard Specification for Pressure Vessel Plates, Carbon Steel, for Moderate and Lower Temperature Service*
		ASTM B 637	*Standard specification for precipitation-hardening nickel alloy bars, forgings, and forging stock for high temperature service*
		ASTM F 1545	*Standard specification for plastic-lined ferrous metal pipe, fittings and flanges*
		EJMA	*Standards of the Expansion Joint Manufacturers Association*
		NACE MR0103	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		NACE TM0177	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		NACE TM0284	*Laboratory Testing of Metals for Resistance to Sulfide Stress Cracking and Stress Corrosion Cracking in H2S Environments*
		NACE SP0472	*Evaluation of Pipeline and Pressure Vessel Steels for Resistance to Hydrogen-Induced Cracking*
		NACE MR0175	*Petroleum and natural gas industries – Materials for use in H2S-containing environments in oil and gas production*

NO	URAIAN KEGIATAN	STANDAR	
		BS 3505	*Unplasticized polyvinyl chloride (PVC-U) pressure pipes for cold potable water*
		BS 4346-1	*Joints and fittings for use with unplasticized PVC pressure pipes:* *Part 1: Injection moulded unplasticized PVC fittings for solvent welding for use with pressure pipes, including potable water supply*
		BS 4991	*Propylene copolymer pressure pipe*
		BS 5351	*Specification for steel ball valves for the petroleum, petrochemical and allied industries*
		BS 6364	*Specifications for valves in cryogenic service*
		BS 6437	*Polyethylene pipes (type 50) in metric diameters for general purposes*
		BS 6730	*Black polyethylene pipes up to nominal size 63 for above ground use for cold potable water*
		BS 6755-1	*Testing of valves:* *Part 1: Specification for production pressure testing requirements*
		BS 6755-2	*Testing of valves:* *Part 2: Specification for fire-testing requirements*
		BS 7281	*Polyethylene pipes for the supply of gaseous fuels*
		IEC 60534-4	*Industrial control valves Part 4: Inspection and routine testing*
		ISO 5208	*Industrial valves - pressure testing of valves*
		ISO 10497	*Testing of valves – fire type testing requirements*
		ISO 15156	*Petroleum and natural gas industries— Materials for use in H2S-containing Environments in oil and gas production*

E. Standar Rekayasa Elektrikal

NO	URAIAN KEGIATAN	STANDAR	
1	Spesifikasi Umum Rekayasa Elektrikal	API RP 500	*Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Division 2*
		API RP 505	*Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, Zone 1, and Zone 2*
		FM 3600	*Electric Equipment for use in Hazardous (Classified) Locations General Requirements*
		FM 3610	*Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations*
		FM 3615	*Explosion-proof electrical equipment - general requirements*
		FM 3620	*Purged and Pressurized Electrical Equipment for Hazardous (Classified) Locations*
		IEEE 80	*Guide for Safety in AC Substation Grounding*
		NFPA 20	*Standard for the Installation of Stationary Pumps for Fire Protection*
		NFPA 496	*Standard for Purged and Pressurized Enclosures for Electrical Equipment*
		UL 698	*UL Standard for Safety Industrial Control Equipment for Use in Hazardous (Classified) Locations*

NO	URAIAN KEGIATAN	STANDAR	
		UL 886	*UL Standard for Safety Outlet Boxes and Fittings for Use in Hazardous (Classified) Locations*
		UL 60079-1	*Part 1: Flameproof Enclosures "d"*
		UL 60079-5	*Part 5: Powder Filling "q"*
		UL 60079-6	*Part 6: Oil-Immersion "o"*
		UL 60079-7	*Part 7: Increased Safety "e"*
		UL 60079-11	*Part 11: Intrinsic Safety "i"*
		UL 60079-15	*Part 15: Electrical Apparatus with Type of Protection "n"*
		UL 60079-18	*Part 18: Construction, Test and Marking of Type of Protection Encapsulation "m" Electrical Apparatus*
		BSI BS 1990-1	*Wood poles for overhead power and telecommunications lines Part 1 - Specification for softwood poles*
		BSI BS EN 60896-21	*Stationary lead-acid batteries – Part 21: Valve regulated types – Method of test.*
		BSI BS EN 60896-22	*Stationary lead-acid batteries – Part 22: Valve regulated types – Requirements.*
		BSI BS EN 62305 – 1	*Protection against lightning – Part 1: General Principles.*
		BSI BS EN 62305 – 2	*Protection against lightning – Part 2: Risk Management.*
		BSI BS EN 62305 – 3	*Protection against lightning – Part 3: Physical damage to structures and life hazard.*
		BSI BS EN 62305 – 4	*Protection against lightning – Part 4: Electrical and electronic systems within structures*
		BSI BS 6883	*Elastomer insulated cables for fixed wiring in ships and on mobile and fixed offshore units*
		IP 15	*IP Model Code of Safe Practice Part 15: Area classification code for petroleum installations*
		EN 81	*Safety rules for the construction and installation of lifts*
		EN 12843	*Precast concrete products, masts and poles*
		EN 60079	*Electrical apparatus for explosive gas atmospheres*
		EN 60079-1	*Part 1 - Construction and verification test of flameproof enclosures of electrical apparatus*
		EN 60079-2	*Part 2 - Electrical apparatus type of protection 'p*
		EN 60079-5	*Part 5 - Sand-filled apparatus*
		EN 60079-6	*Part 6 - Oil-immersed apparatus*
		EN 60079-7	*Part 7 - Increased safety 'e'*
		EN 60079-11	*Part 11 - Construction and test of intrinsically safe and associated apparatus*
		EN 60079-15	*Part 15 - Electrical apparatus with type of protection 'n'*
		EN 60079-18	*Part 18 - Electrical apparatus with type of protection 'm'*
		EN 60079-25	*Part 25 - Intrinsically safe systems*
		ICAO	*Annex 14 to the Convention on International Civil Aviation Aerodromes*
		IEC 60034-1	*Rotating electrical machines*
		IEC 60038	*IEC standard voltages*
		IEC 60050	*International electrotechnical vocabulary*
		IEC 60056	*High-voltage alternating-current circuit-breakers*
		IEC 60071	*Insulation co-ordination*
		IEC 60076	*Power transformers*
		IEC 60076-5	*Part 5 - Ability to withstand short circuit*
		IEC 60079	*Electrical apparatus for explosive gas atmospheres*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60079-1	*Part 1 - Construction and verification test of flameproof enclosures of electrical apparatus*
		IEC 60079-2	*Part 2 - Electrical apparatus type of protection 'p*
		IEC 60079-5	*Part 5 - Sand-filled apparatus*
		IEC 60079-6	*Part 6 - Oil-immersed apparatus*
		IEC 60079-7	*Part 7 - Increased safety 'e'*
		IEC 60079-11	*Part 11 - Construction and test of intrinsically safe and associated apparatus*
		IEC 60079-13	*Part 13 - Construction and use of rooms or buildings protected by pressurisation*
		IEC 60079-14	*Part 14 - Electrical installations in explosive gas atmospheres (other than mines)*
		IEC 60079-15	*Part 15 - Electrical apparatus with type of protection 'n'*
		IEC 60079-18	*Part 18 - Electrical apparatus with type of protection 'm'*
		IEC 60079-25	*Part 25 - Intrinsically safe systems*
		IEC 60099-1	*Lightning arresters*
		IEC 60113	*Diagrams, charts, tables*
		IEC 60120	*Dimensions of ball and socket couplings of string insulator units*
		IEC 60227	*Polyvinyl chloride insulated cables of rated voltages up to including 450/750 V*
		IEC 60255	*Electrical relays*
		IEC 60309	*Plugs, socket-outlets and couplers for industrial purposes*
		IEC 60332-3	*Tests on electric cables under fire conditions*
		IEC 60364	*Electrical installations of buildings*
		IEC 60364-3	*Part 3 - Assessment of general characteristics*
		IEC 60383	*Tests on insulators of ceramic material or glass for overhead lines with a nominal voltage greater than 1000 V*
		IEC 60433	*Characteristics of string insulator units of the long rod type*
		IEC 60439-4	*Low-voltage switchgear and controlgear assemblies* *Part 4 - Particular requirements for assemblies for construction sites (ACS)*
		IEC 60479-1	*Effects of current on human beings and livestock – Part 1: General aspects*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60536	*Classification of electrical and electronic equipment with regard to protection against electric shock*
		IEC 60549	*High-voltage fuses for the external protection of shunt power capacitors*
		IEC 60617	*Graphical symbols for diagrams*
		IEC 60623	*Vented nickel-cadmium prismatic rechargeable single cells*
		IEC 60742	*Isolating transformers and safety isolating transformers*
		IEC 60815	*Guide for the selection of insulators in respect of polluted conditions*
		IEC 60831	*Shunt power capacitors of the self-heating type for a.c. systems having a rated voltage up to and including 1 kV*
		IEC 60871	*Shunt capacitors for a.c. power systems having a rated voltage above 1 kV*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60871-4	*Shunt capacitors for a.c. power systems having a rated voltage above 1000 V – Part 4: Internal fuses*
			Stationary lead-acid batteries. General requirements :
		IEC 60896-1	*Part 1: Vented types*
		IEC 60896-2	*Part 2: Sealed type*
		IEC 60931-3	*Shunt power capacitors of the non-self-healing type for a.c. systems having a rated voltage up to and including 1000 V – Part 3: Internal fuses*
		IEC 60947	*Low voltage switchgear and controlgear*
		IEC 60947-2	*Part 2 - Circuit-breakers*
		IEC 61000-3-6	*Electromagnetic compatibility (EMC) Part 3 - Assessment of emission limits for distorting loads in MV and HV power systems*
		IEC 61000-5-2	*Electromagnetic compatibility (EMC)Part 5 - Mitigation methods and installation guidelines Section 2 - Earthing and cabling*
		IEC 61089	*Round wire concentric lay overhead electrical stranded conductors*
		IEC 61241	*Electrical apparatus for use in the presence of combustible dust*
		IEC 61634	*Use and handling of Sulphur Hexafluoride (SF6) in High-voltage switchgear and controlgear*
		IEC 61241	*Electrical apparatus for use in the presence of combustible dust*
		IEC 61634	*Use and handling of Sulphur Hexafluoride (SF6) in High-voltage switchgear and controlgear*
		IEC 61892	*Mobile and fixed offshore units – Electrical installations*
		IEC 61936-1	*Power installations exceeding 1 kV a.c. Part 1: Common rules*
		IEC 62271-200	*High-voltage switchgear and controlgear Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV*
		IEC 62305-2	*Protection against lightning – Part 2: Risk management*
		ISO 1461	*Galvanized coatings on fabricated iron and steel articles*
		ISO 9000	*Quality management and quality assurance standards – Guidelines for selection and use*
2	Desain dan Operasi Penyediaan Listrik dan Pembangkitan	EN 50160	*Voltage characteristics of electricity supplied by public electricity networks*
		IEC 60034	*Rotating Electrical Machines*
		IEC 60034-1	*Part 1 : Rating and performance*
		IEC 60034-4	*Part 4 : Methods for determining synchronous machine quantities from tests*
		IEC 60034-16-1	*Part 16-1 : Excitation systems for synchronous machines - Definitions*
		IEC 60034-16-2	*Part 16 : Excitation systems for synchronous machines - Chapter 2: Models for power system studies*
		IEC 60034-16-3	*Part 16 : Excitation systems for synchronous machines - Section 3: Dynamic performance*
		IEC 60050	*International electrotechnical vocabulary*
		IEC 61000-3-6	*Electromagnetic compatibility (EMC) - Part 3-6: Limits - Assessment of emission limits for the connection of distorting installations to MV, HV and EHV power systems*
3	*Substation* Prefabrikasi	IEC 62271-202	*Prefabricated Substation*

NO	URAIAN KEGIATAN	STANDAR	
4	Kualitas Daya Listrik	IEEE 519	*Recommended Practice and Requirements for Harmonic Control in Electrical Power Systems*
		IEC 61000	*Electromagnetic Compatibility (EMC)*
		IEC 61000-2-4: 2002	*Environment - Compatibility levels in industrial plants for low-frequency conducted disturbances*
		IEC 61000-4-11: 2004	*Testing and measurement techniques - Voltage dips, short interruptions and variation immunity test*
		IEC 61000-4-34: 2005	*Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with mains current more than 16 A per phase*
5	Serah Terima (*Commissioning*) dan Pemeliharaan Instalasi Listrik dan Peralatan	IEC 60079	*Explosive atmospheres*
		IEC 60156	*Insulating liquids - Determination of the breakdown voltage at power frequency - Test method*
		IEC 60422	*Mineral insulating oils in electrical equipment - Supervision and maintenance guidance*
		IEC 62271-1	*High-voltage switchgear and controlgear - Part 1: Common specifications*
		ISO 2954	*Mechanical vibration of rotating and reciprocating machinery -- Requirements for instruments for measuring vibration severity*
		ISO 7919	*Mechanical vibration -- Evaluation of machine vibration by measurements on rotating shafts*
		ISO 10816	*Mechanical vibration -- Evaluation of machine vibration by measurements on non-rotating parts*
6	Peralatan Uji dan Perkakas Bengkel Kelistrikan	IEC 60079	*Electrical apparatus for explosive gas atmospheres*
		IEC 60309	*Plugs, socket-outlets and couplers for industrial purposes*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60745-1	*Hand-held motor-operated electric tools - Safety - Part 1: General requirements*
		IEC 60974-1	*Arc welding equipment -- Part 1: Welding power sources*
		IEC 61439-1	*Low-voltage switchgear and controlgear assemblies - Part 1: General rules*
		IEC 61558	*Safety of power transformers, power supplies, reactors and similar products*
7	*Transformer* Daya Listrik	IEC 61558	*Auto transformers*
		IEC 60044	*Current transformers*
		IEC 60076-1	*Part 1: General*
		IEC 60076-2	*Part 2: Temperature rise*
		IEC 60076-3	*Part 3: Insulation levels and dielectric tests*
		IEC 60076-3-1	*Part 3-1: External clearances in air*
		IEC 60076-5	*Part 5: Ability to withstand short circuit*
		IEC 60076-8	*Part 8: Application Guide First Edition*
		IEC 60076-10	*Part 10: Measurement of transformer and reactor sound levels*
		IEC 60076-11	*Part 11: Dry type power transformers*
		IEC 60076-12	*Part 12: Loading guide for dry-type power transformers*
		IEC 60085	*Electrical insulation - Thermal evaluation and designation*
		IEC 60099-1	*Part 1: Non linear resistor type gapped arrestors for AC systems*
		IEC 60214-1	*Part 1: Performance requirements and test methods*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60214-2	*Part 2: Application Guide*
		IEC 60296	*Specification for unused Mineral Oils for Transformers and Switchgear.*
		IEC 61439	*Low voltage switchgear and controlgear assemblies*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 61099	*Specification for unused synthetic organic esters for electrical purposes*
		ISO 8503	*Preparation of steel substrates before application of paints and related products: surface roughness characteristics of blast-cleaned steel substrates*
8	Gigi Pengalih (*Switch Gear*) dan Gigi Pengatur (*Control Gear*) Tertutup Logam Tegangan Tinggi AC	ISO 9001	*Quality management systems – Requirements*
		IEC 61869-2:2012	*Instrument Transformers – Part 2: Additional Requirements for Current Transformers*
		IEC 61869-3:2011	*Instrument Transformers – Part 3: Additional Requirements for Inductive Voltage Transformers*
		IEC 60079-10-1:2015	*Explosive Atmospheres –Part 10-1: Classification of Areas – Explosive Gas Atmosphere*
		IEC 60079-10-2:2015	*Explosive Atmospheres –Part 10-2: Classification of Areas – Explosive Dust Atmosphere*
		IEC 60099-5:2013	*Surge Arresters - Part 5: Selection and Application Recommendations*
		IEC 60255	*Electrical Relays*
		IEC 62271-103:2011	*High-Voltage Switchgear and Controlgear – Part 1: Switches for Rated Voltages above 1 kV Up To and Including 52 kV*
		IEC 60269	*Low-Voltage Fuses*
		IEC 60282-1:2009 + AMD1:2014 CSV	*High-Voltage Fuses – Part 1: Current-Limiting Fuses*
		IEC 60445:2010	*Basic and Safety Principles for Man-Machine Interface, Marking and Identification - Identification of Equipment Terminals, Conductors Terminations and Conductors*
		IEC 62271-106:2011	*High Voltage Switchgear and Controlgear – Part 106: Alternating Current Contactors, Contactor-Based Controllers and Motor-Starters*
		IEC 61554:1999	*Panel-Mounted Equipment – Electrical Measuring Instruments – Dimensions for Panel Mounting*
		IEC 60529:1989 + AMD1:1999 + AMD2:2013 CSV	*Degrees of Protection Provided by Enclosures (IP Code)*
		IEC 60688:2012	*Electrical Measuring Transducers for Converting A.C. and D.C. Electrical Quantities to Analogue or Digital Signals*
		IEC 62271-1:2007	*High-Voltage Switchgear and Controlgear – Part 1: Common Specifications*
		IEC 60947-2:2006 + AMD1:2009 + AMD2:2013 CSV	*Low-Voltage Switchgear and Controlgear – Part 2: Circuit-Breakers*
		IEC TR 61000-2-5:2011	*Electromagnetic Compatibility (EMC) – Part 2-5: Environment –Description and Classification of Electromagnetic Environments*
		IEC 61000-4-1:2006	*Electromagnetic Compatibility (EMC) – Part 4-1: Testing and Measurement Techniques – Overview of IEC 61000-4 Series*
		IEC 61000-4-12:2006	*Electromagnetic Compatibility (EMC) Part 4-12: Testing and Measurement Techniques - Ring Wave Immunity Test*

NO	URAIAN KEGIATAN	STANDAR	
		IEC TR 61000-5-1:1996	*Electromagnetic Compatibility (EMC) Part 5: Installation and Mitigation Guidelines – Section 1: General Considerations*
		IEC TR 61000-5-2:1997	*Electromagnetic Compatibility (EMC) Part 5: Installation and Mitigation Guidelines – Section 2: Earthing and Cabling*
		IEC 61000-6-2:2005	*Electromagnetic Compatibility (EMC) Part 6-2: Generic Standards – Immunity for Industrial Environments*
		IEC 61000-6-4:2006 + AMD1:2010 CSV	*Electromagnetic Compatibility (EMC) Part 6-4: Generic Standards: Emission Standard for Industrial Environment*
		IEC 61000-6-5:2015	*Electromagnetic Compatibility (EMC) – Part 6-5: Generic Standards – Immunity for Equipment Used in Power Station and Substation Environments*
		IEC 61850:2016 SER	*Communication Networks and Systems for Power Utility Automation – All Parts*
		IEC 61892-3:2012	*Mobile and Fixed Offshore Units – Electrical Installations, Part 3: Equipment*
		IEC 62271-1:2007 + AMD1:2011 CSV	*High-Voltage Switchgear and Controlgear – Part 1 Common Specifications*
		IEC 62271-100: 2008 + AMD1:2012 CSV	*High-Voltage Switchgear and Controlgear – Part 100: Alternating Current Circuit Breakers*
		IEC 62271-102:2001 + AMD1:2011 + AMD2:2013 CSV	*High-Voltage Switchgear and Controlgear – Part 102: Alternating Current Disconnectors and Earthing Switches*
		IEC 62271-200:2011	*High-Voltage Switchgear and Controlgear – Part 200: A.C. Metal-Enclosed Switchgear and Controlgear for Rated Voltages Above 1 kV and Up To and Including 52 kV*
9	Pemasangan (*Assemblies*) Gigi Pengalih (*Switch Gear*) dan Gigi Pengatur (*Control Gear*) Tegangan Rendah	IEC 61869-2	*Instrument transformers – Part 1: Current transformers*
		IEC 61869-3	*Instrument transformers – Part 2: Inductive voltage transformers*
		IEC 60051	*Direct acting indicating analogue electrical-measuring instruments and their accessories*
		IEC 60079-10	*Electrical apparatus for explosive gas atmospheres Part 10: Classification of hazardous areas*
		IEC 60112	*Method for the determination of the proof and comparative tracking indices of solid insulating material*
		IEC 60269-1	*Low-voltage fuses – Part 1: General requirements*
		IEC 60269-2-1	*Low-voltage fuses – Part 2-1: Supplementary requirements for fuses for use by authorizes persons (fuses mainly for industrial application) – Sections I to V: Examples of types of standardized fuses*
		IEC 61439-1:2009	*Low-voltage switchgear and controlgear assemblies – Part 1: Type-tested and partially type-tested assemblies*
		IEC 60529	*Degrees of protection provided by enclosures (IP code)*
		IEC 60664-1	*Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*
		IEC 60688	*Electrical measuring transducers for converting a.c. electrical quantities to analogue or digital signals*
		IEC 60947-1:2004	*Low-voltage switchgear and controlgear - Part 1: General rules*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60947-2	*Low-voltage switchgear and controlgear – Part 2: Circuit-breakers*
		IEC 60947-3	*Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors, and fuse-combination units*
		IEC 60947-4-1	*Low-voltage switchgear and controlgear – Part 4-1: Contactors and motor-starters – Electromechanical contactors and motor-starters*
		IEC TR 61641	*Enclosed low voltage switchgear and controlgear assemblies - Guide for testing under conditions of arcing due to internal fault*
		IEC 61892-3:1999	*Mobile and fixed offshore units – Electrical installations, Part 3: Equipment*
		IEC 62052-11	*Electricity metering equipment (AC) General requirements, tests and test conditions Part 11: Metering equipment*
10	Unit Penyedia Daya *Static AC Uninterruptible* (AC UPS)	IEEE Std 485	*IEEE Recommended Practice for Sizing Lead-Acid Batteries for Stationary Applications*
		IEEE Std 1115	*IEEE Recommended Practice for Sizing Nickel-Cadmium Batteries for Stationary Applications*
		IEC 60076-11	*Power transformers – Part 11; Dry-type transformers*
		IEC 60146-1-1	*Semiconductor convertors - General requirements and line commutated convertors - Part 1-1: Specifications of basic requirements*
		IEC 60269-2	*Low-voltage fuses-Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application)*
		IEC 60445	*Basic and safety principles for man-machine interface, marking and identification-Identification of equipment terminals, conductor terminations and conductors*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60623	*Secondary cells and batteries containing alkaline or other non-acid electrolytes-vented nickel-cadmium prismatic rechargeable single cells*
		IEC 60896-11	*Stationery lead acid batteries – Part 11. Vented types – General requriements and methods of tests*
		IEC 60896-22	*Stationery lead acid batteries – Part 22. Valve regulated types – Requirements.*
		IEC 60947-4-1	*Low-voltage switchgear and control gear-Part 4-1: Contactors and motor-starters-Electromechanical contactors and motor-starters*
		IEC/TR 61000-3-4	*Electromagnetic compatibility (EMC) -Part 3-4: Limits-Limitation of emission of harmonic currents in low-voltage power supply systems for equipment with rated current greater than 16 A*
		IEC 61000-3-12	*Electromagnetic compatibility (EMC)-Part 3-12 Limits-Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current >16 A and £ 75A per phase.*
		IEC 61000-6-2	*Electromagnetic compatibility (EMC)-Part 6-2: Generic standards Immunity for industrial environments*
		IEC 61000-6-2	*Electromagnetic compatibility (EMC)-Part 6-2: Generic standards Immunity for industrial environments*
		IEC CISPR 61000-6-3	*Electromagnetic compatibility (EMC)-Part 6: Generic standards-Section 3: Emission standard for residential, commercial and light-industrial environments*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 61000-6-4	*Electromagnetic compatibility (EMC)-Part 6: Generic standards-Section 4: Emission standard for industrial environments*
		IEC 62040-1-2	*Uninterruptible power systems (UPS) - Part 1-2: General and safety requirements for UPS used in restricted access locations*
		IEC 62040-2	*Uninterruptible power systems (UPS) – Part 2: Electromagnetic compatibility (EMC) requirements*
		IEC 62040-3	*Uninterruptible power systems (UPS) - Part 3: Method of specifying the performance and test requirements*
11	Unit Penyedia Daya *Static DC Uninterruptible* (DC UPS)	IEEE Std 485	*IEEE Recommended Practice for Sizing Lead-Acid Batteries for Stationary Applications*
		IEEE Std 1115	*IEEE Recommended Practice for Sizing Nickel-Cadmium Batteries for Stationary Applications*
		BS 6290-4	*Lead-acid stationary cells and batteries Part 4: Specification for classifying valve regulated types*
		EN 50091-2	*Uninterruptible Power Systems (UPS)*
		IEC 60146	*Semiconductor converters*
		IEC 60269	*Low-voltage fuses*
		IEC 60445	*Identification of apparatus terminals and general rules for a uniform system of terminal marking, using an alpha-numeric notation.*
		IEC 60478	*Stabilized power supplies, DC output*
		IEC 60529	*Classification of degrees of protection provided by enclosures (IP Code)*
		IEC 60623	*Vented nickel-cadmium prismatic rechargeable single cells*
		IEC 60896	*Stationary lead-acid batteries; general requirements and methods of test*
		IEC 60947	*Low-voltage switchgear and control gear*
		IEC/TR 61000-3-4	*Electromagnetic compatibility (EMC) –Part 3-4: Limits–Limitation of emission of harmonic currents in low-voltage power supply systems for equipment with rated current greater than 16 A*
		IEC 61000-3-12	*Electromagnetic compatibility (EMC)–Part 3-12 Limits– for harmonic currents produced by equipment connected to public low-voltage systems with input current >16 A and £ 75A per phase.*
		IEC 61000-6-2	*Electromagnetic compatibility (EMC)–Part 6-2: Generic standards Immunity for industrial environments*
		IEC 61000-6-4	*Electromagnetic compatibility (EMC)–Part 6: Generic standards–Section 4: Emission standard for industrial environments*
		IEC 62040-1-2	*Uninterruptible power systems (UPS) – Part 1-2: General and safety requirements for UPS used in restricted access locations*
		IEC 62040-2	*Uninterruptible power systems (UPS) – Part 2: Electromagnetic compatibility (EMC) requirements*
		IEC 62040-3	*Uninterruptible power systems (UPS) – Part 3: Method of specifying the performance and test requirements*
12	*Heat Tracing* Elektrik dan Sistem Pencegahan *Frost Heave*	IEC 60079	*Electrical apparatus for explosive gas atmospheres*
		IEC 60529	*Degrees of protection provided by enclosures*
		IEC 60947-2	*Low voltage switchgear and controlgear, Part 2: Circuit breakers*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 62086-1	*Electrical apparatus for explosive gas atmospheres Electrical resistance trace heating, Part 1: General and Testing requirements*
13	Sistem Pemanasan Proses Kelistrikan	EN 50081-2	*Electromagnetic compatibility - Generic emission standards*
		EN 50082-2	*Electromagnetic compatibility - Generic immunity standards*
		EN 50014 through EN 50020	*Electrical apparatus for potentially explosive atmospheres*
		89/336/EEC	*European Council Directive on the approximation of the laws of the Member States relating to electromagnetic compatibility*
		IEC 60044-1	*Instrument Transformers – Part 1: Current transformers*
		IEC 60044-2	*Instrument Transformers – Part 2: Inductive voltage transformers*
		IEC 60079	*Electrical Apparatus for Explosive Gas Atmospheres*
		IEC 60079-1	*Electrical Apparatus for Explosive Gas Atmospheres - Part 1: Flameproof Enclosures 'd'*
		IEC 60079-7	*Electrical Apparatus for Explosive Gas Atmospheres - Part 7: Increased Safety 'e'*
		IEC 60079-10	*Electrical Apparatus for Explosive Gas Atmospheres - Part - 10: Classification of Hazardous Areas*
		IEC 60269	*Low-voltage fuses.*
		IEC 60269-2-1	*Low-voltage fuses – Part 2-1: Supplementary requirements for fuses for use by authorized persons*
		IEC 60398	*Industrial electroheating installations - General test methods*
		IEC 60445	*Basic and safety principles for man-machine interface, marking and identification -*
		IEC 60529	*Degrees of Protection Provided by Enclosures (IP Code)*
		IEC 60664-1	*Insulation Coordination for Equipment within Low-Voltage Systems – Part 1: Principles, requirements and tests*
		IEC 60695-2-10	*Fire hazard testing Part 2-10: Glowing/Hot-Wire based test methods – Glow-wire apparatus and common test procedure*
		IEC 60695-2-11	*Fire hazard testing Part 2-11: Glowing/Hot-wire based test methods – Glow-wire flammability test method for end-products*
		IEC 60947	*Low-Voltage Switchgear and Controlgear*
		IEC 60947-2	*Low-Voltage Switchgear and Controlgear - Part 2: Circuit-breakers*
		IEC 60947-3	*Low-Voltage Switchgear and Controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units*
		IEC 60947-4-1	*Low-Voltage Switchgear and Controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters*
		IEC TR 61000-3-6	*Electromagnetic Compatibility (EMC) - Part 3: Limits – Section 6: Assessment of Emission Limits for Distorting Loads in MV and HV Power Systems*
		IEC 61000-4	*Electromagnetic Compatibility (EMC) Part 4: Testing and measurement techniques.*
		IEC 61000-6-2	*Electromagnetic Compatibility (EMC) Part 6-2: Generic Standards - Immunity for industrial environments*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 61000-6-4	*Electromagnetic Compatibility (EMC), Part 6-4: Generic Standards - Emission standard for industrial environments*
		IEC 61892-3: 1999	*Mobile and Fixed Offshore Units - Electrical Installations – Part 3: Equipment*
		IEC CISPR11	*Industrial, scientific and medical (ISM) radio-frequency equipment Electromagnetic disturbance characteristics Limits and methods of measurement*
		ISO 3746	*Acoustics – Determination of sound power levels of noise sources using sound pressure - Survey method using an enveloping measurement surface of a reflecting plane*
		ISO 9001	*Quality Management Systems - Requirements*
14	*Busduct* Tegangan Rendah	IEC 61439-1	*Low Voltage Switchgear and Controlgear Assemblies – Part 1: General Rules*
		IEC 61439-6	*Low Voltage Switchgear and Controlgear Assemblies – Part 6: Busbar Trunking Systems (Busways)*
		IEC 60529	*Degree of Protection Provided by Enclosures (IP Code)*
		IEC 60085	*Electrical Insulation – Thermal Classification*
		IEC 60664-1	*Insulation Coordination for Equipment within Low-voltage Systems*
15	Sistem *Navigational Aids*	IEC 60079 – 0	*IEC 60079: Electrical apparatus for explosive gas atmospheres Part 0: General requirements*
		IEC 60079-1	*IEC 60079: Electrical apparatus for explosive gas atmospheres Part 1: Construction and verification test of flameproof enclosures of electrical apparatus*
		IEC 60079 – 2	*IEC 60079: Electrical apparatus for explosive gas atmospheres Part 2: Electrical apparatus-type of protection "p".*
		IEC 60079 – 7	*IEC 60079: Electrical apparatus for explosive gas atmosphere Part 7: Increased safety "e"*
		IEC 60529	*IEC 60529: Degrees of protection provided by enclosures (IP code)*
		ICAO Annex 14	*ICAO: International Standards and Recommended Practices Annex 14: Volume II Aerodromes-Heliports, July 2013*
		CAP 437	*UK CAA: Standards for offshore helicopter landing areas Feb 2013*
		IALA O-139	*IALA-AISM: The marking of man-made offshore structures, Dec 2013 Edition 2*
16	Tipe Induksi *Cage* Mesin Kelistrikan	API 617	*Axial and centrifugal compressors and expander-compressors for petroleum, chemical and gas industry services*
		API 670	*Machinery protection systems*
		NEMA MG 1	*Motors and generators*
		EN 50209	*Test of insulation of bars and coils of high-voltage machines*
		IEC 60034	*Rotating electrical machines*
		IEC 60034-1:2010	*Part 1 : Rotating and performance*
		IEC 60034-2-1	*Part 2-1 : Standard methods for determining losses and efficiency from tests (excluding machines for traction vehicles)*
		IEC 60034-2-2	*Part 2-2 : Specific methods for determining separate losses of large machines from tests – supplement to IEC 60034-2-1*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60034-2-3	*Part 2-3 : Specific test methods for determining losses and efficiency of converter-fed AC induction motors*
		IEC 60034-5	*Part 5 : Degrees of protection provided by the integral design of rotating electrical machines (IP code) - Classification*
		IEC 60034-6	*Part 6 : Methods of cooling (IC Code)*
		IEC 60034-7	*Part 7 : Classification of types of constructions and mounting arrangements (IM code)*
		IEC 60034-8	*Part 8 : Terminal marking and direction of rotation*
		IEC 60034-9	*Part 9 : Noise limits*
		IEC 60034-11	*Part 11 : Thermal protection*
		IEC 60034-12	*Part 12 : Starting performance of single-phase cage induction motors*
		IEC 60034-14:2007	*Part 14 : Mechanical vibration of certain machines with shaft heights 56 mm and higher - Measurement, evaluation and limits of vibration severity*
		IEC 60034-15	*Part 15 : Impulse voltage withstand levels of form-wound stator coils for rotating a.c. machines*
		IEC 60034-18	*Part 18 : Functional evaluation of insulation systems*
		IEC 60038	*IEC Standard voltages*
		IEC 60060-2	*High-voltage test techniques - Part 2: Measuring systems*
		IEC 60072	*Dimensions and output series for rotating electrical machines*
		IEC 60072-1	*Part 1 : Frame numbers 56 to 400 and flange numbers 55 to 1080*
		IEC 60072-2	*Part 2 : Frame numbers 355 to 1000 and flange numbers 1180 to 2360*
		IEC 60076	*Power Transformers*
		IEC 60076-1	*Part 1 : General*
		IEC 60076-3	*Part 3 : Insulation levels, dielectric tests and external clearances in air*
		IEC 60076-5	*Part 5 : Ability to withstand short circuit*
		IEC 60079	*Explosive atmospheres*
		IEC 60079-1	*Part 1 : Equipment protection by flameproof enclosures "d"*
		IEC 60079-2	*Part 2 : Equipment protection by pressurized enclosure "p"*
		IEC 60079-7	*Part 7 : Equipment protection by increased safety "e"*
		IEC 60079-10-1	*Part 10-1 : Classification of areas - Explosive gas atmospheres*
		IEC 60079-10-2	*Part 10-2 : Classification of areas - Combustible dust atmospheres*
		IEC 60079-15	*Part 15 : Equipment protection by type of protection "n"*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60751	*Industrial platinum resistance thermometers and platinum temperature sensors*
		IEC/TR 60894	*Guide for test procedure for the measurement of loss tangent of coils and bars for machine windings*
		IEC 61000	*Electromagnetic compatibility (EMC)*
		IEC 61000-6-2	*Part 6-2 : Generic standards - Immunity for industrial environments*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 61000-6-4	*Part 6-4 : Generic standards - Emission standard for industrial environments*
		IEC 61241	*Electrical apparatus for use in the presence of combustible dust*
		IEC 61892-3	*Mobile and fixed offshore units - Electrical installations - Part 3: Equipment*
		ISO 15	*Rolling bearings - radial bearings - boundary dimensions*
		ISO 281	*Rolling bearings - dynamic load ratings and rating life*
		ISO 1132-1	*Rolling bearings - tolerances - Part 1: Terms and definitions*
		ISO 1132-2	*Rolling bearings - tolerances - Part 2: Measuring and gauging principles and methods*
		ISO 1680	*Acoustics- Test code for the measurement of airborne noise emitted by rotating electrical machinery*
		ISO 1940-1	*Mechanical vibration - Balance quality requirements for rotors in a constant (rigid) state - Part 1: Specification and verification of balance tolerances*
17	Mesin Sinkronis AC	API 617	*Axial and centrifugal compressors and expander-compressors for petroleum, chemical and gas industry services*
		API 670	*Machinery protection systems*
		API 671	*Special-Purpose couplings for petroleum, chemical, and gas industry services*
		IEEE 115	*Guide : Test procedures for synchronous machines*
		IEEE 421.2	*Guide for identification, testing, and evaluation of the dynamic performance of excitation control systems*
		IEEE 421.5	*Recommended practice for excitation system models for power system stability studies*
		NEMA MG 1	*Motors and generators*
		BS 4999-140	*General requirements for rotating electrical machines: Part 140: Specification for voltage regulation and parallel operation of a.c. synchronous generators*
		EN 50209	*Test of insulation of bars and coils of high-voltage machines*
		IEC 60317	*Specifications for particular types of winding wires*
		IEC 60332-3	*Tests on electric labels under fire conditions: Part 3: Tests on bunched wire or cables*
		IEC 60721-2-1	*Classification of Environment Conditions: Part 2: Environment conditions appearing in nature; Section 1: Temperature and humidity*
		IEC 60034	*Rotating electrical machines*
		IEC 60034-1:2010	*Part 1 : Rotating and performance*
		IEC 60034-2-1	*Part 2-1 : Standard methods for determining losses and efficiency from tests (excluding machines for traction vehicles)*
		IEC 60034-2-2	*Part 2-2 : Specific methods for determining separate losses of large machines from tests – supplement to IEC 60034-2-1*
		IEC 60034-2-3	*Part 2-3 : Specific test methods for determining losses and efficiency of converter-fed AC induction motors*
		IEC 60034-4	*Part 4 : Methods for determining synchronous machine quantities from tests*
		IEC 60034-6	*Part 6 : Methods of cooling (IC Code)*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60034-8	*Part 8 : Terminal marking and direction of rotation*
		IEC 60034-14:2007	*Part 14 : Mechanical vibration of certain machines with shaft heights 56 mm and higher - Measurement, evaluation and limits of vibration severity*
		IEC 60034-15	*Part 15 : Impulse voltage withstand levels of form-wound stator coils for rotating a.c. machines*
		IEC 60034-18	*Part 18 : Functional evaluation of insulation systems*
		IEC 60038	*IEC Standard voltages*
		IEC 60060-2	*High-voltage test techniques - Part 2: Measuring systems*
		IEC 60072	*Dimensions and output series for rotating electrical machines*
		IEC 60072-1	*Part 1 : Frame numbers 56 to 400 and flange numbers 55 to 1080*
		IEC 60072-2	*Part 2 : Frame numbers 355 to 1000 and flange numbers 1180 to 2360*
		IEC 60076	*Power Transformers*
		IEC 60076-1	*Part 1 : General*
		IEC 60076-3	*Part 3 : Insulation levels, dielectric tests and external clearances in air*
		IEC 60076-5	*Part 5 : Ability to withstand short circuit*
		IEC 60079	*Explosive atmospheres*
		IEC 60079-1	*Part 1 : Equipment protection by flameproof enclosures "d"*
		IEC 60079-2	*Part 2 : Equipment protection by pressurized enclosure "p"*
		IEC 60079-7	*Part 7 : Equipment protection by increased safety "e"*
		IEC 60079-10-1	*Part 10-1 : Classification of areas - Explosive gas atmospheres*
		IEC 60079-10-2	*Part 10-2 : Classification of areas - Combustible dust atmospheres*
		IEC 60079-15	*Part 15 : Equipment protection by type of protection "n"*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60445	*Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals and conductor terminations*
		IEC 60695	*Fire hazard testing*
		IEC 60695-2-10	*Part 2-10 : Glowing/Hot-wire based test methods - Glow-wire apparatus and common test procedure*
		IEC 60695-2-11	*Part 2-11 : Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products*
		IEC 60751	*Industrial platinum resistance thermometers and platinum temperature sensors*
		IEC/TR 60894	*Guide for test procedure for the measurement of loss tangent of coils and bars for machine windings*
		IEC 61000	*Electromagnetic compatibility (EMC)*
		IEC 61000-6-2	*Part 6-2 : Generic standards- Immunity for industrial environments*
		IEC 61000-6-4	*Part 6-4 : Generic standards - Emission standard for industrial environments*
		IEC 61241	*Electrical apparatus for use in the presence of combustible dust*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 61892-3	*Mobile and fixed offshore units - Electrical installations - Part 3: Equipment*
		ISO 1680	*Acoustics - Test code for the measurement of airborne noise emitted by rotating electrical machinery*
		ISO 1940-1	*Mechanical vibration - Balance quality requirements for rotors in a constant (rigid) state - Part 1: Specification and verification of balance tolerances*
18	Perangkat Pembangkitan Unit AC	ASME B16.5	*Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24 Metric/ Inch Standard*
		AWS D1.1/D1.1M	*Structural Welding Code - Steel*
		ASTM A 106	*Standard Specification for Seamless Carbon Steel Pipe for High Temperature Service*
		ASTM A 790/A 790M	*Standard Specification for Seamless and Welded Ferritic/ Austenitic Stainless Steel Pipe*
		BS 4999-140	*General requirements for rotating electrical machines. Specification for voltage regulation and parallel operation of a.c. synchronous generators*
		IEC 60034-1	*Part 1 : Rating and performance*
		IEC 60034-6	*Part 6 : Methods of cooling (IC Code)*
		IEC 60079-15	*Explosive atmospheres - Part 15: Equipment protection by type of protection "n"*
		IEC 60445	*Basic and safety principles for man-machine interface, marking and identification - Identification of equipment terminals, conductor terminations and conductors*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 61000-6-2	*Part 6-2 : Generic standards - Immunity for industrial environments*
		IEC 61000-6-4	*Part 6-4 : Generic standards - Emission standard for industrial environments*
		IEC 60898	*Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations*
		ISO 1813	*Belt drives -- V-ribbed belts, joined V-belts and V-belts including wide section belts and hexagonal belts -- Electrical conductivity of antistatic belts: Characteristics and methods of test*
		ISO 3046-4	*Reciprocating internal combustion engines - Performance Part 4: Speed governing*
		ISO 10816-1	*Part 1 : General guidelines*
		ISO 10816-5	*Part 5 : Machine sets in hydraulic power generating and pumping plants*
		ISO 10816-6	*Part 6 : Reciprocating machines with power ratings above 100 kW*
19	Sistem Penggerak (*Drive*) Variasi Kecepatan Kelistrikan	API Std 617	*Axial and Centrifugal Compressors and Expander-compressors*
		IEC 60034-12	*Part 12 : Starting performance of single-speed three-phase cage induction motors*
		IEC 60044	*Instrument transformers*
		IEC 60076	*Power transformers*
		IEC 60076-6	*Power transformers - Part 6: Reactors*
		IEC 60079	*Explosive atmospheres*
		IEC 60079-10-1	*Explosive atmospheres - Part 10-1: Classification of areas - Explosive gas atmospheres*
		IEC 60146	*Semiconductor converters*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60146-1-1	*Semiconductor converters - General requirements and line commutated converters - Part 1-1: Specification of basic requirements*
		IEC 60364-1	*Low-voltage electrical installations - Part 1: Fundamental principles, assessment of general characteristics, definitions*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60721-2-1	*Classification of environmental conditions - Part 2-1: Environmental conditions appearing in nature - Temperature and humidity*
		IEC 60721-3-3	*Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 3: Stationary use at weatherprotected locations*
		IEC 60947	*Low-voltage switchgear and controlgear*
		IEC 61000-2-4	*Electromagnetic compatibility (EMC) - Part 2-4: Environment - Compatibility levels in industrial plants for low-frequency conducted disturbances*
		IEC/TR 61000-3-6	*Electromagnetic compatibility (EMC) - Part 3-6: Limits - Assessment of emission limits for the connection of distorting installations to MV, HV and EHV power systems*
		IEC 61000-4-7	*Electromagnetic compatibility (EMC) - Part 4-7: Testing and measurement techniques - General guide on harmonics and interharmonics measurements and instrumentation, for power supply systems and equipment connected thereto*
		IEC 61241	*Electrical apparatus for use in the presence of combustible dust*
		IEC 61378	*Converter transformers*
		IEC 61378-1	*Converter transformers - Part 1: Transformers for industrial applications*
		IEC 61378-3	*Converter transformers - Part 3: Application guide*
		IEC 61800-2	*Adjustable speed electrical power drive systems - Part 2: General requirements - Rating specifications for low voltage adjustable frequency a.c. power drive systems*
		IEC 61800-3	*Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods*
		IEC 61800-4	*Adjustable speed electrical power drive systems - Part 4: General requirements - Rating specifications for a.c. power drive systems above 1 000 V a.c. and not exceeding 35 kV*
		IEC 61800-5-1	*Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy*
		IEC 61892-3	*Mobile and fixed offshore units - Electrical installations - Part 3: Equipment*
		ISO 9001	*Quality management systems - Requirements*
20	Sistem Sumber Daya Tenaga Matahari (*Solar*)	IEEE 1547	*IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems*
		IEEE 1547.1	*IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems*
		IEC 60079	*Explosive atmospheres*
		IEC 60099	*Surge arresters*
		IEC 60146	*Semiconductor convertors - General requirements and line commutated convertors*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60227	*Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*
		IEC 60364	*Low-voltage electrical installations*
		IEC 60364-7-712	*Electrical installations of buildings - Part 7-712: Requirements for special installations or locations - Solar photovoltaic (PV) power supply systems*
		IEC 60445	*Identification of equipment terminals and of terminations of certain designated conductors, including general rules for an alphanumeric system*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60947-2	*Low voltage switchgear and controlgear*
		IEC 61215	*Crystalline silicon terrestrial photovoltaic (PV) modules – Design qualification and type approval*
		IEC 61643-12	*Low-voltage surge protective devices - Part 12: Surge protective devices connected to low-voltage power distribution systems - Selection and application principles*
		IEC 61646	*Thin-film terrestrial photovoltaic (PV) modules – Design qualification and type approval*
		IEC 61000-3-2	*Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current & le; 16 A per phase)*
		IEC 61000-6-2	*Electromagnetic Compatibility (EMC) - Part 6-2: Generic standards – Immunity for industrial environments*
		IEC 61000-6-3	*Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments*
		IEC 61000-6-4	*Electromagnetic Compatibility (EMC) - Part 6-4: Generic standards – Emission standard for industrial environments*
		IEC 61427	*Secondary cells and batteries for renewable energy storage – General requirements and methods of test*
		IEC 61701	*Salt mist corrosion testing of photovoltaic (PV) modules*
21	Sistem Pemantauan dan Kontrol Jaringan Kelistrikan	EN 50178	*Electronic Equipment For Use In Power Installations*
		EN 50081-2	*Part 2: Industrial Environment*
		EN 50082-2	*Part 2: Industrial Environment*
		IEC 60038	*IEC Standard Voltages*
		IEC 60068-2-1	*Test A: Cold*
		IEC 60068-2-2	*Test B: Dry Heat*
		IEC 60068-2-30	*Test Db and Guidance: Damp Heat, Cyclic (12 + 12-hour cycle)*
		IEC 60255-5	*Part 5: Insulation Tests For Electrical Relays*
		IEC 60255-11	*Part 11: Interruptions To And Alternating Component (Ripple) In D.C. Auxiliary Energizing Quantity Of Measuring Relays*
		IEC 60255-21-2	*Part 21: Vibration, Shock, Bump And Seismic Tests On Measuring Relays And Protection Equipment Section Two: Shock And Bump Tests*
		IEC 60255-22-1	*Part 22: Electrical Disturbance Tests For Measuring Relays And Protection Equipment Section One: 1 MHz Burst Disturbance Tests*
		IEC 60300	*Dependability Management*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60304	*Standard Colours For Insulation For Low-Frequency Cables And Wires*
		IEC 60391	*Marking Of Insulated Conductors*
		IEC 60409	*Guide For The Inclusion Of Reliability Clauses Into Specifications For Components (Or Parts) For Electronic Equipment*
		IEC 60445	*Identification Of Equipment Terminals*
		IEC 60446	*Identification Of Insulated And Bare Conductors By Colours*
		IEC 60529	*Classification Of Degrees Of Protection Provided By Enclosures*
		IEC 60605	*Equipment Reliability Testing*
		IEC 60706	*Guide On Maintainability Of Equipment*
		IEC 60793-1	*Part 1: Generic Specification*
		IEC 60794-1	*Part 1: Generic Specification*
		IEC 60870-5-101	*Part 5: Transmission Protocols Section 101: Companion Standard For Basic Telecontrol Tasks*
		IEC 61000-5	*Part 5: Installation And Mitigation Guidelines*
		IEC 61070	*Compliance Test Procedures For Steady-State Availability*
		IEC 61123	*Reliability Testing; Compliance Test Plans For Success Ratio*
		IEC 61124	*Reliability Testing - Compliance Tests For Constant Failure Rate And Constant Failure Intensity*
		IEC 61850	*Standard For The Design Of Electrical Substation Automation*
22	Perlindungan Kelistrikan Penggunaan *Relay*	IEEE C37.99	*Guide for the protection of shunt capacitor banks*
		IEEE 1531	*Guide for application and specification of harmonic filters*
		IEEE 1584	*Guide for Performing Arc-Flash Hazard Calculations*
		NFPA 20	*Centrifugal fire pumps*
		NFPA 70E	*Standard for Electrical Safety in the Workplace*
		IEC 60079-7	*Explosive atmospheres – Part 7: Equipment protection by increased safety "e"*
		IEC 61869-1	*Instrument transformers - Part 1: General requirement*
		IEC 61869-2	*Instrument transformers - Part 2: Additional requirements for current transformers*
		IEC 61869-3	*Instrument transformers - Part 3: Additional requirements for inductive voltage transformers*
		IEC 61869-4	*Instrument transformers - Part 4: Additional requirements for combined transformers*
		IEC 60255-22-1	*Measuring relays and protection equipment – Part 22-1: Electrical disturbance tests – 1 MHz burst immunity tests*
		IEC 60529	*Degrees of protection provided by enclosures (IP Code)*
		IEC 60870-1-2	*Tele control equipment and systems – Part 1: General considerations. Section Two: Guide for specifications*
		IEC/TR 61000-2-5	*Electromagnetic compatibility (EMC) – Part 2: Environment – Section 5: Classification of electromagnetic environments – Basic EMC publication*
		IEC/TR 61000-3-6:2008	*Electromagnetic compatibility (EMC) – Part 3-6: Limits – Assessment of emission limits for the connection of distorting installations to MV, HV and EHV power systems*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 61000-4-1	*Electromagnetic Compatibility (EMC) – Part 4-1: Testing and measurement techniques – Overview of IEC 61000-4 series*
		IEC 61000-4-12	*Electromagnetic Compatibility (EMC) – Part 4-12: Testing and measurement techniques – Oscillatory waves immunity test*
		IEC/TR 61000-5-1	*Electromagnetic Compatibility (EMC) – Part 5: Installation and Mitigation Guidelines – Section 1: General Considerations – Basic EMC Publication*
		IEC 61000-5-2	*Electromagnetic compatibility (EMC) – Part 5: Mitigation methods and installation guidelines Section 2 – Earthing and cabling*
		IEC 61000-6-2	*Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments-*
		IEC 61000-6-4	*Electromagnetic compatibility (EMC) - Part 6-4: Generic standards – Emission standard for industrial environments*
		IEC/TS 61000-6-5	*Electromagnetic compatibility (EMC) – Part 6-5: Generic standards – Immunity for power station and substation environments*
		IEC 61850	*Communication networks and systems in substations*
		IEC 62271-1	*High-voltage switchgear and controlgear - Part 1: Common specifications*
		ISO 9001:2008	*Quality management systems – Requirements*
23	Paduan Inspeksi dan Pemeliharaan Peralatan Kelistrikan pada Lingkungan Mudah Terjadi Ledakan	IEC 600790	*IEC 60079: Electrical apparatus for explosive gas atmospheres* *Part 0: General requirements*
		IEC 6007914	*IEC 60079: Electrical apparatus for explosive gas atmospheres* *Part 14: Electrical installations in hazardous areas (other than mines)*
		IEC 6007915	*IEC 60079: Electrical apparatus for explosive gas atmosphere* *Part 15: Type of protection "n"*
		IEC 6007917	*IEC 60079: Electrical apparatus for explosive gas atmospheres* *Part 17: Inspection and maintenance of electrical installations in hazardous areas (other than mines)*
		IEC 6007919	*IEC 60079: Electrical apparatus for explosive gas atmospheres* *Part 19: Repair and overhaul for apparatus used in explosive atmospheres (other than mines or explosives)*
24	Panduan Perbaikan Peralatan Pada Lingkungan Mudah Terjadi Ledakan	IEC 60079 – 19	*Electrical Apparatus for Potentially Explosive Atmospheres.*
		IECEx OD13	*IECEx Operations Manual-Assessment and Certification of Ex Repair and Overhaul Service Facilities Assessment procedures to be followed by ExCBs for issuing and maintaining of IECEx Certificates of Conformity for Service Facilities conducting repair, overhaul or modifications of Ex equipment seeking to be known as an IECEx Certified Service Facility.*
		IECEx OD14	*Quality Management System Requirements and Assessment of, for IECEx Service Facilities involved in repair, overhaul and modification of Exx equipment.*
		IEC 60079	*Electrical apparatus for explosive gas atmospheres*

NO	URAIAN KEGIATAN	STANDAR	
		IECExOD15	*Part 19: Repair and overhaul for apparatus used in explosive atmospheres (other than mines or explosives)*
25	Panduan Penilaian Pengelolaan Pada Lingkungan Mudah Terjadi Ledakan	IEC 60079-0	*Electrical Apparatus for Explosive Gas Atmospheres*
		IEC 60079-1	*Explosive Atmosphere - Equipment Protection by flameproof enclosure 'd'*
		IEC 60079-2	*Explosive Atmosphere - Equipment Protection by pressurized enclosure 'p'*
		IEC 60079-5	*Explosive Atmosphere - Equipment Protection by powder filling 'q'*
		IEC 60079-6	*Explosive Atmosphere- Oil-immersion "o"*
		IEC 60079-7	*Explosive Atmosphere - Equipment Protection by increased safety 'e'*
		IEC 60079-11	*Explosive Atmosphere - Equipment Protection by intrinsic safety 'i'*
		IEC 60079-13	*Explosive Atmosphere - Equipment Protection by pressurized room 'p'*
		IEC 60079-15	*Explosive Atmosphere - Equipment Protection by type of protection 'n'*
		IEC 60079-17	*Explosive Atmospheres - Part 17: Electrical Installations Inspection and Maintenance*
		IEC 60079-19	*Explosive Atmospheres - Part 19: Equipment Repair, Overhaul and Reclamation*
		IECEx 01	*IEC Schemes for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx scheme) – Basic Rules*
		IECEx 03	*IEC Schemes for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx scheme) – IECEx Certified Service Facilities Program covering repair and overhaul of Ex equipment – Rules and Procedure*
		IECEx OD15	*Additional Requirements for IECEx Service Facilities involved in repair, overhaul and modification of Ex equipment*
26	Panduan Pemilihan Peralatan Pada Lingkungan Mudah Terjadi Ledakan	IEC 60079-0	*Equipment - General Requirements*
		IEC 60079-1	*Explosive Atmosphere - Equipment Protection by flameproof enclosure 'd'*
		IEC 60079-2	*Explosive Atmosphere - Equipment Protection by pressurized enclosure 'p'*
		IEC 60079-5	*Explosive Atmosphere - Equipment Protection by powder filling 'q'*
		IEC 60079-7	*Explosive Atmosphere - Equipment Protection by increased safety 'e'*
		IEC 60079-11	*Explosive Atmosphere - Equipment Protection by intrinsic safety 'i'*
		IEC 60079-13	*Explosive Atmosphere - Equipment Protection by pressurized room 'p'*
		IEC 60079-14	*Explosive Atmosphere - Electrical Installations Design, Selection and Erection*
		IEC 60079-15	*Explosive Atmosphere - Equipment Protection by type of protection 'n'*
		IEC 60079-18	*Explosive Atmosphere - Equipment Protection by encapsulation 'm'*
		IEC 60050	*International Electro technical Vocabulary*
27	Persyaratan Kesesuaian *Electromagnetic* (EMC)	IEC 60050 (161)	*International Electrotechnical Vocabulary (IEV)- Chapter 161: Electromagnetic Compatibility*
		IEC 61000-2-5	*Part 2: Environment-Section 5: Classification of electromagnetic environments*
		IEC 61000-4-2	*Part 4: Testing and measurement techniques - Section 2: Electrostatic Discharge immunity test*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 61000-4-3	*Part 4: Testing and measurement techniques- Section 3: RF field immunity test*
		IEC 61000-4-4	*Part 4: Testing and measurement techniques- Section 4: EFT/burst immunity test*
		IEC 61000-4-5	*Part 4: Testing and measurement techniques - Section 5: Surge immunity test*
		IEC 61000-4-6	*Part 4: Testing and measurement techniques- Section 6: CM induced current immunity test*
		IEC 61000-4-8	*Part 4: Testing and measurement techniques- Section 8: Power frequency magnetic field immunity test*
		IEC 61000-4-12	*Part 4: Testing and measurement techniques- Section 12: Oscillatory waves immunity test*
		IEC 61000-5-1	*Part 5: Installation and Mitigation Guidelines- Section 1: General considerations*
		IEC 61000-5-2	*Part 5: Installation and Mitigation Guidelines - Section 2: Earthing and Cabling*
		IEC 61000-6-1	*Part 6: Generic Standards - Section 1: Immunity for residential, commercial and light industrial environments*
		IEC 61000-6-2	*Part 6: Generic Standards - Section 2: Immunity for industrial environments*
		IEC 61000-6-3	*Part 6: Generic Standards - Section 3: Emission standard for residential, commercial and light industrial environments*
		IEC 61000-6-4	*Part 6: Generic Standards - Section 4: Emission standard for industrial environments*
		IEC 61000-6-5	*Part 6: Generic standards- Section 5: Immunity for power stations and substation environments*
		IEC/CISPR 11	*Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM) radio-frequency equipment*
		IEC/CISPR 14	*Limits and methods of measurement of radio disturbance characteristics of electric motor-operated and thermal appliances for household and similar purposes, electric tools and similar electric apparatus*
		IEC/CISPR 22	*Limits and methods of measurement of radio interference characteristics of information technology (ITE) equipment*
		IEC 62305 series	*Protection against lightning*
		IEC 60364-4-44	*Low-voltage electrical installations – Part 4-44: Protection for safety - Protection against voltage disturbances and electromagnetic disturbances*
28	Sistem Perlindungan Pencahayaan	IEC 62305 – 1	*Protection against lightning –Part 1: General principles*
		IEC 62305 – 2	*Protection against lightning –Part 2: Risk management*
		IEC 62305 – 3	*Protection against lightning –Part 3: Physical damage to structures and life hazard*
		IEC 62305 – 4	*Protection against lightning –Part 4: Electrical and electronic systems within structures*
		API RP 545	*RecommendedPractice for Lightning Protection of Above Ground Hydrocarbon Storage Tanks*
		NFPA 780	*Lightning Protection Code*
29	Peralatan *Portable* Kelistrikan dan Panduan Pemasangan Sementara	IEC 60309-1	*Plug, socket outlet and couplers for industrial purposes – general requirement*
		IEC 60309	*Plugs, socket-outlets and couplers for industrial purposes – Part 2: Dimensional interchangeability requirements for pin and contact-tube Accessories*

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60364-7-704	*Low Voltage Electrical Installation – Requirement for special installation or location – construction and demolition site installation*
		IEC60364-7-706	*Low Voltage Electrical Installation – Requirement for special installation or location – conducting location with restricted movement*
		IEC 60745-1	*Handheld motor operated electric tools – safety – general requirement*
		IEC 61008-1	*Residual current operated circuit breakers without integral overcurrent protection for household and similar usage (RCCBs)*
		IEC 61439-4	*Low voltage switchgear and controlgear assembly particular requirements for assembly for construction sites*
		BS 7671	*IEE Wiring regulations 17th Edition*
		AS/NZS 3012:2010	*Electrical Installation – construction*
		NEC/ANSI/NFPA 70	*Standard for the safe installation of electrical wiring and equipments*

F. Standar Rekayasa Instrumentasi dan Kontrol

NO	URAIAN KEGIATAN	STANDAR	
1.	*Interface* dan Desain Ruang Kontrol	EEMUA 201	Process plant control desks utilising human-computer interfaces – A guide to design, operational and human interface issues
		ISO 7731	Ergonomics danger signals for public and work areas – Auditory danger signals.
		ISO 8995-1	Lighting of work places– Part 1: Indoor
		ISO 11064-2	Ergonomic design of control centres – Part 2: Principles for the arrangement of control suites
2.	*Interface* Mesin pada Ruang Kontrol	ISO/DIS 11064-3	Ergonomic design of control centres: Part 3: Control room layout
		ISO/DIS 9241-3	Part 3: Visual display requirements
		ISO/DIS 9241-5	Part 5: Workstation layout and postural requirements
3.	Identifikasi *Tags* Instrumentasi pada Perpipaan (*Piping*) dan Diagram Instrumentasi (P&ID), DCS dan MMS	ANSI / ISA	Instrumentation symbols and identification
4.	Prosedur Rekayasa Proyek Instrumen	ISA S5.1	Instrumentation Symbols and Identification
		ISA S5.2	Binary Logic Diagrams for Process Operations
		ISA S5.3	Graphic Symbols for Distributed Control / Shared Display Instrumentation, Logic and Computer Symbols
5.	Dokumen Instrumen dan Gambar (*Drawings*)	NACE MR0103	Materials resistant to sulfide stress cracking in corrosive petroleum refining environments
		NACE MR0175	Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production
		IEC 617	Graphical symbols for diagrams
		ISO 15156	Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production

NO	URAIAN KEGIATAN	STANDAR	
6.	Instrumen Garis *Signal*	API SPEC 5B	Specification for Threading, Gauging and Thread Inspection of Casing, Tubing, and Line Pipe Threads
		ASTM F1387 -99	Standard Specification for Performance of Piping and Tubing Mechanically Attached Fittings
		ASTM A269	Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service
		IEC 60079-0	Explosive Atmospheres – Part 0: Equipment – General Requirements
		IEC 60079-14	Electrical apparatus for explosive gas atmospheres Part 14: Electrical installations in explosive gas atmosphere (other than mines)
		IEC-60331	Tests for electric cables under fire conditions – Circuit integrity
		IEC-60332 Part 3	Test for vertical flame spread of vertically-mounted bunched wires or cables
		IEC 60529	Degrees of protection provided by enclosures (IP Code)
		IEC 60584-3	Thermocouples Part 3: Extension and compensating cables - Tolerances and identification system
		IEC/TR 61000-5-2	Electromagnetic compatibility (EMC) - Part 5: Installation and mitigation guidelines - Section 2: Earthing and cabling
7.	Kerangan (*Valve*) *Shutdown* yang dioperasikan dengan Hidrolik	ASME B16.5	Pipe flanges and fitting NPS ½ through NPS 24
		ASME B31.3	Process Piping
		UL-1709	Fire test of protection materials for structural steel
		EN 10204	Metallic products – types of inspection documents
		EN 1964	Transportable gas cylinders – Specification for the design and construction of refillable transportable seamless steel gas cylinders of water capacities from 0.5 litres up to and including 150 litres
		ISO 4021	Hydraulic fluid power – Particulate contamination analysis – Extraction of fluid samples from lines of an operating system
		ISO 4406	Hydraulic fluid power – Fluids – Method for coding level of contamination by solid particles
		ISO 5211	Part-turn valve actuator attachment
		ISO 10474	Steel and Steel Products, Inspection Documents
		IEC 60331-11	Tests for electrical cables under fire conditions – circuit integrity Part 11, Apparatus – Fire alone at a flame temperature of at least 750 degrees Celsius
		IEC 60947-5-2	Low-voltage switchgear and control gear – control circuit devices and switching elements – proximity switches
8.	Ukuran (*Sizing*), Pemilihan dan Spesifikasi Kerangan (*Valve*) Penutup (*Shutdown*) dan Penguras (*Blowdown*)	API 6D	Specification for Pipeline Valves (Gate, Plug, Ball and Check Valves)
		API-607	Fire Test for Soft-Seated Quarter Turn Valves
		API 6FA	Fire Test for Valves
		ANSI/ASME B16.5	Pipe Flanges and Flanged Fittings
		ANSI B16.47	Large Diameter Steel Flanges: NPS 26 through NPS 60
		ASME B31.3	Chemical plant and petroleum refinery piping
		ASME VIII DIV 1	Boiler and Pressure Vessel Code

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A 193	Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service
		ASTM A 194	Carbon and Alloy Steel Nuts for Bolts for High-Pressure and High-Temperature Service
		ASTM A 609	Specification for Longitudinal-Beam Ultrasonic Inspection for Carbon and Low-alloy Steel Castings
		ASTM E 94	Standard guide for Radiographic Testing
		ASTM E 165	Standard test method for liquid penetrant examination
		ASTM E 446	Reference Radiographs for Steel Castings up to 2in. (51mm) in Thickness
		ASTM E 709	Standard guide for magnetic particle examination
		BS 1726	Coil Springs
		BS 5351	Steel Ball Valves for the Petroleum Petrochemical and Allied Industries
		BS5500	Unfired fusion welded pressure vessels
		BS 6755 Part 1	Specification for Production Pressure Testing Requirements
		BS 6755 Part 2	Testing of Valves
		IEC 331	Test on electric cables under fire conditions
		IEC 332	Test on electric and optical fibre cables under fire conditions
		IEC 529	Degrees of protection provided by enclosures (IP codes)
		IEC 79-14	Electrical installations in explosive gas atmospheres
		ISO 9001	Quality systems - Model for quality assurance in design, development, production, installation and servicing
		ISO 10012-1	Quality assurance requirements for measuring equipment; part 1: metrological confirmation system for measuring equipment
		ISO 15848	Industrial valves. Measurement, test and qualification procedures for fugitive emissions.
		ISO 10474	Steel and steel products; inspection documents
		NACE MR.01.75	Metals for Sulfide Stress Cracking and Stress Corrosion Cracking Resistance in Sour Oilfield Environments
9.	Persyaratan Desain Instrumentasi Lapangan	API Std 670	Vibration, Axial Position, and Bearing Temperature Monitoring Systems
		ASME B 16.5	Pipe Flanges and Flanged Fittings, NPS ½ through NPS 24
		ASTM A262	Standard practices for detecting susceptibility to intergranular attack in austenitic stainless steels
		AGA-9	Report 9, Measurement of Gas: Ultrasonic Meters
		NACE MR0103	Materials resistant to sulfide stress cracking in corrosive petroleum refining environments
		NACE MR0175	Petroleum and natural gas industries – Materials for use in H2S containing environments in oil and gas production
		BS 6121, PART-1	Mechanical cable glands, Part 1: Specification for metallic glands
		BS 6467	Electrical Apparatus with Protection by Enclosure for Use in the Presence of Combustible dusts
		EN 837, PART 1	Pressure gauges – part 1: Bourdon type pressure gauges – Dimensions, Metrology, Requirements and Testing
		EN 50028	Electrical apparatus for potentially explosive atmospheres; encapsulation 'm'

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60079-10	Electrical apparatus for explosive gas atmosphere:Part 10: Classification of hazardous areas
		IEC 60079-14	Part 14: Electrical installations in hazardous areas (other than mines)
		IEC 60529	Degrees of protection provided by enclosures (IP code)
		IEC 60534-4	Industrial process control valves Part 4: Inspection and routine testing
		IEC 60584-1	Thermocouples: Part 1: Reference tables
		IEC 60584-2	Part 2: Tolerances
		IEC 60654-1	Industrial-process measurement and control equipment; operating conditions Part 1: Climatic conditions
		IEC 60654-3	Operating conditions for industrial-process measurement and control equipment:Part 3: Mechanical influences
		IEC 60654-4	Part 4: Corrosive and erosive influences
		IEC 60751	Industrial process measurement and control terms and definitions
		ISO 5167-1	Measurements of fluid flow by means of orifice plates, nozzles and venturi tubes inserted in circular cross-section conduits running full
		ISO 15156	Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production
10.	Instrumentasi Peralatan	IEC 61508	Functional safety of electrical/electronic/programmable electronic safety-related systems
		IEC 61511	Functional safety - Safety instrumented systems for the process industry sector
		API 670	Machinery Protection System Latest Edition
11.	Pemilihan, Ukuran (*Sizing*), dan Spesifikasi Kerangan (*Valve*) Kontrol	ASME B16.5	Pipe flanges and flanged fittings, NPS ½ through NPS 24
		ASME B16.10	Face-to-face and end-to-end dimensions of valves
		ASME B16.47	Large diameter steel flanges NPS 26 through NPS 60
		API 600	Steel gate valves – flanged and butt welding ends, API 600
		API 602	Compact steel gate valves, flanged, threaded, welding and
		ASTM A 48	Standard specification for gray iron castings
		NACE MR0103	Materials resistant to sulfide stress cracking in corrosive petroleum refining environments
		NACE MR0175	Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production
		BS 5353	Steel plug valves
		DIN 19234	Measurement and control; electrical distance sensors; DC interface for distance sensor and signal converter
		IEC 60529	Degrees of protection provided by enclosures (IP code)
		IEC 60534-1	Part 1: Control valve terminology and general considerations
		IEC 60534-2-1	Part 2: Flow capacity: Section 1 - Sizing equations for fluid flow under installed conditions
		IEC 60534-2-3	Section 3 - Test procedures

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60534-3-1	Part 3: Dimensions Section 1 - Face-to-face dimensions for flanged, two-way, globe-type control valves
		IEC 60534-3-2	Section 2 - Face-to-face dimensions for flangeless control valves except wafer butterfly valves
		IEC 60534-4	Part 4: Inspection and routine testing
		IEC 60534-5	Part 5: Marking
		IEC 60534-8-3	Part 8: Noise Considerations
		ISO 5752	Section 4 - Prediction of noise generated by hydrodynamic flow Metal valves for use in flanged pipe systems – Face-to-face and centre-to-face dimensions
		ISO 14313	Petroleum and natural gas industries – pipeline transportation systems – pipeline valves
		ISO 15156	Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production
		ISO 15848	Industrial Valves – Measurement, test and qualification
		API 609	Procedures for fugitive emissions
		EN 593	Industrial valves. Metallic butterfly valves
		MSS SP67	Butterfly Valves
		MSS SP68	High Performance of Butterfly Valves
		ISA S 75.02	Control Valve Capacity Test Procedures
12.	Instalasi Instrumen *On-Line*	ASME B16.5	Pipe flanges and flanged fittings, NPS 1/2 through
		ASTM A 269	Standard specification for seamless and welded austenitic stainless steel tubing for general service
		ASTM B 165	Standard specification of nickel-copper alloy
		ASTM B 423	Standard specification for seamless and electric welded low-alloy steel tubes
		ASTM B 668	Standard specification for UNS N08028 seamless pipe and tube
		NACE MR0103	Materials resistant to sulfide stress cracking in corrosive petroleum refining environments
		NACE MR0175	Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production
		IEC 61518	Mating dimensions between differential pressure (type) measuring instruments and flanged-on shut-off devices up to 413 bar
		ISO 3601-1	Fluid systems - Sealing devices – O-rings
		ISO 4200	Part 1: Inside diameters, tolerances and size identification code
		ISO 15156	Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production
		ISO 2186	Fluid flow in closed conduits—Connections for pressure signal transmissions between primary and secondary elements
13.	Inspeksi dan Pengujian Fungsi Instrumen	ISO 9000	Quality management and quality assurance standards
		ISO 10012:2003	Measurement Management Systems – Requirements for Measurement Processes and Measuring Equipment
14.	Spesifikasi Panel Kontrol *Wellhead*	ASTM A269	Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service
		IEC 60079-10	Classification of Hazardous Area

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60529	Degrees of Protection Provided by Enclosures
		IEC 61508	Functional Safety Of Electrical/Electronic/Programmable Electronic Safety-Related Systems
		IEC 61511	Functional Safety – Safety Instrumented Systems For The Process Industry Sector
15.	Desain, Pemasangan, Operasi dan Pemeliharaan *Fieldbus*	ISA S50.02	Fieldbus Standard for Use in Industrial Control Systems
		ISO 7498	Open System Interconnection Model
		IEC 61158	Digital data communications for measurement and control - Fieldbus for use in industrial control systems
		IEC 60079-27	Electrical apparatus for explosive gas atmospheres Part 27: Fieldbus intrinsically safe concept (FISCO) and Fieldbus non-incendive concept (FNICO)
16.	Spesifikasi Rekayasa DCS	ISA 99	Industrial Automation and Control Systems Security
17.	Sistem Kontrol Proses Pengelolaan *Cybersecurity*	ANSI / ISA 99	Security for Industrial Automation and Control Systems:
		ISO / IEC 27001	Information Technology – Security Techniques - Information security management systems - Requirements
		ISO / IEC 27002	Information Technology – Security Techniques – Code of Practice for information security controls
18.	Kontrol dan Sistem Keselamatan pada *Small Field Development*	IEC 61000-6-2	Electromagnetic Compatibility (EMC)– Part 6-2: Generic standards – Immunity for industrial environments
		IEC 61000-6-4	Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments
		IEC 60529	Degrees of protection provided by enclosures
		IEC 61131-2	Programmable controllers - Part 2: Equipment requirements and tests
		IEC 61131-3	Programmable controllers - Part 3: Programming languages
		IEC 61508	Functional Safety of Electrical/Electronic/Programmable Electronic Safety-related Systems (E/E/PE, or E/E/PES).
		IEC 61511	Functional safety - Safety instrumented systems for the process industry sector
		NFPA 72	National Fire Alarm Code
		API 14C	Recommended Practice for Analysis, Design, Installation and Testing of Basic Surface Safety Systems for Offshore Production Platforms
19.	Sistem ESD untuk Pemasukan dan Pengeluaran pada Kapal LNG dan LPG	IMO	International code for the construction and equipment of ships carrying liquefied gases in bulk (1993 edition including amendments adopted in by resolutions MSC.32(63) on 23 May 1994 and MSC.59(67) on 5 December 1996) (generally referred to as the IGC code).
20.	Desain, Pemasangan, dan Pemeliharaan Sistem Pendeteksi Api dan Gas	NFPA 12	Carbon Dioxide Extinguishing Systems
		NFPA 58	Standard for the Storage and Handling of Liquefied Petroleum Gases
		NFPA 72	National Fire Alarm Code
		API 14C	Recommended Practice for Analysis, Design, Installation and Testing of Basic Surface Safety Systems for Offshore Production Platforms
		BS 4800	Paint Colours for Building Purposes
		EN 54	Components of Automatic Fire Detection Systems

NO	URAIAN KEGIATAN	STANDAR	
		EN 61779-1	Electrical Apparatus for the Detection and Measurement of Flammable Gases. Part 1: General Requirements and Test Methods
		EN-61779-2	Electrical Apparatus for the Detection and Measurement of Flammable Gases. Part 2: Performance Requirements for Group I Apparatus Indicating A Volume Fraction up to 5% Methane in Air
		EN-61779-3	Electrical Apparatus for the Detection and Measurement of Flammable Gases. Part 3: Performance Requirements for Group I Apparatus Indicating A Volume Fraction up to 100% Methane in Air
		EN-61779-4	Electrical Apparatus for the Detection and Measurement of Flammable Gases. Part 4: Performance requirements for Group II Apparatus Indicating A Volume Fraction up to 100% Lower Explosive Limit
		EN-61779-5	Electrical Apparatus for the Detection and Measurement of Flammable Gases. Part 5: Performance Requirements for Group II Apparatus Indicating A Volume Fraction up to 100% Gas
		IEC 60079 Series	Parts 1-14 Electrical Installations in Hazardous Areas
		IEC 60801	Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment
21.	Persyaratan Pengelolaan Alarm	EEMUA 1912007	Alarm System – A Guide to Design, Management and Procurement
		ANSI/ISA-18.02-2009	Management of Alarm Systems for the Process Industries
22.	Instrumentasi pada Sistem Pengurangan Tekanan	ISO 5208	Industrial valves – Pressure testing of valves
		IEC 60534-1	Industrial process control valves: Part 1: Control valve terminology and general considerations.
		IEC 60534-2-3	Part 2-3:Flow capacity - Test procedures
		IEC 60534-4	Part 4: Inspection and routine testing
		IEC 60331-21	Part 21: Procedures and requirements - Cables of rated voltage up to and including 0,6/1,0 kV
		IEC 61508-1 to -7	Functional safety of electrical/electronic/programmable electronic safety related systems, Parts 1 to 7
23.	Klasifikasi, Verifikasi, dan Implementasi Fungsi Instrumentasi Pengaman	IEC 61508: 2010	Functional safety of electrical/ electronic/ programmable electronic safety related systems
		IEC 60534-4	Industrial – Process Control Valves – Part 4: Inspection and Routine Testing
		IEC 61511	Functional safety: Safety Instrumented Systems for the Process Industry Sector
		ISA S 84.1	Safety Instrumented Systems (SIS) – Safety Integrity Level (SIL) Evaluation Techniques
24.	Pengelolaan Fungsi Instrumentasi Pengaman	IEC 61508	Functional safety of electrical/electronic/programmable electronic safety related systems
		IEC 61511	Functional safety: safety instrumented systems for the process industry sector
25.	Sistem Instrumentasi Pengaman	ISA S18.1	Annunciator sequences and specifications
		IEC 60189-2	Low-frequency cables and wires with PVC insulation and PVC sheath – Part 2: Cables in pairs, triples, quads and quintuples for inside installations

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60304	Standard colours for insulation for low-frequency cables and wires
		IEC 61000-6-2	Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments
		IEC 61000-6-4	Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments
		IEC 61508	Functional safety of electrical/electronic/programmable electronic safety-related systems
		IEC 61511	Functional safety – Safety instrumented systems for the process industry sector
26.	Instrumentasi Kontrol dan Perlindungan pada Peralatan Pembakar	API RP 556 (April 2011)	Instrumentation, Control, and Protective Systems for Fired Heaters
		API RP 14C	Recommended Practice for Analysis, Design, Installation, and Testing of Basic Surface Safety Systems for Offshore Production Platforms
		NFPA 85 (2007)	Boiler and Combustion Systems Hazards Code
		NFPA 86 (2007)	Standard for Ovens and Furnaces
		EN 746-2 (2010)	Industrial thermoprocessing equipment – Part 2: Safety requirements for combustion and fuel handling systems
27.	Sistem Proses *On-line*	ASTM A 269	Standard specification for seamless and welded austenitic stainless steel tubing for general service
		IEC 60079-14	Electrical apparatus for explosive atmospheres: Part 14: Electrical installation in explosive gas atmosphere (other than mines)
28.	Instrumentasi Pengukuran Kualitas *On-Line*	ASTM D 3764	Standard practice for validation of process stream analyser system
		NEMA 250	Enclosures for electrical equipment (1000 volts maximum)
		IEC 60079	Electrical apparatus for explosive atmospheres
		IEC 60025	Degrees of protection provided by enclosures (IP code)
		ISO 6976	Natural gas – Calculation of calorific values, density and relative density and wobbe index from composition
		ISO 9001	Quality systems – Model for quality assurance in design, development, production, installation and servicing
29.	Persyaratan Desain pada Bangunan *Analyser*	IP 15	The Institute of Petroleum Model Code of Safe Practice, Part 15, Area classification code for petroleum installations
		IEC 60079-14	Electrical apparatus for explosive gas atmospheres: Part 14: Electrical installations in hazardous areas (other than mines)
		IEC/TR 60079-16	Electrical apparatus for explosive gas atmospheres: Part 16: Artificial ventilation for the protection of analyser(s) houses
		IEC 60309	Plugs, socket-outlets and couplers for industrial purposes
		IEC 61285	Industrial-process control – safety of analyser buildings

NO	URAIAN KEGIATAN	STANDAR	
30.	Kriteria Penerimaan Analyser dan Sistem Sampling Terkait	ASTM D6299-02	Standard Practice for Applying Statistical Quality Assurance Techniques to Evaluate Analytical Measurement System Performance
		ASTM D3764-06	Standard Practice for Validation of the Performance of Process Stream Analyser Systems
31.	Sistem Meter Gas	ASME MFC 19G	Wet Gas Flowmetering Guideline
		API RP 85	Use of Subsea Wet-Gas Flowmeter In Allocation Measurement Systems
		API MPMS 14.1	Manual of Petroleum Measurement Standards
		ISO 5167	Measurement Of Fluid Flow By Means Of Pressure Differential Devices Inserted In Circular Cross-Section Conduits Running Full – Part 4 : Venturi Tubes
		ISO/TR 11583	Measurement Of Wet Gas Flow By Means Of Pressure Differential Devices Inserted In Circular Cross Section Conduits
		ISO 10715	Natural Gas – Sampling Guidelines
		ISO 13443	Natural Gas – Standard Reference Conditions
32.	Sistem Meter Multi Fasa	API 2566	State of Art Multiphase Flow Meter
		API RP 86	Measurement Of Multiphase Flow
		API MPMS 20.3	Measurement Of Multiphase Flow
		API MPMS 8.1	Standard Practice For Manual Sampling Of Petroleum And Petroleum Products
		API MPMS 8.2	Standard Practice For Automatic Sampling Of Liquid Petroleum And Petroleum Products
		ISO 3170	Petroleum Liquids – Manual Sampling
		ISO 3171	Petroleum Liquids – Automatic Sampling
		ISO 13443	Natural Gas – Standard Reference Conditions
33.	Pengukuran Aliran *Fiscal* Gas Alam	AGA 3	Orifice Metering of Natural Gas and Other Related Hydrocarbon Fluids - Concentric, Square-Edged Orifice Meters
		AGA 5	Gas Energy Measurement
		AGA 8	Compressibility Factor of Natural Gas and Related Hydrocarbon Gases
		AGA 9	Measurement of gas by multipath ultrasonic meters
		AGA 10	Speed of Sound in Natural Gas and Other Related Hydrocarbon Gases
		AGA 11	Measurement of natural gas by Coriolis meter
		ASTM D 6667	Standard test method for determination of total volatile sulphur in gaseous hydrocarbons and liquefied petroleum gases by ultraviolet fluorescence
		ANSI/MPMS Ch 14.6	Natural Gas Fluids Measurement, Section 6 - Continuous Density Measurement, Second Edition
		API MPMS Ch 21.1	Flow Measurement Using Electronic Metering Systems, Section 1 - Electronic Gas Measurement

NO	URAIAN KEGIATAN	STANDAR	
		ASTM D 1945	Standard Test Method for Analysis of Natural Gas by Gas Chromatography
		BS 5233	Terms used in metrology
		BS EN 60751	Industrial Platinum Resistance Thermometers and Platinum Temperature Sensors
		IEC 60751	Industrial platinum resistance thermometer sensors
		ISO 4006	Measurement of fluid flow in closed conduits – Vocabulary and Symbols
		ISO 5167	Measurements of fluid flow by means of pressure differential devices
		ISO 5168	Measurement of fluid flow – Evaluation of uncertainties
		ISO 6142	Gas analysis – Preparation of calibration gas mixtures - Gravimetric method
		ISO 6326	Natural gas – Determination of sulphur compounds
		ISO 6551	Petroleum Liquids and Gases - Fidelity and Security of Dynamic Measurement - Cabled Transmission of Electric and/or Electronic Pulsed Data
		ISO 6570	Natural gas – Determination of potential hydrocarbon-liquid content
		ISO 6974	Natural gas - Determination of composition with defined uncertainty by gas chromatography
		ISO 6976	Natural gas – Calculation of calorific values, density, relative density and Wobbe index from composition
		ISO 6978	Natural gas - Determination of mercury
		ISO 7873	Control charts for arithmetic average with warning limits
		ISO 8943	Refrigerated light hydrocarbon fluids - Sampling of liquefied natural gas - Continuous method
		ISO 9001	Quality management systems – Requirements
		ISO/TR 9464	Guide to the use of ISO 5167
		ISO 9951	Measurement of gas flow in closed conduits – Turbine meters
		ISO 10101	Natural gas – Determination of water by the Karl Fischer method
		ISO 10715	Natural gas – Sampling guidelines
		ISO 10723	Natural gas – Performance evaluation for on-line analytical Systems
		ISO 10790	Measurement of fluid flow in closed conduits — Guidance to the selection, installation and use of Coriolis meters (mass flow, density and volume flow measurements)
		ISO 12213	Natural gas – Calculation of compression factor
		ISO 17089-1	Measurement of fluid flow in closed conduits - Ultrasonic meters for gas - Part 1:Meters for custody transfer and allocation measurement Natural gas – Standard reference conditions

NO	URAIAN KEGIATAN	STANDAR	
		ISO 14001	Environmental management systems – Requirements with guidance for use
		ISO 14111	Natural gas – Guidelines to traceability in analysis
		ISO 15970	Natural Gas - Measurement of Properties - Volumetric Properties: Density, Pressure, Temperature and Compression Factor
		ISO 17025	General requirements for the competence of testing and calibration laboratories
		ISO 18453	Natural gas – Correlation between water content and water dew Point
		ISO 19739	Natural gas – Determination of sulphur compounds
		ISO 80000	Quantities and Units, Part 1 - General, First Edition, Includes Corrigendum 1
		GPA 2145	Table of Physical Properties for Hydrocarbons and Other Compounds of Interest to the Natural Gas Industry
		GPA 2172	Calculation of Gross Heating Value, Relative Density, Compressibility and Theoretical Hydrocarbon Liquid Content for Natural Gas Mixtures for Custody Transfer
		IEC 60751	Industrial Platinum Resistance Thermometers and Platinum Temperature Sensors
		ISA 5.1	Instrumentation Symbols and Identification
		BIPM JCGM 200	International Vocabulary of Metrology - Basic and General Concepts and Associated Terms
34.	*Custody Transfer* Hidrokarbon Cair dan Pengukuran Alokasi	BS 5233	Glossary of Terms used in Metrology
		BS 1904	Specification for Industrial Platinum Resistance Thermometer elements
		BS 1133	Packaging Code
		IEC 60751	Industrial platinum resistance thermometer Sensor
		IEC 60534	Industrial-process control valves. Part 2: Section 1 Sizing equations for incompressible fluid flow under installed conditions
		IEC 60654-1	Industrial-Process Measurement and Control Equipment Operating Conditions - Part 1: Climatic Conditions
		IEC 60721-2-1	Classification of environmental conditions Part 2 Environmental conditions appearing in natural temperature and humidity first edition
		IEC 60721-3-4	Classification of Environmental Conditions Part 3: Classification of Groups of Environmental Parameters and Their Severities - Section 4: Stationary Use at Non-Weatherprotected Locations
		IP Petroleum Measurement Manual	Part VI Section 2 a Guide to Automatic Sampling of liquid frompipelines
		IP 252/76	Petroleum Measurement Manual, Part XIII Section 1 Fidelity and Security of measurement – Data Transmission for fluid metering system
		IP Petroleum Measurement Manual	Part VII Section 2 Continuous Density Measurement tentative Sept. 1979.

NO	URAIAN KEGIATAN	STANDAR	
		IP 201/64	Petroleum Measurement Manual, Part 1 – Calculation of Oil Quantities.
		IP Petroleum Measurement Manual	Part VI1 Section 2 – Guide toAutomatic Sampling.
		ISO 1000: 1981	SI Units and recommendations for the use of their multiples and of certain other units
		ISO 1998-6	Petroleum Industry – Terminology – Part 6: Measurement
		ISO 2714	Liquid hydrocarbons – Volumetric measurement by displacement meter systems other than dispensing pump
		ISO 2715	Volumetric measurement by turbine meter systems
		ISO 3170	Petroleum liquids – Manual sampling
		ISO 4124	Liquid Hydrocarbons – Dynamic measurement – Statistical control of volumetric metering systems
		ISO 4267-2	Petroleum and liquid petroleum products – Calculation of oil quantities – Part 2: Dynamic measurement
		ISO 5024	Petroleum liquids and liquefied petroleum gases – Measurement – Standard reference conditions
		ISO 5168	Measurement of fluid flow – Evaluation of uncertainties
		ISO 6551	Petroleum liquids and gases – Fidelity and Security of dynamic measurement – Cabled transmission of electric and/or electronics pulsed data
		ISO 7278-1	Liquid hydrocarbons – Dynamic measurement – Proving systems for volumetric meters – Part 1: General principles
		ISO 7278-2	Liquid hydrocarbons – Dynamic measurement – Proving systems for volumetric meters – Part 2: Pipe provers
		ISO 7278-3	Liquid hydrocarbons – Dynamic measurement – Proving systems for volumetric meters – Part 3: Pulse interpolation techniques
		ISO 7278-4	Liquid hydrocarbons – Dynamic measurement – Proving systems for volumetric meters – Part 4: Guide for operators of pipe provers
		ISO/TR 9494	Petroleum liquids – Automatic pipeline sampling – Statistical assessment of performance of automatic samplers determining the water content in hydrocarbon liquids
		ISO 10790	Measurement of fluid in closed conduits – Guidance to the selection, installation and use of Coriolis meters (mass flow, density and volume flow measurements)
35.	*Mapping* Deteksi Api dan Gas	NFPA 72	National Fire Alarm Code
		API 14C	Recommended Practice for Analysis, Design, Installation and Testing of Basic Surface Safety Systems for Offshore Production Platforms
		ISA-TR84.00.07	Guidance on the Evaluation of Fire, Flammable Gas and Toxic Gas Systems Effectiveness
		ASTM E1002	Standard Test Method for Leaks Using Ultrasonics
36.	Telekomunikasi pada Bangunan	IEC 60079-14	Electrical apparatus for explosive atmospheres: Part 14: Electrical installation in explosive gas atmosphere (other than mines)

NO	URAIAN KEGIATAN	STANDAR	
		IEC 60529	Classification of degrees of protection provided by enclosures
		UL 913	Intrinsically safe apparatus and associated apparatus for use in Class I, II and III, Division 1 hazardous (classified) locations
37.	Standar Telekomunikasi	EIA/TIA 568/569/570/60 TSB-36/TSB-40	Commercial building wiring standards
		EIA/TIA-568B TIA/EIA-568-C	Commercial Building Cabling Standard, for Telecommunications Pathways and Spaces.
		TIA-570-B	Residential Telecommunications Cabling Standard
		TIA/EIA-606-A	Administration Standard for Commercial Telecommunications Infrastructure
		BS 6656	Prevention of inadvertent ignition of flammable atmospheres by radio-frequency radiation
		BS 6657	Guide to the prevention of inadvertent initiation of electro-explosive devices by radio-frequency radiation.
		BS 6657/2002	Assessment of inadvertent initiation of bridge wire electro-explosive devices by radio-frequency radiation.
		ICAO Annex 10 – Vol I	Aeronautical telecommunications Volume I (Radio navigation aids)
		ICAO Annex 10 – Vol II	Aeronautical telecommunications Volume II Communications procedures including those with PANS status
		IEEE Std 521-2002	Institute of Electrical and Electronics Engineering Series of Publications of Standards – Radar Bands
		IEC 60079-10	Electrical apparatus for explosive gas atmospheres Part 10: Classification of hazardous areas
		IEC 60079-14	Electrical apparatus for explosive gas atmospheres Part 14: Electrical installations in hazardous areas (other than mines)
		IEC 60079-17	Electrical apparatus for explosive gas atmospheres Part 17: Inspection and maintenance of electrical installations in hazardous areas (other than mines)
		IEC 60529	Degrees of protection provided by enclosures
		IEC 62086-1	IEC Electrical apparatus for explosive gas atmospheres
		IEC 61034, IEC 60754-1/2	IEC Emission of Smoke, Tests On Gases Evolved During Combustion Of Materials From Cables
		IEC 61000	Electromagnetic Compatibility for Industrial-Process Measurement and Control Part 1: General Introduction Part 2: Environment Part 3: Limits Part 4: Testing and Measurement Part 5: Installation and Mitigation Guidelines Part 6: Generic Standards

NO	URAIAN KEGIATAN	STANDAR	
38.	Telekomunikasi untuk Fasilitas Lepas Pantai (*Offshore*)	BS 6657:2002	Assessment of Inadvertent Initiation of Bridge Wire Electro explosive Devices by Radio-Frequency Radiation. Guide
		IEC 60050	International Electrotechnical Vocabulary
		IEC 60529	Degrees of Protection Provided by Enclosures
		IMO MODU	Code of the Construction and Equipment of Mobile Offshore Drilling units 2009 amendments to 1991
		IMO SOLAS	Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974 with 1988 amendments
39.	Telekomunikasi untuk Operasi Pengeboran	BS 6657	Guide to the prevention of inadvertent initiation of electro explosive devices by radio-frequency radiation.
		IEC 60050	International Electrotechnical Vocabulary
		IMO MODU	Code For The Construction And Equipment Of Mobile Offshore Drilling Units 2009
		IMO SOLAS	International Convention For The Safety Of Life At Sea, 2004
40.	Menara Telekomunikasi	ICAO	ICAO Standards: Annex 14, chapter 6 of the ICAO Convention - Characteristics of Warning Lights
		ISO 1461	Metallic coatings; Protection against corrosion by hot dip galvanising; Guiding principles
		ISO 9001	Quality systems - Model for quality assurance in design, development, production, installation and servicing
		ANSI/EIA TIA-222-G	Structural Standards for Steel Antenna Towers and Antenna Supporting Structures
		ASTM A 123	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
		BS 5950: Part 1	Structural use of steelwork in building. Code of practice for design in simple and continuous construction: hot-rolled sections
		BS EN 1993-3-1:2006	Lattice towers and masts
41.	Desain dan Pemasangan Kabel Telepon	ISO/IEC 8877	Information technology; telecommunications and information exchange between systems; interface connector and contact assignments for ISDN basic access interface located at reference points S and T
42.	Petunjuk Desain, Pemasangan, dan Pengujian Sistem Telekomunikasi Hulu	IEC 60332	Tests on Electric Cables Under Fire Conditions
		IEC 60079	Selection Equipment in Hazardous Area
		IEC 144	Degrees of Protection of Enclosures for Low Voltage Switch Gear and Control Gear
		IEC 331	Fire Resisting Characteristics of Electric Cables
		IEC 332	Tests on Electric Cables under Fire Conditions Model Code of Safety Practice in Petroleum Industry Part 15
		EIA	Codes of Practice Electronic Industrial Association

NO	URAIAN KEGIATAN	STANDAR	
		IEE	Regulations for Electrical and Electronic Equipment of Mobile and Fixed Offshore Installation
		ITU-R	International Telecommunication Union (Radio)
		ITU-T	ITU Telecommunication Standardization Sector
		SOLAS	International Convention for Safety of Life at Sea
43.	Struktur Pemasangan Kabel untuk Telekomunikasi	TIA/EIA-568-B and TIA/EIA-568-C	Commercial Building Telecommunications Cabling Standard.
		TIA-569-B	Commercial Building Cabling Standard, for Telecommunications Pathways and Spaces.
		TIA-570-B	Residential Telecommunications Cabling Standard
		TIA/EIA-606-A	Administration Standard for Commercial Telecommunications Infrastructure
		TSB 67	Transmission Performance Specifications for Field Testing of Unshielded Twisted Pair Cabling Systems
		TSB 72	Centralized Fibre Optic Cabling Guidelines
		TSB 75	Additional Horizontal Cabling Practices for Open Offices
		UL 910	Standard for Safety test for Flame-Propagation and Smoke-Density Valves for Electrical and Optical- Fibre Cables used in Spaces Transporting Environmental Air. Fourth edition.
		BS 7718	Code of Practice for Installation of Fibre Optic Cabling
		ISO/IEC 8802-3	Information Technology - Local and Metropolitan Area Networks - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications
		ISO/IEC 8802-5 (Token Ring)	Information Technology - Local and Metropolitan Area Networks - Part 5: Token Ring Access Method and Physical Layer Specifications
		ISO/IEC 8877	Information Technology - Telecommunications and information exchange between systems; interface connector and contact assignments for ISDN basic access interface located at reference points S and T
		ISO/IEC 9314-3	Information Processing Systems; Fibre Distributed Data Interface (FDDI); Part 3: Physical Layer Medium Dependent (PMD)
		ISO/IEC 11801 (1998)	Information technology - generic cabling for customer premises
		ISO/IEC JTC 1/SC25 PDTR 14763-2	Implementation and operation of customer premises cabling, Part 2
44.	Sistem Radio *Microwave*	ITU-T and ITU-R	International Telecommunication Union – Telecommunication Standardization Sector and Radio Standardization Sector Series of Recommendations

NO	URAIAN KEGIATAN	STANDAR	
		IEEE Std 521-2002	Institute of Electrical and Electronics Engineering Series of Publications of Standards – Radar Bands
		IEC 62086-1	IEC Electrical apparatus for explosive gas atmospheres
		IEC 61034, IEC 60754-1/2	IEC Emission of Smoke, Tests On Gases Evolved During Combustion Of Materials From Cables
		EIA/TIA-568B	Commercial Building Telecommunications Cabling Standard
		BS 6657/2002	BS British Standards - Assessment of inadvertent initiation of bridge wire electro-explosive devices by radio-frequency radiation.
45.	Peralatan Bawah Laut pada Sistem Kontrol Produksi Bawah Laut	API 6AV1	API 6AV1 Verification Test of Wellhead Surface Safety Valves & Underwater Safety Valves for Offshore service
		API 17 F	Subsea Production Control Systems
		API 6AV2	Installation, Maintenance and Repair of SSV/USV
		API 17A (ISO 13628-1)	General Requirements and Recommendations
		API 17F (ISO 13628-6)	Design and Operation of Subsea Production Systems, Part 6: Subsea Production Control Systems
		API RP 17N	Recommended Practice for Subsea Production System Reliability, Technical Risk and Integrity Management
		DNV-OS-H205	Lifting Operations (VMO Standard Part 2-5)
		API RP 17H	Remotely Operated Vehicle (ROV) interfaces on subsea production systems
		IEC 61508	Functional Safety of Electrical / Electronic / Programmable Electronic Safety-related Systems
		IEC 61511	Functional Safety – Safety instrumented systems for the process sector
		ISO 1219, Part 1 and 2	Graphical Symbols for Fluid Power systems
		IEC 62402	Obsolescence Management
		ISO 12944-5	Paints and varnishes – Corrosion protection of steel structures by protective paint systems. Part 5 Protective Paint Systems;
		ISO 4406	Hydraulic Fluid Power – Fluids – Method for coding the level of contamination by solid particles.
		ISO 4407	Hydraulic fluid power — Fluid contamination — Determination of particulate contamination by the counting method using an optical microscope
		ISO 10945	Hydraulic Fluid Power: Gas Loaded Accumulators - Dimensions of Gas Ports
		ISO 16889	Hydraulic Fluid Power: Filters - Multi-pass Methods for Evaluating Filtration Performance of a Filter Element
		ISO 18413	Hydraulic Fluid Power: Cleanliness of Parts and Components - Inspection Document and Principles Related to Contaminant Collection, Analysis and Data Reporting

NO	URAIAN KEGIATAN	STANDAR	
		BS EN IEC 60801-2	Electromagnetic compatibility for industrial-process measurement and control equipment. Electrostatic discharge requirements
		IEC 60502-1	Power cables with extruded insulation and their accessories for rated voltages from 1kV up to 3kV
		IEC 61000-2-1	Electromagnetic compatibility (EMC): Part 2: Environment: Section 1: Description of the environment - Electromagnetic environment for low-frequency conducted disturbances and signaling in public power supply systems
		API RP 14B	Recommended Practice for Design, Installation, Repair and Operation of Subsurface Safety Valve Systems
		API RP 14C	Analysis, Design, Installation, and Testing of Basic Surface Safety Systems for Offshore Production Platforms
		API 6A	Specification for Wellhead and Christmas Tree Equipment
		API STD 17O	Recommended Practice for Subsea High Integrity Pressure Protection System (HIPPS)
		ISO 13628-4 (API 17D)	Design and Operation of Subsea Production Systems-Subsea Wellhead and Tree Equipment
		ISO 13638-5 (API 17E)	Specification for Subsea Umbilicals
		ISO 13628-8 (API 17H)	Recommended Practice for Remotely Operated Vehicle (ROV) Interfaces on Subsea Production Systems
		API MPMS Chapter 22.2	Measurement of Multiphase Flow
		ASME / ANSI B16.25	Butt-welding Ends
		ASME B31.3	Process Piping
		ASME B31.8	Gas Transmission and Distribution Piping Systems
		ASME BPVC-IX	ASME Boiler and Pressure Vessel Code (BPVC), Section IX: Welding, Brazing, and Fusing Qualifications: Qualification Standard for Welding, Brazing, and Fusing Procedures; Welders; Brazers; and Welding, Brazing and Fusing Operators
		ASME BPVC-V	ASME Boiler and Pressure Vessel Code (BPVC), Section V: Nondestructive Examination
		AWS D1.1	Structural Welding Code - Steel
		ISO 13919-1	Welding - Electron and laser-beam welded joints - Guidance on quality levels for imperfections - Part 1: Steel
		ASTM G48	Standard Test Methods for Pitting and Crevice Corrosion Resistance of Stainless Steels and Related Alloys by Use of Ferric Chloride Solution
		DNV-RP-B401	Cathodic Protection Design
		DNV-RP-F112	Design of Duplex Stainless Steel Subsea Equipment Exposed to Cathodic Protection
		EEMUA 194	Guidelines For Materials Selection And Corrosion Control For Subsea Oil And Gas Production Equipment
		EN 10204	Metallic products - Types of Inspection Documents
		ISO 10474	Steel And Steel Products - Inspection Documents

NO	URAIAN KEGIATAN	STANDAR	
		ISO 15156-3	Materials For Use In H2S-Containing Environments In Oil And Gas Production
		API MPMS 20.3	Manual Of Petroleum Measurement Standards Chapter 20.3 Measurement Of Multiphase Flow
		API RP 85	Use of Subsea Wet Gas Flowmeter in Allocation Measurement Systems
		ISO 11631	Measurement Of Fluid Flow - Methods Of Specifying Flowmeter Performance
		ISO 5167-4	Measurement Of Fluid Flow By Means Of Pressure Differential Devices Inserted In Circular Cross-Section Conduits Running Full -Part 4: Venturi Tubes

G. Standar Rekayasa Material, Korosi, dan Inspeksi

NO	URAIAN KEGIATAN	STANDAR	
1.	Material yang dapat digunakan pada lingkungan yang terdapat H2S pada Produksi Minyak dan Gas	ANSI/NACE MR0175/ISO 15156-1:2009	*Petroleum and natural gas industries – Materials for use in H2S- containing environments in oil and gas production Part 1: General Principles*
		ANSI/NACE MR0175/ISO 15156-2:2009	*Part 2: Cracking-resistant carbon and low alloy steels, and the use of cast irons*
		ANSI/NACE MR0175/ISO 15156-3:2009	*Part 3: Cracking-resistant CRA and other alloys*
		ASTM A578	*Standard Specification for Straight-Beam Ultrasonic Examination of Rolled Steel Plates for Special Applications*
		NACE TM0284	*Evaluation of pipeline and pressure vessel steels for resistance to HIC*
		NACE MR0103	*Materials Resistant to SSC in Corrosive Petroleum Refining Environments*
2.	Pemilihan Material untuk Penggunaan di Bawah Laut (*Subsea*)	API 6A	*Specification for Wellhead and Christmas Tree Equipment*
		API 5L	*Specification for Line Pipe*
		API 5LC	*CRA Line Pipe*
		API 5LD	*CRA Clad or Lined Steel Pipe*
		API RP 6HT	*Heat Treatment and Testing of Carbon and Low Alloy Steel Large Cross Section and Critical Section Components*
		API 17A	*Design and Operation of Subsea Production Systems – General Requirements and Recommendations*
		API 17D	*Design and Operation of Subsea Production Systems – Subsea Wellhead and Tree Equipment*
		API 17P	*Design and Operation of Subsea Production Systems – Subsea Structures and Manifolds*
		ASME Section II	*Materials*
		ASME Section V	*Nondestructive Examination*
		ASME Section VIII	*Rules for Construction of Pressure Vessels*
		ASME Section IX	*Welding and Brazing Qualifications*
		ASME B16.5	*Pipe Flanges and Flanged Fittings: NPS ½ through NPS 24 Metric/Inch Standard*
		ASME B16.20	*Metallic Gaskets for Pipe Flanges: Ring-Joint, Spiral-Wound, and Jacketed*
		ASME B16.47	*Large Diameter Steel Flanges: NPS 26 through NPS 60 Metric/Inch Standard*

NO	URAIAN KEGIATAN	STANDAR	
		ASME B31.3	*Process Piping*
		ASME B31.4	*Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids*
		ASME B31.8	*Gas Transmission and Distribution Piping Systems*
		ASTM A106	*Standard Specification for Seamless Carbon Steel Pipe for HighTemperature Service*
		ASTM A182	*Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for HighTemperature Service*
		ASTM A193	*Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications*
		ASTM A194	*Standard Specification for Carbon Steel, Alloy Steel, and Stainless Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both*
		ASTM A240	*Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications*
		ASTM A262	*Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels*
		ASTM A269	*Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service*
		ASTM A312	*Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes*
		ASTM A320	*Standard Specification for Alloy-Steel and Stainless Steel Bolting for Low-Temperature Service*
		ASTM A333	*Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service and Other Applications with Required Notch Toughness*
		ASTM A358	*Standard Specification for Electric-Fusion-Welded Austenitic Chromium-Nickel Stainless Steel Pipe for High-Temperature Service and General Applications*
		ASTM A370	*Standard Test Methods and Definitions for Mechanical Testing of Steel Products*
		ASTM A403	*Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings*
		ASTM A420	*Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-Temperature Service*
		ASTM A671	*Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures*
		ASTM A694	*Standard Specification for Carbon and Alloy Steel Forgings for Pipe Flanges, Fittings, Valves, and Parts for High-Pressure Transmission Service*
		ASTM A789	*Standard Specification for Seamless and Welded Ferritic/Austenitic Stainless Steel Tubing for General Service*
		ASTM A790	*Standard Specification for Seamless and Welded Ferritic/Austenitic Stainless Steel Pipe*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A815	*Standard Specification for Wrought Ferritic, Ferritic/Austenitic, and Martensitic Stainless Steel Piping Fittings*
		ASTM A833	*Standard Practice for Indentation Hardness of Metallic Materials by Comparison Hardness Testers*
		ASTM A923	*Standard Test Methods for Detecting Detrimental Intermetallic Phase in Duplex Austenitic/Ferritic Stainless Steels*
		ASTM A928	*Standard Specification for Ferritic/Austenitic (Duplex) Stainless Steel Pipe Electric Fusion Welded with Addition of Filler Metal*
		ASTM A962	*Standard Specification for Common Requirements for Bolting Intended for Use at Any Temperature from Cryogenic to the Creep Range*
		ASTM A988	*Standard Specification for Hot Isostatically-Pressed Stainless Steel Flanges, Fittings, Valves, and Parts for High Temperature Service*
		ASTM B363	*Standard Specification for Seamless and Welded Unalloyed Titanium and Titanium Alloy Welding Fittings*
		ASTM B366	*Standard Specification for Factory-Made Wrought Nickel and Nickel Alloy Fittings*
		ASTM B443	*Standard Specification for Nickel-Chromium-MolybdenumColumbium Alloy(UNS N06625) and Nickel-ChromiumMolybdenum-Silicon Alloy (UNS N06219) Plate, Sheet, and Strip*
		ASTM B444	*Standard Specification for Nickel-Chromium-MolybdenumColumbium Alloys (UNS N06625 and UNS N06852) and NickelChromium-Molybdenum-Silicon Alloy (UNS N06219) Pipe and Tub*
		ASTM B446	*Standard Specification for Nickel-Chromium-MolybdenumColumbium Alloy (UNS N06625), Nickel-Chromium-MolybdenumSilicon Alloy (UNS N06219), and Nickel-Chromium-MolybdenumTungsten Alloy (UNS N06650) Rod and Bar*
		ASTM B861	*Standard Specification for Titanium and Titanium Alloy Seamless Pipe*
		ASTM E10	*Standard Test Method for Brinell Hardness of Metallic Materials*
		ASTM E140	*Standard Hardness Conversion Tables for Metals Relationship Among Brinell Hardness, Vickers Hardness, Rockwell Hardness, Superficial Hardness, Knoop Hardness, Scleroscope Hardness, and Leeb Hardness*
		ASTM E18	*Standard Test Methods for Rockwell Hardness of Metallic Materials*
		ASTM E92	*Standard Test Method for Vickers Hardness of Metallic Materials*
		E709	*Standard Guide for Magnetic Particle Testing ASTM*
		ASTM G48	*Standard Test Methods for Pitting and Crevice Corrosion Resistance of Stainless Steels and Related Alloys by Use of Ferric Chloride Solution*
		BS EN 10204	*Metallic products. Types of inspection documents*
		DNVGL RP 0034	*Steel Forgings for Subsea Applications*
		DNV RP F112	*Design of Duplex Stainless Steel Subsea Equipment Exposed to Cathodic Protection" to avoid Hydrogen Induced Stress Cracking (HISC)*
		DNV OS F101	*Submarine Pipeline Systems*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 898-1	*Mechanical properties of fasteners made of carbon steel and alloy steel – Part 1: Bolts, screws and studs with specified property classes - Coarse thread and fine pitch thread*
		ISO 898-2	*Mechanical properties of fasteners made of carbon steel and alloy steel – Part 2: Nuts with specified property classes - Coarse thread and fine pitch thread*
		ISO 898-5	*Mechanical properties of fasteners made of carbon steel and alloy steel – Part 5: Set screws and similar threaded fasteners with specified hardness classes - Coarse thread and fine pitch thread*
		ISO 898-7	*Mechanical properties of fasteners – Part 7: Torsional test and minimum torques for bolts and screws with nominal diameters 1 mm to 10 mm*
		ISO 8249	*Welding – Determination of Ferrite Number (FN) in austenitic and duplex ferritic-austenitic Cr-Ni stainless steel weld metals*
		ISO 10423	*Petroleum and Natural Gas Industries – Drilling and Production Equipment – Wellhead and Christmas Tree Equipment*
		ISO 10474	*Steel and steel products – Inspection documents*
		ISO 13628-1	*Petroleum and natural gas industries — Design and operation of subsea production systems, Part 1: General requirements and recommendations*
		ISO 13628-4	*Petroleum and natural gas industries — Design and operation of subsea production systems, Part 4: Subsea Wellhead and Tree Equipment*
		ISO 13628-15	*Petroleum and natural gas industries — Design and operation of subsea production systems, Part 15: Subea Structures and Manifold*
		NACE MR0175/ ISO 15156 -1	*Petroleum and natural gas industries — Materials for use in H2Scontaining environments in oil and gas production, Part 1 : General principles for selection of cracking-resistant materials*
		NACE MR0175/ ISO 15156 -2	*Petroleum and natural gas industries — Materials for use in H2Scontaining environments in oil and gas production, Part 2: Cracking-resistant carbon and low-alloy steels, and the use of cast irons*
		NACE MR0175/ ISO 15156 -3	*Petroleum and natural gas industries — Materials for use in H2Scontaining environments in oil and gas production, Part 3: Cracking-resistant CRAs (corrosion resistant alloys) and other alloys*
		ISO 15590-1	*Petroleum and natural gas industries -- Induction bends, fittings and flanges for pipeline transportation systems -- Part 1: Induction bends*
		ISO 15590-2	*Petroleum and natural gas industries -- Induction bends, fittings and flanges for pipeline transportation systems -- Part 2: Fittings*
		ISO 15590-3	*Petroleum and natural gas industries -- Induction bends, fittings and flanges for pipeline transportation systems -- Part 3: Flanges*
		ISO 21457	*Petroleum, petrochemical and natural gas industries — Materials selection and corrosion control for oil and gas production systems*
		NORSOK M-001	*Materials Selection*

NO	URAIAN KEGIATAN	STANDAR	
3.	Identifikasi Material Positif (*Positive Material Identification*)	API RP 578:2ndEdition 2010	*API Material Verification Program for New and Existing Alloy Piping Systems*
4.	Pengelolaan Korosi	ASTM E797 / E797M-10	*Standard Practice for Measuring Thickness by Manual Ultrasonic Pulse Echo Contact Method.*
		ASTM G170 – 06	*Standard Guide for Evaluating and Qualifying Oilfield and Refinery Corrosion Inhibitors in the Laboratory (Reapproved 2012).*
		ANSI/ASME B31G	*Manual for Determining the Remaining Strength of Corroded Pipelines*
		API 570	*Piping Inspection Code: In-service Inspection, Rating, Repair, and Alteration of Piping Systems 3rd Edition November 2009*
		API 571	*Damage Mechanism Affecting Fixed Equipment in the Refining Industry, API Recommended Practice 571, Second Edition, April 2011*
		API 510	*Pressure Vessel Inspection Code: In-Service Inspection, Rating, Repair, and Alteration, 9th Edition 2006, Errata April 2009.*
		API 584	*Integrity Operating Window, API Recommended Practice, May 2014*
		NACE MR 0175/ISO 15156, 2009	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
5.	Catatan Penggunaan Peralatan	API RP 521	*Guide for pressure relief and depressurising systems*
		ASME Section VIII Div 1 & 2	*ASME Boiler and Pressure Vessel Code – Rules for construction of pressure vessels*
		ASME B16.5	*Pipe flanges and flanged fittings NPS 1/2 through NPS 24*
		ASME B16.47	*Large diameter steel flanges NPS 26 Through NPS 60*
		WRC 107	*Local stresses in spherical and cylindrical shells due to external loadings*
		WRC 297	*Local stresses in cylindrical shells due to external loadings on nozzles*
6.	Fraktur Rapuh (*Brittle Fracture*) Material Logam	ASME B31.3	*Process piping* *ASME Boiler and Pressure Vessel Code: Section II: Materials – Part C: Specifications for welding rods, electrodes and filler metals:*
		ASME Section II C-SFA 5.11	*Specification for nickel and nickel alloy welding for shielded metal arc welding*
		ASME Section II C-SFA 5.14	*Specification for nickel and nickel-alloy bare welding electrodes and rods*
		ASME Section VIII, Div. 1	*Rules for construction of pressure vessels*
		ASME Section VIII, Div. 2	*Alternative rules for construction of pressure vessels*
		ASTM A 923	*Standard test methods for detecting detrimental intermetallic phase in duplex austenitic/ferritic stainless steels*
		PD 5500:2009	*Specification for unfired fusion-welded pressure vessels*
		EN 13445-2:2009	*Unfired pressure vessels EN 13445 Part 2: Materials*
		ISO 13709:2009	*Centrifugal pumps for petroleum, petrochemical and natural gas industries*
		ISO 14172	*Welding consumables – Covered electrodes for manual metal arc welding of nickel and nickel alloys – Classification*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 14172	*Welding consumables – Covered electrodes for manual metal arc welding of nickel and nickel alloys – Classification*
		ISO 18274	*Welding consumables – Wire and strip electrodes, wires and rods for fusion welding of nickel and nickel alloys – Classification*
7.	Material dan Fabrikasi Bejana Tekan Baja Krom-Moledinum Bertekanan Dinding Berat untuk Layanan Hidrogen (*Hydrogen Service*) Temperatur Tinggi, dan Tekanan Tinggi	API Recommended Practice 582	*Welding Guidelines for the Chemical, Oil, and Gas Industries*
		API Recommended Practice 934-A	*Materials and Fabrication Requirements for 2 1/4Cr-1Mo, 2 1/4Cr1Mo-1/4V, 3Cr-1Mo, and 3Cr-1Mo-1/4V Steel Heavy Wall Pressure Vessels for High Temperature, High Pressure Hydrogen Service*
8.	Material untuk Komponen Perapian (*Furnace*) Temperatur Tinggi	API RP 530	*Recommended Practice for the Calculation of Heater Tube Thickness in Petroleum Refineries*
		ASME VIII Divisions 1 and 2.	*ASME Boiler and Pressure Vessel Code*
		ASTM A 182	*Forged or Rolled Alloy Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High Temperature Service.*
		ASTM A 193	*Alloy Steel and Stainless Steel Bolting Materials for High-Temperature Service*
		ASTM A 297	*Steel Castings, Iron-Chromium and Iron-ChromiumNickel, Heat-Resistant, for General Application*
		ASTM A 312	*Seamless and Welded Austenitic Stainless Steel Pipes.*
		ASTM A 351	*Castings, Austenitic, Austenitic Ferritic (Duplex), for Pressure Containing Parts.*
		ASTM A 403	*Wrought Austenitic Stainless Steel Pipe Fittings*
		ASTM A 447	*Steel Castings, Chromium-Nickel Iron Alloy (25-12 Class), for High Temperature Service*
		ASTM A 530	*General Requirements for Specialised Carbon and Alloy Steel Pipe*
		ASTM A 560	*Castings, Chromium-Nickel Alloy ASTM A 560*
		ASTM A 608	*Centrifugally Cast Iron-Chromium Nickel High Alloy Tubing for Pressure Application at High Temperatures*
		ASTM A 903	*Standard Specification for Steel Castings, Surface Acceptance Standards, Magnetic Particle and Liquid Penetrant Inspection*
		ASTM B 366	*Factory Made Wrought Nickel and Nickel Alloy Welding Fittings*
		ASTM B 407	*Nickel-Iron-Chromium Alloy Seamless Pipe and Tube*
		ASTM B 408	*Nickel-Iron-Chromium Alloy Rod and Bar*
		ASTM B 564	*Nickel Alloy Forgings*
		ASTM E 8	*Standard Test Methods for Tension Testing of Metallic Materials*
		ASTM E 165	*Standard Test Method for Procedure for Liquid Penetrant Inspection Method*
9.	Pelapisan (*Clad*) CRA atau Pipa Salur Baja (*Lined Steel Pipe*) *CRA Clad or Lined Steel Pipe (Amendments/ Supple*	ANSI/API Spec 5L, 45th Edition, February 2012	*Specification for Linepipe*
		API 5LC, August 2006	*Specification for Corrosion Resistant Alloy (CRA) Linepipe*
		ANSI/API Spec 5LD	*Specification for CRA Clad or Lined Steel Pipe*

NO	URAIAN KEGIATAN	STANDAR	
	ments to API Spec 5LD)	API RP 5L1	*Railroad Transportation of Line Pipe*
		API RP 5LW	*Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels*
		ASME V	*ASME Boiler and Pressure Vessel Code: Section V: Non-destructive examination*
		ASME VIII	*Section VIII: Rules for construction of pressure vessels*
		ASME IX	*Section IX: Qualification standard for welding and brazing procedures, welders, brazers, and welding and brazing operators*
		ASTM A 240	*Standard specification for heat-resisting chromium and chromiumnickel stainless plate, sheet, and strip for pressure vessels*
		ASTM A 264	*Standard specification for stainless chromium-nickel steel-clad plate, sheet, and strip*
		ASTM A 370	*Standard test methods and definitions for mechanical testing of steel products*
		ASTM A 751	*Standard Test methods, practices and terminology for chemical analysis of steel products*
		ASTM B 424	*Standard specification for ni-fe-cr-mo-cu alloy (UNS N08825 and UNS N08221) plate, sheet, and strip*
		ASTM B 443	*Standard specification for nickel-chromium-molybdenum-columbium alloy (UNS N06625) plate, sheet, and strip*
		ASTM B 499	*Standard test method for measurement of coating thickness by the magnetic method: nonmagnetic coatings on magnetic basis metals*
		ASTM E 112	*Standard test methods for determining average grain size*
		ASTM E 165	*Practice for liquid penetrant examination*
		ASTM E 570	*Standard practice for flux leakage examination of ferromagnetic steel tubular products*
		ASTM E 709	*Standard guide for magnetic particle examination*
		ISO 1027	*Radiographic Image Quality Indicator for Non-destructive Testing*
		ISO 2178	*Non-magnetic coatings on magnetic substrates; Measurement of coating thickness; Magnetic method*
		ISO 2566-1	*Steel, conversion of elongation values Part 1 Carbon and low alloy steels*
		ISO 9001	*Quality systems - Model for quality assurance in design/development, production, installation and servicing*
		ISO 9712	*Non-destructive testing; qualification and certification of Personne*
		ISO 10474	*Steel and steel products, inspection document*
		NACE MR 0175	*Petroleum and natural gas industries—Materials for use in H2Scontaining Environments in oil and gas production*
10.	Spesifikasi Pipa Salur CRA (*CRA Line Pipe*)	API 5LC	*Specification For Corrosion Resistant Alloy (CRA) Line Pipe*
		API RP 5L1	*Recommended Practice For Railroad Transportation Of Line Pipe*
		API RP 5LW	*Recommended Practice For Transportation Of Line Pipe On Barges And Marine Vessels.*
		ASTM A751	*Standard Test Methods, Practices, And Terminology For Chemical Analysis Of Steel Products*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A923	*Standard Test Methods For Detecting Detrimental Inter-Metallic Phase In Duplex Austenitic/Ferritic Stainless Steels*
		ASTM E340	*Standard Test Method For Macro-Etching Metals And Alloys*
		ASTM E353	*Standard Test Method For Chemical Analysis Of Stainless, Heat Resisting, Maraging And Other Similar Chromium–Nickel–Iron Alloys.*
		ASTM E562	*Standard Test Method For Determining Volume Fraction By Systematic Manual Point Count*
		ASTM E797	*Standard Practice For Measuring Thickness By Manual Ultrasonic Pulse-Echo Contact Method*
		ASTM E1245	*Standard Practice For Determining The Inclusion Or Second-Phase Constituent Content Of Metals By Automatic Image AnalysiS*
		ASTM G48	*Standard Test Methods For Pitting And Crevice Corrosion Resistance Of Stainless Steels And Related Alloys By Use Of Ferric Chloride Solution*
		NORSOK M601	*Welding And Inspection Of Piping*
		ISO 148-1	*Metallic Materials — Charpy Pendulum Impact Test - Part 1: Test Method*
		ISO 783	*Metallic Materials – Tensile Testing At Elevated Temperature*
		ISO 3183	*Petroleum And Natural Gas Industries - Steel Pipe For Pipeline Transportation Systems*
		ISO 6507-1	*Metallic Materials – Vickers Hardness Test- Part 1: Test Method*
		ISO 9001	*Quality Management Systems – Requirements*
		ISO 10005	*Quality Management - Guidelines For Quality Plans*
		ISO 10012	*Measurement Management Systems - Requirements For Measurement Processes And Measuring Equipment*
		ISO 10474	*Steel And Steel Products, Inspection Documents*
		ISO 10893-4	*Non-Destructive Testing Of Steel Tubes – Part 4: Liquid Penetrant Inspection Of Seamless And Welded Steel Tubes For The Detection Of Surface Imperfections*
		ISO 10893-6	*Non-Destructive Testing Of Steel Tubes – Part 6: Radiographic Testing Of The Weld Seam Of Welded Steel Tubes For The Detection Of Imperfections*
		ISO 10893-7	*Non-Destructive Testing Of Steel Tubes – Part 7: Digital Radiographic Testing Of The Weld Seam Of Welded Steel Tubes For The Detection Of Imperfections*
		ISO 10893-8	*Non-Destructive Testing Of Steel Tubes – Part 8: Automated Ultrasonic Testing Of Seamless And Welded Steel Tubes For The Detection Of Laminar Imperfections*
		ISO 10893-9	*Non-Destructive Testing Of Steel Tubes – Part 9: Automated Ultrasonic Testing For The Detection Of Laminar Imperfections In Strip/Plate Used For The Manufacture Of Welded Steel Tubes*
		ISO 1089310	*Non-Destructive Testing Of Steel Tubes – Part 10: Automated Full Peripheral Ultrasonic Testing Of Seamless And Welded (Except Submerged Arc Welded) Steel Tubes For The Detection Of Longitudinal And/Or Transverse Imperfections*
		ISO 1089311	*Non-Destructive Testing Of Steel Tubes – Part 11: Automated Ultrasonic Testing Of The Weld Seam*

NO	URAIAN KEGIATAN	STANDAR	
			Of Welded Steel Tubes For The Detection Of Longitudinal And/Or Transverse Imperfections
		ISO 1089312	*Non-Destructive Testing Of Steel Tubes – Part 12: Automated Full Peripheral Ultrasonic Thickness Testing Of Seamless And Welded (Except Submerged Arc-Welded) Steel Tubes*
		ISO 11126-7	*Preparation Of Steel Substrates Before Application Of Paints And Related Products – Specifications For Non-Metallic Blast-Cleaning Abrasives -Part 7: Fused Aluminum Oxide*
		ISO 1112610	*Preparation Of Steel Substrates Before Application Of Paints And Related Products – Specifications For Non-Metallic Blast-Cleaning Abrasives – Part 10: Almandite Garnet*
		ISO 11484	*Steel Products — Employer's Qualification System For NonDestructive Testing (NDT) Personnel*
		ISO 12094	*Steel -- Ultrasonic Testing For Steel Flat Products Of Thickness Equal To Or Greater Than 6 Mm*
		ISO 15156-1	*Petroleum And Natural Gas Industries - Materials For Use In H2S Containing Environments In Oil And Gas Production - Part 1: General Principles For Selection Of Cracking-Resistant Materials*
		ISO 15156-2	*Petroleum, Petrochemical And Natural Gas Industries - Materials For Use In H2S-Containing Environments In Oil And Gas Production Part 2: Cracking-Resistant Carbon And Low Alloy Steels, And The Use Of Cast Irons.*
		ISO 15607	*Specification And Qualification Of Welding Procedures For Metallic Materials – General Rules*
		ISO/IEC 17025	*General Requirements For The Competence Of Testing And Calibration Laboratories*
11.	Pipa Salur (*Line Pipe*) Baja Tahan Karat (*Stainless Steel*) Martensitic yang dapat di Las	API Spec 5LC	*Specification for CRA line pipe*
		API RP 5L1	*Recommended Practice for Railroad Transportation of Line Pipe*
		API RP 5LW	*Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels*
		ASME V	*Boiler and Pressure Vessel Code, Section V, Non-Destructive Examination*
		ASTM E 340	*Standard Test Method for Macro-Etching Metals and Alloys*
		ASTM E 797	*Standard Practice for Measuring Thickness by Manual Ultrasonic Pulse-Echo Contact Method*
		ISO 148-1	*Steel – Charpy Impact Test (V-notch)*
		ISO 3183-3	*Petroleum and natural gas industries – Steel pipe for pipelines – Technical Delivery Conditions – Part 3: Pipes of Requirement Class C*
		ISO 6507-1	*Metallic materials - Vickers hardness test - Part 1: Test method*
		ISO 9001	*Quality systems - Model for quality assurance in design, development, production, installation and servicing*
		ISO 10893-10	*Non-destructive testing of steel tubes - Part 10: Automated full peripheral ultrasonic testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of longitudinal and/or transverse imperfections*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 9712	*Non-destructive testing – Qualification and certification of NDT Personnel*
		ISO 10005	*Quality management - Guidelines for quality plans*
		ISO 10021-1	*Quality assurance requirements for measuring equipment – Part 1: Metrological confirmation system for measuring equipment*
		ISO 10893-8	*Non-destructive testing of steel tubes - Part 8: Automated ultrasonic testing of seamless and welded steel tubes for the detection of laminar imperfections*
		ISO 10474	*Steel and steel products – Inspection documents*
		ISO 10893-12	*Non-destructive testing of steel tubes - Part 12: Automated full peripheral ultrasonic thickness testing of seamless and welded (except submerged arc-welded) steel tubes*
		ISO 11484	*Steel tubes for pressure purposes - Qualification and certification of non-destructive testing (NDT) personnel*
		ISO 10893-4	*Non-destructive testing of steel tubes - Part 4: Liquid penetrant inspection of seamless and welded steel tubes for the detection of surface imperfections*
		ISO 10893-5	*Non-destructive testing of steel tubes - Part 5: Magnetic particle inspection of seamless and welded ferromagnetic steel tubes for the detection of surface imperfections*
		ISO 15653:2010	*Metallic materials – Method of test for the determination of quasistatic fracture toughness of weld*
12.	Spesifikasi Pipa Salur (*Linepipe*)	ASME IX	*ASME Boiler and Pressure Vessel Code, Welding and Brazing Qualifications*
		API 5L	*Specification for Line Pipe*
		ASTM A 578	*Standard Specification for Straight-Beam Ultrasonic Examination of Rolled Steel Plates for Special Applications*
		ASTM A 435	*Standard Specification for Straight-Beam Ultrasonic Examination of Steel Plates*
		ASTM E 3	*Standard guide for preparation of metallographic specimens*
		ASTM E 92	*Standard test method for Vicker's hardness of metallic materials*
		ASTM E 110	*Standard test method for indentation hardness of metallic materials by portable hardness testers*
		ASTM E 213	*Standard Practice for Ultrasonic Examination of Metal Pipe and Tubing*
		ASTM E 709	*Standard guide for magnetic particle inspection*
		ASTM E 797	*Standard practice for measuring thickness by manual Ultrasonic pulse-echo contact method*
		ASTM F 21	*Standard test method for hydrophobic surface films by the atomiser test*
		ASTM E 1806	*Standard Practice for Sampling Steel and Iron for Determination of Chemical Composition*
		API 5L 45th ed	*Petroleum and natural gas industries – Steel pipe for pipeline transportation systems*
		API 5T1-2010	*Standard on imperfection terminology*
		ISO 404	*Steel and steel products – General technical delivery requirements*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 6507-1	*Metallic materials – Vickers hardness test – Part 1 Test method*
		ISO 9001	*Quality management systems – Requirements*
		ISO 9303	*Seamless and welded (except submerged arc-welded) steel tubes for pressure purposes - Full peripheral ultrasonic testing for the detection of longitudinal imperfections*
		ISO 9305	*Seamless steel tubes for pressure purposes – Full peripheral ultrasonic testing for the detection of transverse imperfections*
		ISO 9606-1	*Approval testing of welders – Fusion welding – Part 1: Steels*
		ISO 9712	*Non-destructive testing – Qualification and certification of personnel*
		ISO 9764	*Electric resistance and induction welded steel tubes for pressure purposes – Ultrasonic testing of the weld seam for the detection of longitudinal imperfections*
		ISO 10005	*Quality management – Guidelines for quality plans*
		ISO 10012	*Measurement management systems – Requirements for measurement processes and measuring equipment*
		ISO 10124	*Seamless and welded (except submerged arc-welded) steel tubes for pressure purposes -- Ultrasonic testing for the detection of laminar imperfections*
		ISO 12094	*Welded steel tubes for pressure purposes – Ultrasonic testing for the detection of laminar imperfections in strips/plates used in the manufacture of welded tubes*
		ISO 13663	*Welded steel tubes for pressure purposes – Ultrasonic testing of the area adjacent to the weld seam for the detection of laminar imperfections*
		ISO 14284	*Steel and Iron – Sampling and preparation of samples for the determination of chemical composition*
		ISO 14731	*Welding coordination - Tasks and responsibilities*
		ISO 14732	*Welding personnel – Approval testing of welding operators for fusion welding and of resistance weld setters for fully mechanised and automatic welding of metallic materials*
		ISO 15609-1	*Specification and qualification of welding procedures for metallic materials – Welding procedure specification. Part 1 – Arc Welding*
		EN 876	*Destructive tests on welds in metallic materials – longitudinal tensile test on weld metal in fusion welded joints*
		ISO 15614-1	*Specification and qualification of welding procedures for metallic materials – Welding procedure test. Part 1 – Arc and gas welding of steels and arc welding of nickel and nickel alloys.*
		NACE MR0175	*Sulfide Stress Cracking Resistant Metallic Materials for Oilfield Equipment*
		NACE TM0177	*Laboratory Testing of Metals for Resistance to Sulfide Stress Cracking and Stress Corrosion Cracking in H2S Environments*
		NACE TM0284	*Evaluation of Pipeline and Pressure Vessel Steels for Resistance to Hydrogen-Induced Cracking*

NO	URAIAN KEGIATAN	STANDAR	
13.	Pipa Baja *Oil Country Tubular Goods* (OCTG)	ISO 11960:2014	*Petroleum and natural gas industries – Steel pipes for use as casing or tubing for wells*
14.	Buluh (*Tubes*) Tanpa Sambungan (*Seamless*) Campuran Tahan Karat (*Corrosion-Resistant Alloy*) untuk *Casing, Tubing* dan *Coupling Stock*	API Specification 5CRA	*Specification for Corrosion Resistant Alloy Seamless Tubes for Use as Casing, Tubing and Coupling Stock*
		ISO 13680:2010	*Petroleum and natural gas industries – Corrosion Resistant Alloy Seamless Tubes for Use as Casing,Tubing and Coupling Stock – Technical Delivery Conditions*
15.	Baja Struktur Fasilitas Lepas Pantai (*Offshore*)	EEMUA 158	*Construction Specification for Fixed Offshore Structures in the North Sea*
		EN 10025-2:2004	*Hot Rolled Products of Structural Steels – Part 2: Technical Delivery Conditions for Non-Alloy Structural Steels*
		EN 10025-3:2004	*Hot Rolled Products of Structural Steels – Part 3: Technical Delivery Conditions for Normalized / Normalized Rolled Weldable Fine Grain Structural Steels*
		EN 10025-4:2004	*Hot Rolled Products of Structural Steels – Part 4: Technical Delivery Conditions for Thermomechanical Rolled Weldable Fine Grain Structural Steels*
		EN 10225:2009	*Weldable Structural Steels for Fixed Offshore Structures – Technical Delivery Condition*
		EN 10210-1:2006	*Hot finished structural hollow sections of nonalloy and fine grain steels - Part 1: Technical delivery conditions*
		ISO 10474	*Steel and Steel Products - Inspection Documents*
		ISO 19902:2007	*Petroleum and Natural Gas Industries – Fixed Steel Offshore Structures*
		API Specification 2MT1	*Specification for Carbon Manganese Steel Plate with Improved Toughness for Offshore Structures*
		API Specification 2MT2	*Rolled Shapes With Improved Notch Toughness*
		API Specification 2H	*Specification for Carbon Manganese Steel Plate for Offshore Platform Tubular Joints*
		API Specification 2Y	*Specification for Steel Plates, Quench-and-Tempered, for Offshore Structures*
		API Specification 2W	*Specification for Steel Plates for Offshore Structural, Produced by Thermo-Mechanical Control Process (TMCP)*
		API Specification 5L	*Specification for Line Pipe*
		ASTM A36	*Standard Specification for Carbon Structural Steel*
		ASTM A53	*Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless*
		ASTM A106	*Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service*
		ASTM A131	*Standard Specification for Structural Steel for Ships*
		ASTM A500	*Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shape*
		ASTM A572	*Standard Specification for High-Strength Low Alloy Columbium-Vanadium Structural Steel*
		ASTM A633	*Standard Specification for Normalized High-Strength LowAlloy Structural Steel Plates*
		ASTM A709	*Standard Specification for Carbon and High-Strength LowAlloy Structural Steel Shapes,*

NO	URAIAN KEGIATAN	STANDAR	
			Plates and Bars and Quench-and Tempered Alloy Structural Steel Plates for Bridge
		ASTM A578	*Standard Specification for Straight-Beam Ultrasonic Examination of Plain and Clad Steel Plates for Special Applications*
		ASTM A898	*Standard Specification for Straight Beam Ultrasonic Examination of Rolled Steel Structural Shapes*
16.	Bejana Tekan di Darat (Onshore) dan Perpipaan pada Layanan H2S Basah (*Wet H2S Service*)	ASME VIII Div 1 & 2	*Rules for Construction of Pressure Vessels*
		ASME V	*Nondestructive Examination*
		ASME IX	*Welding, Brazing, and Fusing Qualifications: Qualification Standard for Welding, Brazing, and Fusing Procedures; Welders; Brazers; and Welding, Brazing and Fusing Operators*
		ASME B31.3	*Process Piping*
		ASTM A 578	*Standard test method for indentation hardness of metallic materials by portable hardness testers.*
		ASTM A 833	*Standard Practice for Indentation Hardness of Metallic Materials by Comparison Hardness Testers*
		ASTM E 112	*Standard Test Method for Determining Average Grain Size*
		ASTM A 770/A770M	*Standard Specification for Through-Thickness Tension Testing of Steel Plates for Special Applications*
		ASTM E 110	*Standard Test Method for Indentation Hardness of Metallic Materials by Portable Hardness Testers*
		AWS A 4.3	*AWS STANDARDS Standard Methods for Determination of the Diffusible Hydrogen Content of Martensitic, Bainitic, and Ferritic Steel Weld Metal Produced by Arc Welding*
		NACE MR0103	*Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments*
		NACE TM0284	*Evaluation of Pipeline and Pressure Vessel Steels for Resistance to Hydrogen Induced Cracking*
		NACE TM0177	*Laboratory Testing of Metals for Resistance to Sulfide Stress Cracking and Stress Corrosion Cracking in H2S Environments*
		NACE SP0472	*Methods and Controls to Prevent In-Service Environmental Cracking of Carbon Steel Weldments in Corrosive Petroleum Refining Environments*
		EN 1043-1	*Destructive tests on welds in metallic materials - Hardness testing - Part 1: Hardness test on arc welded joints*
		ISO 15156-2	*Petroleum and natural gas industries – Material for use in H2S containing environments in oil and gas production – Part 2: cracking-resistant carbon and low alloy steels, and the use of cast irons*
		ISO 3690	*Welding and allied processes - Determination of hydrogen content in arc weld metal*
17.	Campuran Basis Nikel 718 (Nickel Base Alloy 718) pada Peralatan Pengeboran dan Produksi Minyak dan Gas Bumi	API Standard 6A718	*Specification of Nickel Base Alloy 718 (UNS N07718) for Oil and Gas Drilling and Production Equipment*

NO	URAIAN KEGIATAN	STANDAR	
18.	Pipa *Spoolable Fibre-Reinforced Plastic*	ASME B31.3	*Process piping*
		API 15 HR (2010)	*Specification for high pressure fiberglass line pipe*
		API 17J (2014)	*Specification for Unbonded Flexible Pipe*
		API 17TR2 (2003)	*The Ageing of PA-11 in Flexible Pipes*
		API RP 15S (2013)	*Qualification of Spoolable Reinforced Plastic Line Pipe*
		ASTM C 581 (2008)	*Standard practice for determining chemical resistance of thermosetting resins used in glass-fiber reinforced structures intended for liquid service*
		ASTM D 1598-02 (2009)	*Test method for time-to-failure of plastic pipe under constant internal pressure*
		ASTM D 1599	*Test method for short-time hydraulic failure pressure of plastic pipe, tubing, and fittings*
		ASTM D 2105-01 (2014)	*Standard Test Method for Longitudinal Tensile Properties of "Fiberglass" (GlassFiber-Reinforced Thermosetting-Resin) Pipe and Tube*
		ASTM D 296904(2014)	*Standard Test Methods for Steel Tire Cords*
		ASTM D 356797(2011)	*Standard Practice for Determining Dimensions of Fiberglass (GlassFiber Reinforced Thermosetting Resin) Pipe and Fittings*
		ASTM D143482(2015)	*Standard Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting*
		ISO 1163-1:1995	*Plastics - Unplasticized Poly (Vinyl Chloride) (PVC-U) Moulding and Extrusion Materials - Part 1: Designation System and Basis for Specifications*
		ISO 1172:1996	*Textile Glass Reinforced Plastics - Determination of Loss on Ignition*
		ISO 1872-2:2007	*Plastics - Polyethylene (PE) Moulding and Extrusion Materials - Part 1: Designation System and Basis for Specifications*
		ISO 1874-2:2014	*Plastics - Polyamide (PA) Moulding and Extrusion Materials - Part 1: Designation*
		ISO 9000:2015	*Quality management and quality assurance standards*
		ISO 16474-1:2013	*Paints and varnishes - Exposure of coatings to artificial weathering - Exposure to fluorescent UV and water*
		ISO 15013:2007	*Extruded Sheets of Polypropylene (PP) - Requirements and Test Methods*
		ISO 15014:2007	*Extruded Sheets of Polyvinylidene Fluoride (PVDF) - Requirements and Test Methods*
19.	Pengelasan pada Industrik Kimia, Minyak, dan Gas	ANSI/AWS D10.8-96	*Recommended Practices for Welding of ChromiumMolybdenum Steel Piping and Tubing*
		ANSI/NACE MR0175/ISO 15156	*Petroleum and natural gas industries — Materials for use in H2Scontaining environments in oil and gas*
		API RP 582	*Welding Guidelines for the Chemical, Oil, and Gas Industries Second Edition, December 2009*
		API TR 938-B	*Use of 9Cr-1Mo-V (Grade 91) Steel in the Oil Refining Industry*
		API TR 938-C	*Use of Duplex Stainless Steels in the Oil Refining Industry*
		API 650	*Welded Tanks for Oil Storage*
		ASME/BPVC Sec II	*Material Specifications*

NO	URAIAN KEGIATAN	STANDAR	
		ASME/BPVC Sec V	*Nondestructive Examination*
		ASME/BPVC Sec VIII Div 1 and 2	*Rules for Construction of Pressure Vessels*
		ASME/BPVC Sec IX	*Qualification Standard For Welding and Brazing Procedures, Welders, Brazers, and Welding and Brazing Operators Welding and Brazing Qualifications*
		ASME B16.25	*Butt welding Ends*
		ASME B31.3	*Process Piping - Includes Interpretation 22*
		ASTM A182	*Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service*
		ASTM A203	*Standard Specification for Pressure Vessel Plates, Alloy Steel, Nickel*
		ASTM A 333	*Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service*
		ASTM A350	*Standard Specification for Carbon and Low-Alloy Steel Forgings, Requiring Notch Toughness Testing for Piping Components*
		ASTM A352	*Standard Specification for Steel Castings, Ferritic and Martensitic, for Pressure-Containing Parts, Suitable for LowTemperature Service*
		ASTM A380	*Standard Practice for Cleaning, Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems*
		ASTM A387	*Standard Specification for Pressure Vessel Plates, Alloy Steel, Chromium-Molybdenum*
		ASTM A420	*Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-Temperature Service*
		ASTM A691	*Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures*
		ASTM A703	*Standard Specification for Steel Castings, General Requirements, for Pressure - Containing Parts*
		ASTM A765	*Standard Specification for Carbon Steel and Low-Alloy Steel Pressure-Vessel-Component Forgings with Mandatory Toughness Requirements*
		ASTM A923	*Standard Test Methods for Detecting Detrimental Intermetallic Phase in Duplex Austenitic/Ferritic Stainless Steels*
		ASTM B337	*Standard Specification for Seamless and Welded Titanium and Titanium Alloy Pipe*
		ASTM B363	*Standard Specification for Seamless and Welded Unalloyed Titanium and Titanium Alloy Welding Fittings*
		ASTM B381	*Standard Specification for Titanium and Titanium Alloy Forgings*
		ASTM E92	*Standard Test Method for Vickers Hardness of Metallic Materials*
		ASTM E165	*Standard Practice for Liquid Penetrant Examination for General Industry*
		ASTM E562	*Standard Test Method for Determining Volume Fraction by Systematic Manual Point Count*
		ASTM G48	*Standard Test Methods for Pitting and Crevice Corrosion Resistance of Stainless Steels and Related Alloys by Use of Ferric Chloride Solution*

NO	URAIAN KEGIATAN	STANDAR	
		AWS 10.10/D10.10M	*Recommended Practices for Local Heating of Welds in Piping and Tubing*
		AWS A4.3	*Standard Methods for Determination of the Diffusible Hydrogen Content of Martensitic, Bainitic, and Ferritic Steel Weld Metal Produced by Arc Welding*
		AWS A5.01	*Procurement Guidelines for Consumables—Welding and Allied Processes—Flux and Gas Shielded Electrical Welding Processes*
		AWS A5.9	*Specification for Bare Stainless Steel Welding Electrodes and Rods*
		AWS 5.20	*Specification for Carbon Steel Electrodes for Flux Cored Arc Welding*
		AWS 5.32	*Welding Consumables—Gases and Gas Mixtures for Fusion Welding and Allied Processes*
		AWS D1.1	*Structural Welding Code - Steel*
		AWS D1.2	*Structural Welding Code— Aluminum*
		AWS D2.4	*Standard Welding Symbols*
		AWS D10.11	*Recommended Practices for Root Pass Welding without Backing*
		AWS D18.1	*Specification for Welding of Austenitic Stainless Steel Tube and Pipe Systems in Sanitary (Hygienic) Applications*
		SSPC SP-6	*White Metal Blast Cleaning SSPC-SP 5/NACE No. 1 Commercial Blast Cleaning*
		ANSI/NACE MR0175/ ISO 15156	*Petroleum and natural gas industries—Materials for use in H2S containing environments in oil and gas production (see ISO 15156-1)*
		NACE MR0103	*Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments - Item No. 21305*
		NACE SP0472	*Methods and Controls to Prevent In-Service Environmental Cracking of Carbon Steel Weldments in Corrosive Petroleum Refining Environments - Item No. 21006*
		EN ISO 3834	*Quality Requirements for Fusion Welding of Metallic Materials*
		EN ISO 9000	*Quality Management Systems - Fundamentals and Vocabulary*
		ISO 2553	*Welded, Brazed and Soldered Joints - Symbolic Representation on Drawings*
		ISO 3690	*Welding and Allied Processes - Determination of Hydrogen Content in Ferritic Steel Arc Weld Metal*
		ISO 9002	*Gas Welding Equipment Blowpipes for Gas Welding, Heating and Cutting Specifications and Tests ISO 5172 Quality Systems - Model for Quality Assurance in Production, Installation and Servicing*
		ISO 9606-3	*Approval Testing of Welders - Fusion Welding - Part 3: Copper and Copper Alloys*
		ISO 9606-5	*Approval Testing of Welders - Fusion Welding - Part 5: Titanium and Titanium Alloys, Zirconium and Zirconium Alloys*
		ISO 9712	*Non-Destructive Testing - Qualification and Certification of Personnel*
		ISO 10474	*Steel and Steel Products - Inspection Documents*
		ISO 15156-1	*Petroleum and natural gas industries — Materials for use in H2S containing environments in oil and gas production — Part 1: General principles for selection of cracking-*

NO	URAIAN KEGIATAN	STANDAR	
			resistant materials (see ANSI/NACE MR0175/ISO 15156)
		ISO 15614	*Specification and Qualification of Welding Procedures for Metallic Materials — Welding Procedure Test*
		ISO 15614-1	*Specification and Qualification of Welding Procedures for Metallic Materials — Welding Procedure Test — Part 1: Arc and Gas Welding of Steels and Arc Welding of Nickel and Nickel Alloys*
		ISO 15614-2	*Specification and Qualification of Welding Procedures for Metallic Materials - Welding Procedure Test - Part 2 : Arc Welding of Aluminium and Its Alloys*
		ISO 15614-5	*Specification and Qualification of Welding Procedures for Metallic Materials - Welding Procedure Tests - Part 5 : Arc Welding of Titanium, Zirconium and Their Alloys*
		ISO 15614-6	*Specification and Qualification of Welding Procedures for Metallic Materials - Welding Procedure Test - Part 6 : Arc and Gas Welding of Copper and Its Alloys*
		ISO 17025	*General Requirements for the Competence of Testing and Calibration Laboratories*
20.	Oksidasi Lasan Baja Tahan Karat	API 571	*Damage Mechanism Affecting Fixed Equipment in the Refining Industry*
21.	Pengelasan Jalur Pipa (*Pipelines*) dan Fasilitas Terkait	API 1104	*Welding of pipelines and related facilities*
		API 579-1/ ASME FFS-1	*Fitness For Service*
		ASTM E 92	*Standard test method for Vickers hardness of metallic materials*
		ASTM E 1815-06	*Standard test method for classification of film systems for Industrial radiography*
		ISO 148-1	*Metallic materials – Charpy pendulum impact test- Part 1: Test Method Petroleum and natural gas industries – Steel pipe for Pipeline transportation systems ISO 3183 Metallic materials – Vickers hardness test ISO 6507*
		ISO 3183	*Petroleum and natural gas industries – Steel pipe for Pipeline transportation systems*
		ISO 11484	*Steel tubes for pressure purposes – Qualification and Certification of non-destructive testing (NDT) personnel*
		ISO 11699-1	*Non-destructive testing – Industrial radiographic films - Part 1: Classification of film systems for industrial radiography*
		ISO 15156	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
		ISO 15590-1	*Petroleum and natural gas industries – Induction bends, Fittings and flanges for pipeline transportation systems – Part 1 : Induction bends*
		DNV-OS-F101	*Submarine pipeline system*
		DNV-RP-F118	*Pipe girth weld AUT system qualification and project specific procedure validation*
		BS 7910	*Guide to methods for assessing the acceptability of flaws in metallic structures*

NO	URAIAN KEGIATAN	STANDAR	
22.	Pengelasan Lapangan Jalur Pipa (*Pipelines*) Baja Tahan Karat *Duplex* dan *Super Duplex*	API 1104, Revision 2013	*Welding of pipelines and related facilities*
		API 5LC	*Specification for Corrosion Resistant Alloy (CRA) Line Pipe*
		ASME B31.4	*Pipeline transportation systems for liquid hydrocarbons and other liquids*
		ASME B31.8	*Gas transmission and distribution piping systems*
		ASTM A370	*Mechanical testing of steel products*
		ASTM D1193	*Standard specification for reagent water*
		ASTM E340	*Macroetching metals and alloys*
		ASTM E562	*Determining volume fraction by systematic manual point count*
		ASTM G1	*Standard practice for preparing, cleaning, and evaluating corrosion test specimens*
		ASTM G39	*Standard practice for preparation and use of bent- beam stress-corrosion test specimens*
		ASTM G48	*Standard test methods for pitting and crevice corrosion resistance of stainless steels and related alloys by use of ferric chloride solution*
		AWS A5.01	*Filler metal procurement guidelines*
		ASNT SNT-TC-1A	*ASNT Central Certification Program*
		ASTM E23	*Standard Test Methods for Notched Bar Impact Testing of Metallic Materials*
		ASTM E1654	*Standard Practice for Contact Ultrasonic Testing for Weldments*
		ASTM E165	*Standard Test Method for Liquid Penetrant Examination*
		ASTM E384	*Standard Test Method for Knoop and Vickers Hardness of Materials*
		ASTM E747	*Standard Practice for Design, Manufacturer and Material Group Classification of Wire Image Quality Indicators (IQI) Used for Radiography*
		AWS A3.0	*Standard Welding Terms and Definitions*
		BS 4515-2	*Welding of steel pipelines on land and offshore - Part 2: Duplex stainless steel pipelines*
		BSI BS 7910:2005	*Guide to Methods forAssessing th Acceptability of Flaws in Metallic Structures*
		AWS A5.01	*Filler metal procurement guidelines*
		ASNT SNT-TC-1A	*ASNT Central Certification Program*
		ASTM E23	*Standard Test Methods for Notched Bar Impact Testing of Metallic Materials*
		ASTM E1654	*Standard Practice for Contact Ultrasonic Testing for Weldments*
		ASTM E165	*Standard Test Method for Liquid Penetrant Examination*
		ASTM E384	*Standard Test Method for Knoop and Vickers Hardness of Materials*
		ASTM E747	*Standard Practice for Design, Manufacturer and Material Group Classification of Wire Image Quality Indicators (IQI) Used for Radiography*
		AWS A3.0	*Standard Welding Terms and Definitions*
		BS 4515-2	*Welding of steel pipelines on land and offshore - Part 2: Duplex stainless steel pipelines*
		BSI BS 7910:2005	*Guide to Methods forAssessing th Acceptability of Flaws in Metallic Structures*
		EN 970	*Non-destructive examination of fusion welds - Visual examination*

NO	URAIAN KEGIATAN	STANDAR	
		EN 1043-1	*Destructive tests on welds in metallic materials - Hardness testing - Part 1: Hardness test on arc welded joints*
		EN 10204	*Metallic Products – Type of Inspection Documents*
		ISO 17636	*Non-destructive testing of welds – Radiographic testing of fusion welded joints*
		ISO 3834-2	*Quality requirements for fusion welding of metallic materials – Part 2: Comprehensive quality requirements*
		ISO 5580	*Non-destructive testing – Industrial radiographic illuminators – Minimum requirements*
		ISO 6520	*Welding and allied processes – Classification of geometric imperfections in metallic materials*
		ISO 9001	*Quality management systems – Requirements*
		ISO 9712	*Non-destructive testing – Qualification and certification of personnel*
		ISO 10005	*Quality management – Guidelines for quality plans*
		ISO 10012	*Measurement management systems – Requirements for measurement processes and measuring equipment*
		ISO 10474	*Steel and steel products – Inspection documents*
		ISO 13623	*Petroleum and natural gas industries – Pipeline transportation system*
		ISO 13916	*Welding - Guidance on the measurement of preheating temperature, interpass temperature and preheat maintenance temperature*
		ISO 14175	*Welding consumables — Gases and gas mixtures for fusion welding and allied processes*
		ISO 19232-1	*Non-destructive testing – image quality of radiographs – Part 1: Image quality indicators (wire type)-Determination of image quality value*
		NACE MR017:2005	*Sulfide Stress Cracking Resistant Metallic Materials for Oil Field Equipment*
		NACE MR0103	*Materials resistant to sulfide stress cracking in corrosive petroleum refining environments*
		NACE MR0175/ISO 15156	*Petroleum and natural gas industries — Materials for use in H2S-containing environments in oil and gas production*
23.	Fabrikasi Baja Struktur	API 5L	*Specification for Line Pipe*
		API RP 2A	*Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms*
		API 2B	*Specification for Fabricated Structural Steel Pipe*
		API 2H	*Specification for Carbon Manganese Steel Plate For Offshore Platform Tubular Joints*
		AWS A.2.4	*Symbols for Welding and Non Destructive Testing*
		AWS A.3.0	*Welding Terms and Definitions*
		AWS A.5.1	*Specification for Carbon Steel Covered Arc Welding Electrodes*
		AWS A.5.5	*Specification for Low Alloy Steel Covered Arc Welding Electrodes*
		AWS A.5.12	*Specification Tungsten Arc Welding electrodes*
		AWS A.5.17	*Specification for Bare Carbon Steel Electrodes For Arc Welding Submerged*
		AWS A.5.18	*Specification for Carbon Steel Filler Metals for Gas Shielded Arc Welding*
		ASTM A6	*Specification for General Requirements for Delivery of Rolled Steel Plates, Shapes, Sheet Piles and Bars For Structural Use*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM A36	*Standard Test Methods and Definitions for Mechanical Testing of Steel Products*
		EN 10225	*Weldable structural steels for fixed offshore structures*
		EEMUA 158	*Construction Specification for Fixed Offshore Structures In the North Sea*
		ISO 19902	*Petroleum and Natural Gas Industries – Fixed Offshore Structures*
		ISO 10474	*Steel and Steel Product – Inspection Document*
		JIS G3106 SM41-B	*Rolled Steels for Welded Structures*
		STD SP0176	*Corrosion Control of Submerged Areas of Permanently Installed Steel Offshore Structures Associated with Petroleum Production*
24.	Pengelasan Jalur Pipa dan Fasilitas Terkait dengan Material Pelapisan (*Clad*) CRA atau Pipa Salur (*Line Pipe*) CRA	API STANDARD 1104	*Index to PTS Welding of Pipelines and Related Facilities*
		ASTM A262	*Standard Practices for Detecting Susceptibility to Intergranular Attach in Austenitic Stainless Steels*
		ASTM A370	*Standard Test Methods and Definitions for Mechanical Testing of Steel Products*
		ASTM E562	*Standard Test Method for Macroetching Metals and Alloys ASTM E340 Standard Test Method for Determining Volume Fraction by Systematic Manual Point Count*
		ASTM G28	*Intergranular Corrosion in Wrought, Nickel-Rich, ChromiumBearing Alloys*
		ISO 3834-2	*Quality Requirements for Fusion Welding of Metallic Materials- Part 2: Comprehensive Quality Requirements*
		ISO 5580	*Non-Destructive Testing -Industrial Radiographic Illuminators- Minimum Requirements*
		ISO 6520 -1	*Welding and Allied Processes- Classification of Geometric Imperfections in Meta/lie Materials- Part 1: Fusion Welding*
		ISO 7438	*Metallic Materials- Bend Test*
		ISO 9001	*Quality Management Systems- Requirements*
		ISO 9015-1	*Destructive Tests on Welds in Meta/lie Materials- Hardness Testing- Part 1 : Hardness Test on Arc Welded Joints*
		ISO 9712	*Non-Destructive Testing- Qualification and Certification of Personnel*
		ISO 10005	*Quality Management- Guidelines for Quality Plans*
		ISO 10012	*Measurement Management Systems- Requirements for Measurement Processes and Measuring Equipment*
		ISO 10474	*Steel and Steel Products -Inspection Documents*
		ISO 108934	*Non-Destructive Testing of Steel Tubes- Part 4: Liquid Penetrant Inspection of Seamless and Welded Steel Tubes for the Detection of Surface Imperfections -First Edition*
		ISO 13623	*Petroleum and Natural Gas Industries- Pipeline Transportation Systems*
		ISO 14175	*Welding Consumables- Gases and Gas Mixtures for Fusion Welding and Allied Processes*
		ISO 15156	*Petroleum and Natural Gas Industries- Materials for Use in H2SContaining Environments in Oil and Gas Production*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 176361	*Non-destructive testing of welds- Radiographic testing- Part 1: X- and gamma-ray techniques with film*
		ISO17637	*Non-Destructive Testing of Welds- Visual Testing of Fusion-Welded Joints*
25.	Insulasi Termal	API RP 571 2nd Ed. Apr. 2011	*Damage Mechanisms Affecting Fixed Equipment in the Refining Industry,*
		API RP 581 2nd Ed. Sept. 2008	*Risk-Based Inspection Technology*
		ASTM A240/A240M 2015	*Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications*
		ASTM C533	*Specification for Calcium Silicate Block and Pipe Thermal Insulation*
		ASTM C795	*Specification for Thermal Insulation for Use in Contact with Austenitic Stainless Steels*
		ISO 9001:2008	*Quality Management Systems - Requirements*
		EN 253:2009 +A1:2013 Apr. 2013	*District heating pipes. Preinsulated bonded pipe systems for directly buried hot water networks. Pipe assembly of steel service pipe, polyurethane thermal insulation and outer casing of polyethylene*
		EN 13941:2009+A1 July 2010	*Design and installation of preinsulated bonded pipe systems for district heating*
26.	Insulasi Akustik Perpipaan (*Piping*)	ISO 15665	*Acoustics – Acoustics insulation for pipes, valves and flanges*
27.	Lapisan Pelindung (*Protective Coatings*) dan Pelapisan (*Linings*)	BS 4800	*Schedule of Coating for Building Purposes*
		BS 5252	*Framework for Colour Co-ordination For Building Purposes*
		ISO 4628-3	*Assignment of Degree of Rusting*
		ISO 3549	*Zinc Dust Pigments for Coatings*
		ISO 4624	*Coatings and Varnishes – Pull-Off Test for Adhesion*
		ISO 8501	*Preparation of Steel Substrates before Application of Coatings and Related Products – Visual Assessment of Surface Cleanliness*
		ISO 8502	*Preparation of Steel Substrates before Application of Coatings and Related Products – Tests for the Assessment of surface Cleanliness*
		ISO 8503	*Preparation of Steel Substrates before Application of Coatings and Related Products – Surface Roughness Characteristics of Blast-Cleaned Steel Substrates*
		ISO 8504	*Preparation of Steel Substrates before Application of Coatings and Related Products – Surface Preparation Methods*
		ISO 14896	*Plastics – Polyurethane Raw Materials – Determination of Isocyanate Content*
		ISO 11124	*Preparation of Steel Substrates before Application of Coatings and Related Products – Specifications for Metallic Blast-Cleaning Abrasives*
		ISO 11125	*Preparation of Steel Substrates before Application of Coatings and Related Products – Test Methods for Metallic Blast-Cleaning Abrasives*
		ISO 11126	*Preparation of Steel Substrates before Application of Coatings and Related Products –*

NO	URAIAN KEGIATAN	STANDAR	
			Specifications for Non-Metallic Blast Cleaning Abrasives
		ISO 11127	*Preparation of Steel Substrates before Application of Coatings and Related Products – Test Methods for Non-Metallic Blast Cleaning Abrasives*
		ISO 19840	*Coatings and Varnishes – Corrosion Protection of Steel Structures by Protective Coating Systems – Measurement of, and Acceptance Criteria for, the Thickness of Dry Films on Rough Surfaces*
		ISO 9001	*Quality Management Systems – Requirements*
		ISO 2431	*Coatings and Varnishes – Determination of Flow Time by Use of Flow Cups*
		ISO 2884	*Coatings and Varnishes – Determination of Viscosity Using Rotary Viscometers*
		ISO 2811	*Coatings and Varnishes – Determination of Density*
		ISO 3251	*Coatings, Varnishes and Plastics – Determination of Non-Volatile Matter Content*
		ISO 14680	*Coatings and Varnishes – Determination of Pigment Content*
		ISO 3864	*Graphical Symbol – Safety Colours and Safety Signs*
		ASTM D5064	*Standard Practice for Conducting a Patch Test to Assess Coating Compatibility*
		ASTM D520	*Standard Specification for Zinc Dust Pigment*
		ASTM D2572	*Standard Test Method for Isocyanate Groups in Urethane Materials or Prepolymers*
		ASTM D4417	*Standard Test Methods for Field Measurement of Surface Profile of Blast Cleaned Steel*
		ASTM 4285	*Standard Test Method for Indicating Oil or Water in Compressed Air*
		ASTM B117	*Standard Practice for Operating Salt Spray (Fog) Apparatus*
		ASTM D1654	*Standard Test Method for Evaluation of Coated or Coated Specimens Subjected to Corrosive Environments*
		ASTM D4541	*Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers*
		ASTM D3359	*Standard Test Methods for Measuring Adhesion by Tape Test*
		ASTM D2794	*Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)*
		ASTM D4060	*Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser*
		ASTM G8	*Standard Test Methods for Cathodic Disbonding of Pipeline Coatings*
		ASTM G155	*Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials*
		ASTM D2485	*Standard Test Methods for Evaluating Coatings for High Temperature Service*
		ASTM D5894	*Standard Practice for Cyclic Salt Fog/UV Exposure of Coated Metal.(Alternating Exposures in a Fog/Dry Cabinet and a UV Condensation Cabinet)*
		ASTM D523	*Standard Test Method for Specular Gloss*
		ASTM D4287	*Standard Test Method for High-Shear Viscosity Using a Cone/Plate Viscometer*
		ASTM D5125	*Standard Test Method for Viscosity of Coatings and Related Materials by ISO Flow Cups*

NO	URAIAN KEGIATAN	STANDAR	
		ASTM D562	*Standard Test Method for Consistency of Coatings Measuring Krebs Unit(KU) Viscosity Using a Stormer-Type Viscometer*
		ASTM D7588	*Standard Guide for FT-IR Fingerprinting of a Non-Aqueous Liquid Coating as Supplied in the manufacturer's Container*
		ASTM D1653	*Standard Test Methods for Water Vapour Transmission of Organic Coating Films*
		ASTM D1654	*Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments*
		ASTM D2583	*Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor*
		ASTM D870	*Standard Practice for Testing Water Resistance of Coatings Using Water Immersion*
		ASTM D2370	*Standard Test Method for Tensile Properties of Organic Coatings*
		ASTM E337	*Standard Test Method for Measuring Humidity with a Psychrometer (the Measurement of Wet- and Dry-Bulb Temperatures)*
		ASTM D5162	*Standard Practice for Discontinuity (Holiday) Testing of Nonconductive Protective Coating on Metallic Substrates*
		NACE 6A 192	*Dehumidity and Temperature Control During Surface Preparation, Application, and Curing for Coatings/Linings of Steel Tanks, Vessels, and Other Enclosed Spaces*
		NACE RP 0188	*Discontinuity (Holiday) Testing of New Protective Coatings on Conductive Substrates*
		ANSI A13.1	*Scheme for Identification of Piping System*
28.	Pelapisan (*Lining*) Semen Bagian Dalam Pipa Baja Karbon	ASME IX	*ASME Boiler and Pressure Vessel Code Section IX: Qualification standard for welding and brazing procedures, welders, brazers, and welding and brazing operators*
		ASME B16.25	*Buttwelding ends*
		ASME B16.47	*Large Diameter Steel Flanges*
		ASME B16.5	*Pipe flanges and flanged fittings, NPS ½ through NPS 24*
		ASME B16.9	*Factor-made wrought steel butt welding fittings*
		ASME B31.3	*Process Piping*
		ISO 4179	*Ductile Iron pipes and fittings for pressure and non-pressure pipelines – Cement mortar lining*
		ISO 16132	*Ductile iron pipes and fittings - Seal coats for cement mortar linings*
29.	Lapisan Semprot Termal (*Thermal Spray Coatings*) Alumunium dan Campuran (*Alloy*) 85/15 Seng/Alumunium	ISO 209	*Aluminium and aluminium alloys – Chemical composition*
		ISO 2808	*Paints and Varnishes – Determination of Film Thickness*
		ISO 4624	*Paints and varnishes – Pull-off test for adhesion*
		ISO 8501-1	*Preparation of steel substrates before application of paints and related products – Visual assessment of surface cleanliness*
		ISO 8502-3	*Preparation of steel substrates before application of paints and related products - Tests for the assessment of surface cleanliness - Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method)*
		ISO 8502-4	*Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness – Part 4:*

NO	URAIAN KEGIATAN	STANDAR	
			Guidance on the estimation of the probability of condensation prior to paint application
		ISO 8502-6	*Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness – Part 6: Extraction of soluble contaminants for analysis – The Bresle method*
		ISO 8502-9	*Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness – Part 9: Field method for the conductometric determination of water-soluble salts*
		ISO 8503-5	*Preparation of steel substrates before application of paints and related products - Surface roughness characteristics of blast-cleaning steel substrates - Part 5: Replica tape method for the determination of the surface profile*
		ISO 8504-2	*Preparation of steel substrates before application of paints and related products – Surface preparation methods – Part 2: Abrasive blast-cleaning*
		ISO 9001	*Quality management systems – Requirements*
		ISO 11124-2	*Preparation of steel substrates before application of paints and related products - Specifications for metallic blast-cleaning abrasives - Part 2: Chilled-iron grit*
		ISO 11124-3	*Preparation of steel substrates before application of paints and related products - Specifications for metallic blast-cleaning abrasives - Part 3: High-carbon cast-steel shot and grit*
		ISO 11126-4	*Preparation of steel substrates before application of paints and related products - Specifications for Non- metallic blast-cleaning abrasives - Part 4: Coal furnace slag*
		ISO 11126-7	*Preparation of steel substrates before application of paints and related products - Specifications for nonmetallic blast-cleaning abrasives - Part 7: Fused aluminium oxide*
		ISO 11126-9	*Preparation of steel substrates before application of paints and related products - Specifications for nonmetallic blast-cleaning abrasives - Part 9: Staurolite*
		ISO 11126-10	*Preparation of steel substrates before application of paints and related products - Specifications for nonmetallic blast-cleaning abrasives - Part 10: Almandite garnet*
		ISO 11127	*Preparation of steel substrates before application of paints and related products Test methods for non-metallic blast-cleaning abrasives*
		ISO 14877	*Protective clothing for abrasive blasting operations using granular abrasives*
		ISO 14918	*Thermal spraying – Approval testing of thermal sprayers*
		ISO 14919	*Thermal spraying – Wires, rods and cords for flame and arc spraying – classsification – Technical supply conditions.*
		ISO 14922-1	*Thermal Spraying – Quality Requirements of Thermally Sprayed Structures – Part 1: Guidance for Selection and Use*
		ISO 14922-2	*Thermal Spraying – Quality Requirements of Thermally Sprayed Structures – Part 2: Comprehensive Quality Requirements*

NO	URAIAN KEGIATAN	STANDAR	
		ISO/IEC 17024	*Conformity assessment – General requirements for bodies operating certification of persons*
30.	Pelapisan Nikel *Electroless*	ASTM B 183-79	*Standard practice for preparation of low-carbon steel for electroplating*
		ASTM B 254-92	*Standard practice for preparation of and electroplating on stainless steel*
		ASTM B 322-99	*Standard guide for cleaning metals prior to electroplating*
		ASTM B 602-88	*Standard test method for attribute sampling of metallic and inorganic coatings*
		ASTM B 733-14	*Standard specification for autocatalytic (electroless) nickel phosphorus coatings on metal*
		ASTM B117-11	*Standard Practice for Operating Salt Spray*
		ISO 4572 2nd Edition, 15/05/2003	*Steel and steel products – Inspection document ISO 10474 2013 Metallic Coatings – Autocatalytic (Electroless) NickelPhosporus Alloy Coatings – Specification and Test Methods*
		ISO 37	*Rubber, vulcanised or thermoplastic - determination of tensile stress-strain properties*
		ISO 1629	*Rubbers and lattices - Nomenclature*
		ISO 8501-1	*Preparation of steel substrate before application of paint related products*
		ISO 10474	*Steel and steel products - Inspection documents*
		ISO/TR 7620	*Rubber materials - Chemical resistance*
		ASTM D 412	*Standard test methods for vulcanised rubber and thermoplastic elastomers - Tension*
		ASTM D 429	*Rubber property - Adhesion to rigid substrates*
		ASTM D 2240	*Rubber property - Durometer hardness*
		ASTM D 3677	*Rubber - Identification by infrared spectrophotometry*
		ASTM D 5162	*Standard practice for discontinuity (Holiday) testing of nonconductive protective coating on metallic substrates*
		ISO 37	*Rubber, vulcanised or thermoplastic - determination of tensile stress-strain properties*
		ISO 1629	*Rubbers and lattices - Nomenclature*
		ISO 8501-1	*Preparation of steel substrate before application of paint related products*
		ISO 10474	*Steel and steel products - Inspection documents*
		ISO/TR 7620	*Rubber materials - Chemical resistance*
		ASTM D 412	*Standard test methods for vulcanised rubber and thermoplastic elastomers - Tension*
		ASTM D 429	*Rubber property - Adhesion to rigid substrates*
		ASTM D 2240	*Rubber property - Durometer hardness*
		ASTM D 3677	*Rubber - Identification by infrared spectrophotometry*
		ASTM D 5162	*Standard practice for discontinuity (Holiday) testing of non conductive protective coating on metallic substrates*
31.	Pelapisan Baja dengan Gelas (*Glass-Lined Steel*) pada Peralatan dan Perpipaan (*Piping*)	ASTM D5445 REV A 2011	*Standard Practice for Pictorial Markings for Handling of Goods*
		ASTM B499 2009 (R2014)	*Standard Test Method for Measurement of Coating Thicknesses by the Magnetic Method: Nonmagnetic Coatings on Magnetic Basis Metal*

NO	URAIAN KEGIATAN	STANDAR	
		ASME VIII Div. 1 (2010 Edition)	*ASME Boiler and Pressure Vessel Code Section VIII Dision 1: Rules of Constrcution of Pressure Vessels, Mandatory Appendix 27*
		ISO/FDIS 2746: 2015(E)	*Vitreous And Porcelain Enamels: High Voltage Test*
		ISO 8501-1 (1998)	*Preparation Of Steel Substates Before Application Of Paints And Related Products - Visual Assessment Of Surface Cleanliness*
		ISO 28706-2: 1st Edition (2008)	*Vitreous And Porcelain Enamels — Determination Of Resistance To Chemical Corrosion — Part 2: Determination Of Resistance To Chemical Corrosion By Boiling Acids, Boiling Neutral Liquids And/Or Their Vapours*
		ISO 28706-4: 1st Edition (2008)	*Vitreous And Porcelain Enamels — Determination Of Resistance To Chemical Corrosion — Part 4: Determination Of Resistance To Chemical Corrosion By Alkaline Liquids Using A Cylindrical Vessel*
		ISO 13807: 1st Edition (1999)	*Vitreous And Porcelainenamels – Determination of Crack Formation Temperature In The Thermal Shock Testing Of Enamels For The Chemical Industry*
		ISO 13000-1: 2nd Edition (2005)	*Plastics — Polytetrafluoroethylene (PTFE) Semi-Finished Products — Part 1: Requirements And Designation*
		ISO 13000-2: 2nd Edition (2005)	*Plastics — Polytetrafluoroethylene (PTFE) Semi-Finished Products — Part 2: Preparation Of Test Specimens And Determination Of Properties*
		ISO 2746: 2nd Edition (1998)	*Vitreous And Porcelain Enamels — Enamelled Articles For Service Under Highly Corrosive Conditions — High Voltage Test*
		ISO 2178: 2nd Edition (1982)	*Non-Magnetic Coatings On Magnetic Substrates – Measurement Of Coating Thickness – Magnetic Method*
		ISO 780: 4th Edition (1997)	*Packaging-Pictorial Marking For Handling Goods*
		ISO 28721-3: 1st Edition (2008)	*Vitreous And Porcelain Enamels — Glass-Lined Apparatus For Process Plants — Part 3: Thermal Shock Resistance*
32.	Perlindungan Katodik Pada Struktur Baja Lepas Pantai (*Offshore*) Permanen Baru *Cathodic Protection for New Fixed Offshore Steel Structures (Amendments/Supplements to DNV-RP-B401)*	ASTM D 1141	*Substitute Ocean Water*
		DNV-RP-B401	*Cathodic Protection Design*
		API RP2A-LRFD	*Planning, Designing and Constructing Fixed Offshore Platforms - Load and Resistance Factor Design*
		API RP2A-WSD	*Recommended Practice for Planning, Design and Constructing Fixed Offshore Platforms - Working Stress Design*
		NACE SP0387 - 2014	*Metallurgical and Inspection Requirements for Cast Galvanic Anodes for Offshore Applications*
		NACE TM0190-2006	*Standard Test Method - Impressed Current Test Method for Laboratory Testing of Aluminum Anodes*
		DNV RP B401 (2010)	*Recommended Practice - Cathodic Protection Design*
		ISO 15589-2	*Petroleum, petrochemical and natural gas industries — Cathodic protection of pipeline transportation systems — Part 2: Offshore pipelines6-2*
		BV NI 423 DT R01 E (2006)	*Corrosion Protection of Steel Offshore Units and Installations*

NO	URAIAN KEGIATAN	STANDAR	
33.	Pemeliharaan Fasilitas Produksi Hulu dan Fasilitas Proses	ISO 10474	*Steel and Steel Products – Inspection Documents*
		ISO 9001	*Quality Management Systems - Requirements*
		NACE MTI 34	*Guidelines for the Mothballing of Process Plants*
34.	Evaluasi Jalur Pipa (*Pipeline*) dan Bejana Tekan Baja terhadap Ketahanan Keretakan *Hydrogen Induced*	NACE TM0284, October 2011	*Standard Test Method - Evaluation Of Pipeline And Pressure Vessel Steels For Resistance To Hydrogen-Induced Cracking*
		ANSI/ NACE MR0175/ ISO15156 - 2:2009	*Petroleum and Natural Gas Industries - Materials For Use In H2S-Containing Environments In Oil And Gas Production - Part 2: Cracking-Resistant Carbon And Low Alloy Steels, and The Use Of Cast Irons*
		ISO 10474	*Steel and Steel Products - Inspection Documents*
35.	Pengujian Radiografi	ASTM E95	*Standard guide for radiographic examination*
		ASTM E1815	*Standard test method for classification of film systems for industrial radiography*
		ANSI/ASME V	*Non-destructive examination.*
		SNT-TC-1A	*The American Society for Nondestructive Testing (ASNT) Recommended Practice*
		DIN 54109 Part 1	*Non-destructive testing; image quality of radiographs; concepts, image quality indicators, determination of image quality value.*
		BS EN 1435	*Non-destructive of welds*
		ISO 5579	*Non-destructive testing-Radiographic testing of metallic materials using film and X- or gamma rays*
36.	Pemeriksaan Ultrasonik	ASME SEC V	*Non Destructive Testing*
		BS4331 Part 3	*Methods for assessing the performance characteristics of ultrasonic flaw detection equipment. Electrical performance*
		ISO/MS 17020	*Conformity assessment - Requirements for the operation of various types of bodies performing inspection*
37.	Inspeksi *Oil Country Tubular Goods (OCTG)*	ISO 15463:2003	*Petroleum and natural gas industries – Field Inspection of new casing, tubing and plain-end drill pipe*
		ISO15463:2003/ Cor.1:2009	*Petroleum and natural gas industries – Field Inspection of new casing, tubing and plain-end drill pipe (Technical Corrigendum 1)*
38.	Panduan Inspeksi (*Inspection Manual*) Peron (*Platform*) Lepas Pantai (*Offshore*) dan Peralatan Terkait	ASME VIII DIV 1	*Boiler and Pressure Vessel Code*
		ANSI/ASME B31.3	*Chemical Plant and Petroleum Refinery Piping*
		API RP 2A	*Recommended Practice for Planning. Designing and Constructing of Fixed Offshore Plattorms*
		API RP 2SIM	*Recommended Practice for Structural Integrity Management of Fixed*
		API 2C	*Specification for Offshore Cranes*
		API RP 2D	*Recommended Practice for Operation and Maintenance of Offshore Cranes*

NO	URAIAN KEGIATAN	STANDAR	
		API 510	*Pressure Vessel Inspection Code: In-Service Inspection, Rating, Repair and Alteration*
		API RP 521	*Guide Pressure Relief and Depressuring Systems*
		API 570	*Piping Inspection Code*
		API RP 572	*Inspection of Pressure Vessel (Towers, Drums, Reactors, Heat Exchanger, and Condensers)"*
		API RP 576	*Inspection of Pressure Relieving Devices*
		API 580	*Risk Based Inspection*
		API 6A	*Specification for wellhead equipment*
		API 14D	*Specification for wellhead surface safety valves and underwater safety valves for offshore service*
		BS 5500	*Unfired Fusion Welded Pressure Vessels*
		ISO 19902:2007	*Petroleum and natural gas industries - Fixed steel offshore structures*
		NACE RP 0775-87	*Preparation and Installation of Corrosion Coupons and Interpretation of Test Data in Oilfield Operations*

H. Standar Rekayasa Proses dan Operasi

NO	URAIAN KEGIATAN	STANDAR	
1	Besaran dan Unit Standar Internasional	ISO 5024	*Petroleum liquids and liquefied petroleum gases - Measurement – Standard reference conditions*
		ISO 13443	*Natural gas - Standard reference conditions*
		ISO 80000-1	*General (Part 1)*
		ISO 80000-2	*Mathematical signs and symbols to be used in the natural sciences and technology (Part 2)*
		ISO 80000-3	*Space and time (Part 3)*
		ISO 80000-4	*Mechanics (Part 4)*
		ISO 80000-5	*Thermodynamics (Part 5)*
		ISO 80000-6	*Electromagnetism (Part 6)*
		ISO 80000-7	*Light (Part 7)*
		ISO 80000-8	*Acoustics (Part 8)*
		ISO 80000-9	*Physical Chemistry and Molecular Physics (Part 9)*
		ISO 80000-10	*Atomic and Nuclear Physics (Part 10)*
		ISO 80000-11	*Characteristic Numbers (Part 11)*
		ISO 80000-12	*Solid State Physics (Part 12)*
2	Bilangan Fouling (*Fouling Factor*) pada Peralatan Penukar Panas	TEMA,9th Edition	*INTERNATIONAL STANDARDS Standards of the Tubular Heat Exchanger Manufacturers Association (TEMA)*
3	Injeksi *Water Wash* Pada Unit *Hydroprocessing* untuk mitigasi Korosi dan *Fouling*	API Recommended Practice 571	*Damage Mechanisms Affecting Fixed Equipment In The Refining Industry*
		API Recommended Practice 932 B	*Design, Materials, Fabrication, Operation And Inspection Guidelines For Corrosion Control In Hydroprocessing Reactor Effluent Air Cooler (Reac) Systems*

NO	URAIAN KEGIATAN	STANDAR	
		API Recommended Practice 581	*Risk Based Inspection Technology*
4	Sistem Bahan Bakar	ASTM D4870	*Standard Test Method for Determination of Total Sediment in Residual Fuels – Accelerated (Chemical) Ageing.*
		IP 375 (part of ISO 10307)	*Petroleum Products – Total sediment in residual fuel oils.*
5	Pelat *Corrugated Interceptor* (CPI)	API 421	*Design and Operation of Oil Water Separators*
		API 4602	*Minimization, Handling, Treatment, and Disposal of Petroleum Products Terminal Wastewaters*
		BS EN 858-1	*Separator systems for light liquids*
6	Sistem Bahan Bakar Jenis Diesel	API Std 676	*Positive Displacement Pumps - Rotary*
		ASTM D 975	*Standard Classification Of Diesel Fuel Oils – Rev. 2011*
		ASTM D 2880	*Standard specification for Gas Turbine Fuel Oils – Rev. 2010*
7	Sistem Instrumentasi Udara	ASME B31.3	*Process piping*
		ISA 7.0.01	*Quality standard for instrument air*
		BS EN 12021:1999	*Respiratory protective devices. Compressed air for breathing apparatus*
		IEC 60534-4	*Industrial process control valves - Part 4: Inspection and routine testing*
		IEC 60654	*Operating conditions for industrial-process measurement and control equipment*
8	Pemasokan Nitrogen/Oksigen dan Sistem Distribusi	Code NFPA 55	*Process Piping ASME B31.3 Compressed Gas & Cryogenic Fluids*
9	Uap, Air Masukan Boiler, dan Sistem Kondensasi	ASME CRTD 34	*Consensus on Operating Practices for Control of Feedwater and Boiler Water Chemistry in Modern Industrial Boilers*
		ASTM D1066	*Standard Method for Sampling Steam*
		ANSI/ASME PTC 39.1	*Steam Trap Performance Test Codes*
		ANSI/FCI 69.1	*Pressure Rating Standards for Steam Traps*
		ANCI/FCI 85.1	*Standards for Production and Performance Test for Steam Traps*
		NACE TM0199	*Standard Test Method for Measuring Deposit Mass Loading ("Deposit Weight Density") Values for Boiler Tubes by the Glass- Bead-Blasting Technique*
		IEC 60534	*Industrial Process Control Valve*
		VGB-S-010-T-00;2011-12.EN	*Feed Water, Boiler Water and Steam Quality for Power Plants / Industrial Plants*
		VGB-R 513e	*Internal Cleaning of Water-Tube Steam Generating Plants and Associated Pipework*
		EN 1295212:2003	*Water-Tube Boilers and Auxiliary Installations - Part 12: Requirements for Boiler Feedwater and Boiler Water Quality*
		EN 1295310:2003	*Shell boilers - Requirements for Feedwater and Boiler Water Quality*
		JIS B 8223: 2003	*Water Conditioning for Boiler Feedwater and Boiler Water*
10	Temperatur, Tekanan, dan Tingkat Toksik Kondisi Desain	API RP 520	*Sizing, selection and installation of pressure-relieving devices in refineries, Part I and Part II*
		API RP 521	*Guide for pressure-relieving and depressuring systems*
		ASME B31.1	*Power piping*
		ASME B31.3	*Process piping*

NO	URAIAN KEGIATAN	STANDAR	
		ASME B31.4	*Pipeline transportation systems for liquid hydrocarbon and other liquids*
		ASME B31.8	*Gas transmission and distribution piping system*
		ASME VIII	*ASME Boiler and Pressure Vessel Code Section VIII : Pressure Vessels*
		ISO 23251	*Petroleum, petrochemical and natural gas industries – Pressure-relieving and depressuring systems*
11	Sistem *Liquified Petroleum Gas (LPG)*	API Spec. 6FA	*Specification for fire test for valves*
		ASTM D 1265	*Standard practice for sampling Liquefied Petroleum (LP) gases (manual method)*
		ASTM D 1657	*Standard Test Method for Density of Relative Density of Light Hydrocarbons by Pressure Hydrometer.*
		ASTM D 1835	*Standard specifications for Liquefied Petroleum (LP) gases*
		ASTM D 2163	*Standard Test Method for Determination of Hydrocarbons in Liquefied Petroluem (LP) Gases and Propane/Propene Mixtures by Gas Chromatography*
		NFPA 58	*Liquefied Petroleum Gas Code*
		BS 6755	*Testing of valves Part 2: Specification for fire type-testing requirements*
		IP 473	*Determination of the composition of liquefied petroleum gases - Gas chromatography method*
		EN 589	*Automotive fuels - Requirements and test methods*
		ISO 9162	*Petroleum Products - Fuels (class F) - Liquefied petroleum gases – Specifications*
12	Sistem Injeksi Kimia	API RP 14C	*Recommended Practice for Analysis, Design, Installation, and Testing of Basic Surface Safety Systems for Offshore Production Platforms*
		API Spec 17F	*Specification for Subsea Production Control Systems*
		API RP 520	*Sizing, Selection and Installation of Pressure-relieving Devices in Refineries*
		AS 4059	*Aerospace Fluid Power – Cleanliness Classification for Hydraulic Fluids*
		ISO 4406	*Hydraulic Fluid Power – Fluids – Method for Coding the Level of Contamination by Solid Particles*
		ISO 11014-1	*Safety Data Sheet for Chemical Products – Part 1: Contents and Order of Sections*
		ISO 13628-6:2006	*Petroleum and Natural Gas Industries – Design and Operation of Subsea Production Systems – Part 6: Subsea Production Control Systems*
		ISO 23251	*Petroleum, Petrochemical and Natural Gas Industries – Pressure-relieving and Depressuring Systems*
13	Desain Pelepas Tekanan, *Flare*, dan Sistem *Vent*	API RP 520 Part I	*Part I: Sizing and selection*
		API RP 520 Part II	*Part II: Installation*
		API Std 521	*Guide for pressure-relieving and depressuring systems*
		API Std 537	*Flare details for general refinery and petrochemical service*
		API 602	*Steel gate, globe and check valves for sizes DN 100 and smaller for the petroleum and natural gas industries*
		API Std 2000	*Venting atmospheric and low pressure storage tanks (non-refrigerated and refrigerated)*

NO	URAIAN KEGIATAN	STANDAR	
		API Pub 2510A	*Fire-protection considerations for the design and operation of liquefied petroleum gas (LPG) storage facilities*
		ASME B31.3	*Process piping*
		ASME B16.34	*Valves – Flanged, threaded, and welding end*
		ASME VIII	*ASME Boiler and Pressure Code – Section VIII: Rules for construction of pressure vessels*
		ASME STS-1	*Steel Stacks*
		BS 2742	*Notes on the use of the Ringelmann and miniature smoke charts*
		ISO 15761	*Steel gate, globe and check valves for sizes DN 100 and smaller, for the petroleum and natural gas industries*
		ISO 23251	*Petroleum, petrochemical and natural gas industries – Pressure-relieving and depressuring systems*
14	Sistem Gas Oksigen	API 607	*Fire Test for Quarter-turn Valves and Valves Equipped with Nonmetallic Seats*
		API 6FA	*Specification for Fire Test for Valves*
		ASME B31.3	*Process Piping, ASME Code for Pressure Piping*
		ASTM D 88	*Standard Guide for Designing Systems for Oxygen Service*
		ASTM G 63	*Standard Guide for Evaluating Non-metallic Materials for Oxygen Service*
		ASTM G 94	*Standard Guide for Evaluating Metals for Oxygen Service*
		ASTM G 93	*Standard Practice for Cleaning Methods and Cleanliness Levels for Material and Equipment Used in Oxygen-Enriched Environments1*
		ISO 8501-1	*Preparation of steel substrates before application of paints and related products - Visual assessment of surface cleanliness – Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates afteroverall removal of previous coatings*
15	Bagian Dalam Kolom	ASME IX	*ASME Boiler and Pressure Vessel Code: Section IX: Qualification standard for welding and brazing procedures, welders, brazers, and welding and brazing operators*
16	Separator Cair-cair dan Separator 3 Fasa	API 12J	*Oil and Gas Separators*
17	Filter untuk Umpan *Hydroprocessing*	ASTM D 2276	*Standard test method for particulate contaminant in aviation fuel by line sampling)*
		ISO 2941	*Hydraulic fluid power - Filter elements – Verification of collapse/ burst resistance*
		ISO 2942	*Hydraulic fluid power - Filter elements – Determination of fabrication integrity*
		ISO 2943	*Hydraulic fluid power - Filter elements – Verification of material compatibility with fluids*
		ISO 3170	*Petroleum Liquids - Manual sampling*
		ISO 3171	*Petroleum Liquids - Automatic pipeline sampling*
		ISO 3723	*Hydraulic fluid power - Filter elements - Method for end load tests.*
		ISO 3968	*Hydraulic fluid power - Filters - Evaluation of pressure drop versus flow characteristics*
		ISO 4572	*Hydraulic fluid power - Filters - Multi-pass method for evaluating filtration performance*
		ISO 10307-1	*Petroleum products - Total sediment in residual fuel oils - Part 1: Determination by hot filtration*

NO	URAIAN KEGIATAN	STANDAR	
18	Sistem Ejektor Vakum Jet Uap	ASME B16.5	*Pipe flanges and flanged fittings NPS 1/2 through NPS 24 metric/inch standard*
		ASME B16.47	*Large diameter steel flanges NPS 26 through NPS 60 metric/inch standard*
		ASME B31.3	*Chemical plant and refinery piping*
		ASME VIII, Div. 1	*ASME Boiler and Pressure Vessel Code: Rules for construction of pressure vessels*
		ASME VIII, Div. 2	*ASME Boiler and Pressure Vessel Code Alternative rules for construction of pressure vessels*
		ISO 10474	*Steel and Steel Products, Inspection documents*
		BS 5500	*Unfired fusion welded pressure vessels*
19	Proses dan Sistem Pengeringan Permukaan untuk Fasilitas Hulu dan Hilir	API E5	*Waste Management in Exploration and Production Operations*
		API 14E	*Recommended Practice for Design and Installation of Offshore Production Platform Piping Systems*
20	Fasilitas *Loading* untuk Kendaraan Jalan pengangkut Curah	API RP 1004	*Bottom loading and vapour recovery for MC-306 and DOT-406 tank motor vehicles*
		API RP 1637	*Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals*
		API/IP Standard 1542	*Identification markings for dedicated aviation fuel manufacturing and distribution facilities, airport storage and mobile fuelling equipment*
		API RP 2003	*Protection against ignitions arising out of static, lightning and stray currents*
		API MPMS 4.1	*Chapter 4 - Proving systems, Section 1 – Introduction*
		API MPMS 4.2	*Chapter 4 - Proving systems, Section 2 - Displacement provers*
		API MPMS 4.5	*Chapter 4 - Proving systems, Section 5 - Master-meter provers*
		API MPMS 4.6	*Chapter 4 - Proving systems, Section 6 - Pulse interpolation*
		API MPMS 4.8	*Chapter 4 - Proving systems, Section 8 - Operation of proving systems*
		API MPMS 5.6	*Chapter 5 - Metering, Section 6 - Measurement of liquid hydrocarbons by Coriolis meters*
		API MPMS 6.2	*Chapter 6 – Metering Assemblies, Section 2 – Loading Rack Metering Systems*
		ASME B73.1	*Specification for horizontal end suction centrifugal pumps for chemical process*
		ASME B73.2	*Specification for vertical in-line centrifugal pumps for chemical process*
		NFPA 16	*Standard for the installation of foam-water sprinkler and foamwater spray systems*
		NFPA 30	*Flammable and combustible liquids code*
		ASTM D 2624	*Standard test methods for electrical conductivity of aviation and distillate fuel*
		BS 7244	*Flame arresters for general use*
		IP Part 2	*Part 2: Design, Construction and Operation of Distribution Terminals*
		IP Part 15	*Part 15: Area Classification Code for Petroleum Installations*
		EN 12874	*Flame arresters – Performance requirements, test methods and limits for use.*
		EN 50014	*Electrical Apparatus for Potentially Explosive Atmospheres – General Requirements.*

NO	URAIAN KEGIATAN	STANDAR	
		ISO 5199	*Technical specifications for centrifugal pumps, class II*
21	Desain, Operasi, dan Pembuangan *Produced Sand*	API RP 14 E	*Guidelines For Erosive Service*
		DNV RP0501	*Pipelines For Erosive Service*
		ASTM D4057	*Standard Practice For Sampling Of Petroleum And Petroleum Products Section 7*
		EPA method 1617	*Static Sheen Test*
		NORSOK M-DP001	*Material Selection – Corrosion Allowance*
22	Sistem Keselamatan untuk Fasilitas Produksi *Wellhead*	API 14C	*Recommended Practice for Analysis, Design, Installation, and Testing of Basic Surface Safety System for Offshore Production Platforms*
		API 14H	*Installation, Maintenance, And Repair of Surface Safety Valves and Underwater Safety Valves Offshore*
		API 17V	*API RP 17V – Recommended Practice for Analysis, Design, Installation, and Testing of Safety System for Subsea Application*
23	Perlindungan dan Pencegahan *Overpressure* dan *Underpressure*	API RP 520 Part I	*Sizing, selection, and installation of pressure-relieving devices in refineries – Part I: Sizing and selection*
		API RP 520 Part II	*Sizing, selection, and installation of pressure-relieving devices in refineries – Part II: Installation*
		API Std 521	*Pressure-relieving and depressurizing systems*
		API Std 620	*Design and construction of large, welded, low-pressure storage tanks*
		API Std 650	*Welded steel tanks for oil storage*
		API Std 2000	*Venting atmospheric and low pressure storage tanks (nonrefrigerated and refrigerated)*
		ASME I	*Section I – Power boilers*
		ASME VIII	*Section VIII – Pressure vessels*
		ASME B31.3	*Process piping*
		ASME B31.8	*Gas transmission and distribution piping systems*
		NFPA 58	*Standard for the storage and handling of liquefied petroleum gases*
		EN 13445	*Unfired pressure vessels*
		EN 14015	*Specification for the design and manufacture of site built, vertical, cylindrical, flat-bottomed, above ground, welded, steel tank for the storage of liquids at ambient temperature and above*
		ISO 23251	*Petroleum, petrochemical and natural gas industries – Pressure-relieving and depressuring systems*
		ISO 28300	*Petroleum, petrochemical and natural gas industries — Venting of atmospheric and low-pressure storage tanks*
24	Penurunan Tekanan Darurat dan *Sectionalizing*	ISO 23251	*Petroleum, petrochemical and natural gas industries – Pressure-relieving and depressurizing systems*
		API Std 521	*Pressure-relieving and depressurizing systems*
25	Sistem Interloking untuk Kerangan Pembebas (*Relief Valve*)	ISO/IEC Guide 2	*Standardization and related activities - General vocabulary*
		ISO 690	*Information and documentation - Guidelines for bibliographic references and citations to information resources*
26		NFPA 11	*Low, medium and high expansion foam*
		NFPA 13	*Installation of sprinkler systems*

NO	URAIAN KEGIATAN	STANDAR	
	Perlindungan Api Berbasis Air pada Fasilitas Lepas Pantai (*Offshore*)	NFPA 15	*Water spray fixed systems for fire protection*
		NFPA 20	*Installation of stationary pumps for fire protection*
		NFPA 25	*Inspection, testing and maintenance of water-based fire protection systems*
		ASME VIII,Div 1	*Secselstion VIII, Division 1 – Rules for construction pressure vessel*
		UL 162	*Safety foam equipment and liquid concentrates*
		ASTM A488	*Steel castings, welding, qualifications of procedure personnel*
		ASTM A278	*Gray Iron castings for pressure-containing parts for temperature Up to 650 deg F*
		ASTM A536	*Ductile iron castings*
		ASTM A395	*Ferritic ductile iron pressure-retaining castings for use at Elevated temperatures*
		API RP 13M	*Recommended Practice for the measurement of viscous properties of Completion fluid, 1st Edition, 2003-09-01*
		CAP 168	*Licensing of aerodromes*
		CAP 437	*Offshore helicopter landing areas – Guidance on standards*
		EEMUA 107	*Recommendations for the protection of diesel engines EEMUA 107 For use in Zone 2 hazardous areas*
		SOLAS	*International convention for the safety of life at sea*
		BS 1400	*Copper alloy ingots and copper alloy and high conductivity copper castings*
		BS 970	*Specification for wrought steels for mechanical and allied engineering*
		ICAO 9137-1	*Airport Services Manual – Part 1: Rescue and fire fighting*
		ICAO 9137-1	*Airport Services Manual – Part 1: Rescue and fire fighting*
		ISO 13702	*Petroleum and natural gas industries – Control and mitigation of fires and explosions on offshore production installations – Requirements and guidelines*
27	Desain *Slug Catchers* Banyak Pipa	ASME B31.3	*Process piping*
		ASME B31.8	*Gas Transmission and Distribution Piping Systems*
		ISO 13623	*Petroleum and natural gas industries - Pipeline transportation systems*
		NFPA 58	*Liquid Petroleum Gas Code*
28	Desain Lab dan Operasi	ASME B31.3	*Process Piping Design*
		ASHRAE 4514	*Laboratory design guide*
		ASHRAE	*Application handbook*
		NFPA 45	*Standard on fire protection for laboratories using chemicals*
		NFPA 101	*Life safety code*
		ASTM D 613	*Test method for cetane number of diesel fuel oil*
		ASTM D 909	*Test method for knock characteristics of aviation gasolines by the supercharge method*
		ASTM D 2699	*Test method for research octane number of spark-ignition engine fuel*
		ASTM D2699/ 2700	*Test method for motor octane number of spark-ignition engine fuel*
		ASTM D 2885	*Test method for determination of octane number of sparkignition engine fuels by on-line direct comparison technique*

NO	URAIAN KEGIATAN	STANDAR	
		BS 3202	*Laboratory furniture and fittings*
		EN 14056	*Laboratory furniture - Recommendations for design and installation*
		EN 13150	*Workbenches for laboratories – Dimensions, safety requirements and test methods*
		EN 13792	*Colour coding of taps and valves for use in laboratories*
		IEC 60079-10	*Electrical apparatus for explosive gas atmospheres - Part 10: Classification of hazardous Areas*
		IEC 60079-14	*Electrical apparatus for explosive gas atmospheres -atmospheres (other than mines)*
29	Klasifikasi Daerah Berbahaya	IP-15	*The Institute of Petroleum Model Code of Safe Practice, Part 15, Area Classification Code for Installations Handling Flammable Fluid.*
		IEC 60079-10	*International Electrotechnical Commision, Electrical Apparatus for Explosive Gas Atmosphere – 60079 series Part 10: Classification of Hazardous Areas; and*
		IEC 60079-10-2	*International Electrotechnical Commision, Electrical Apparatus for Explosive Gas Atmosphere – 60079 series Part 10-2: Classification of Areas where Combustible Dusts are or may be present.*
		API RP500	*Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Division 2; and*
		API RP505	*Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, Zone 1, and Zone 2.*
		NFPA 497	*Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas, 2008 Edition; and*
		NFPA 499	*Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas, 2008 Edition.*
30	Fasilitas Lepas Pantai (*Offshore*), Peralatan Penyelamatan Jiwa	ISO/DIS 13702	*Petroleum and natural gas industries - Offshore platform systems - Functional requirements and guidelines for the control and mitigation of fires and explosions*
		IEC 60529	*Degrees of protection provided by enclosures (IP code)*
		EN 1964	*Transportable gas cylinders – Specification for the design and construction of refillable transportable seamless steel gas cylinders of water capacities from 0,5 litre up to and including 150 litres*
31	Kontrol dan Mitigasi Kebakaran dan Ledakan pada Instalasi Produksi Lepas Pantai	ISO 13702	*Petroleum and natural gas industries – Control and mitigation of fires and explosions on offshore production installations – Requirements and guidelines*
32	Persyaratan dan Panduan pada Keadaan Darurat pada Instalasi Produksi Lepas Pantai (*Offshore*)	ISO 15544	*Petroleum and natural gas industries – Offshore production installations – Requirements and guidelines for emergency response*
		ISO1544	*Petroleum and natural gas industries – Offshore production installations – Requirements and guidelines for emergency response: AMENDMENT 1*

NO	URAIAN KEGIATAN	STANDAR	
33	Fasilitas Keselamatan terhadap Kejadian Kebakaran pada Fasilitas di Darat (*Onshore*)	NFPA 11	*Standard for low, medium and high expansion foam*
		NFPA 12	*Carbon dioxide extinguishing systems*
		NFPA 13	*Installation of sprinkler systems*
		NFPA 20	*Firewater Pump*
		NFPA 30	*Flammable and combustible liquids code*
		NFPA 101	*Code for safety to life from fire in buildings and structures*
		NFPA 704	*Standard system for the identification of the fire hazards of materials*
		NFPA 5000	*Building Construction and Safety Code*
		IP Code Part 19	*Model code of safe practice in the petroleum industry; Part 19: Fire Precautions at Refineries and Bulk Storage Installations*
		IEC 60331-21	*Tests for electric cables under fire conditions - Circuit integrity*
		ISO 23251	*Petroleum, petrochemical and natural gas industries Pressure-relieving and depressuring systems*
34	Analisis Tingkat Kritis pada Kerangan (*Valve*)	NIOSH 94-110	*Applications Manual for the Revised NIOSH Lifting Equation*
		ASTM F1166 – 07	*Human Engineering Design for Marine Systems, Equipment, and Facilities*

I. Standar Pengelolaan Proyek Migas

NO	URAIAN KEGIATAN	STANDAR	
1	Fabrikasi Struktur Lepas Pantai Permanen (*Fixed Offshore Structures*)	API RP 2A	*Recommended Practice for Planning, Designing, and Constructing Fixed Offshore Platforms*
		AWS D1-1	*Structural Welding Code*
		API STD 1104	*Code for Welding Pipelines and Related Facilities*
		API - RP 5LX	*Recommended Practice for Marine Transportation of Line Pipe*
		ANSI B31.3	*American National Standard Code for Pressure Piping - Chemical Plant and Petroleum Refinery Piping*
		ANSI B31.8	*American National Standard Code for Pressure Piping – Gas Transmission and Distribution Piping Systems*
		ANSI B31.4	*American National Standard Code for Pressure Piping - Liquid Petroleum Transportation Piping Systems*
		ISO 19901-5	*Petroleum and Natural Gas Industries – Specific Requirements for Offshore Structures, Part 5 – Weight Control during Engineering and Construction*
2	Instalasi Struktur Lepas Pantai (*Offshore*) : *Jacket* dan *Topsides*	DNV-OS-H204	*Offshore Installation Operations (November 2014)*
		ISO/FDIS 19901-06:2009(E)	*Petroleum and Natural Gas Industries – Specific Requirement for Offshore Structures (Part 6: Marine Operations)*
		ISO19902: 2007 (E)	*Petroleum and Natural Gas Industries – Fixed Steel Offshore Structures*
		API RP-2A-WSD	*Recommended Practise for Planning, Designing and Constructing Fixed Offshore Platforms – Working Stress Design*
3		API RP 1111	*Design, Construction, Operation, and Maintenance of Offshore Hydrocarbon Pipelines (Limit State Design)*

NO	URAIAN KEGIATAN	STANDAR	
	Instalasi Jalur Pipa Lepas Pantai (*Offshore*) dan Pipa Vertikal (*Risers*)	API STD 1104	*Welding of Pipelines and Related Facilities*
		API 5L	*Specification for Line Pipe*
		API RP 5LW	*Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels*
		ASME 31.4	*Pipeline Transportation Systems for Liquids and Slurries*
		ASME 31.8	*Gas Transmission and Distribution Piping Systems*
		BS 7910	*Guide To Methods For Assessing The Acceptability Of Flaws In Metallic Structures*
		DNV-OS-F101	*Submarine Pipeline Systems*
		DNV RP F118	*Pipe Girth Weld AUT System Qualification and Project Specific Procedure Validation.*
		ISO 19901-6	*Petroleum And Natural Gas Industries - Specific Requirements For Offshore Structures - Part 6: Marine Operations*
4	*Habitat* Bertekanan	OSHA 1926.353	*Ventilation & Protection in Welding, Cutting and Heating*
		OSHA 1910.252	*Welding, Cutting and Brazing – General Requirements*
		IEC 60079-13	*Equipment Protection by Pressurized Room 'p'*
		ANSI/FM 4950	*Evaluating Welding Pads, Blankets, Curtains for Hot Work*

J. Standar Pengeboran

NO	URAIAN KEGIATAN	STANDAR	
1	Pengeboran	SPE 067616	*Accuracy Prediction for Directional Measurement While Drilling*
		ISCWSA	*Collision Avoidance Current Common Practice 2011*
		SPE 90408	*Prediction of Wellbore Position Accuracy When Surveyed with Gyroscopic Tools Torgeir Torkildsen, Stein T Havardstein, John L. Weston, Roger Ekseth*
		ISO 1523:2002	*Determination of flash point -- Closed cup equilibrium method*
		API RP 13B-1	*Field testing of drilling fluids -- Part 1: Water-based fluids*
		ISO 10414-1	
		API RP 13B-2	*Field testing of drilling fluids -- Part 2: Oil-based fluids*
		ISO 10414-2	
		DIN 51758	*Flash-Point by Pensky-Martens Closed Cup Tester*
		ASTM 93	*Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester*
		NORSOK D-010	*Well Integrity in drilling and well operations*
		AISI 4130	*Alloy Steel*
		API Spec 16C	*Choke and Kill Equipment*
		ISO 15156 NACE MR0175	*Materials for use in H2S -containing environments in oil and gas production*
		ISO 13679	*Procedures for testing casing and tubing connections*
		API RP 500	*Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division I and Division 2*

NO	URAIAN KEGIATAN	STANDAR	
		API RP 505	*Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, and Zone 2*
		API Spec 5CT	*Specification for Casing and Tubing*
		API Spec 16D	*Specification for Control Systems for Drilling Well Control Equipment and Control Systems for Diverter Equipment*
		API Spec 16D	*Specification for Control Systems for Drilling Well Control Equipment and Control Systems for Diverter Equipment*
		API Spec 16A	*Specification for Drill Through Equipment*
		API Spec 6A	*Specification for Wellhead and Christmas Tree Equipment*
		API Standard 53 ISO 15156 NACE MR0175	*Specifications for H2S rating*
		ASTM A-194 Class 2H	*Standard Specification for Carbon Steel, Alloy Steel, and Stainless Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both*
		ASTM A-193 B-7	*Steel Pipe Flanges for Waterworks Service - Sized 4 in. Through 144 in. (100mm Through 3600mm)*
		API RP 6T	*Training and Qualification of Personnel in Well Control Equipment and Techniques for Wireline Operations in Offshore Location*
		API RP T3	*Training and Qualification of Personnel in Well Control Equipment and Techniques for Drilling on Offshore Locations*
		API RP-65	*Cementing Shallow Water Flow Zones in Deep Water Wells*
		ISO 10426 Series API Spec 10A	*Cements and materials for well cementing*
		ISO 10426 Series API Spec 10B	*Materials and Testing for Well Cement*
		ISO 10426-3	*Specific testing protocol for use in cold temperature environments*
		API 10D	*Specification for Bow-Spring Casing Centralizers*
		ASTM C 150	*Standard Specification for Portland Cement*
		API 5A5	*Recommended Practice for Field Inspection of New Casing, Tubing and Plain End Drill Pipe. Rejected joints*
		ISO 13679-CAL IV	*Procedures for testing casing and tubing connections*
		API Spec 5CT	*Specification for Casing and Tubing*

K. Standar Keselamatan

1. Standar Perlindungan Manusia

NO	URAIAN KEGIATAN	STANDAR	
1	Standar Perlindungan Tubuh dan Pakaian	EN 471	*High Visibility Jackets*
		ANSI 107/2017	*High visibility clothing*
		NFPA 1975	*Standard on Station/ Work Uniforms for Emergency Services*
		EN 11612	*Body Protection against Risk from Heat and Fire*
		EN 469/A1	*Protective clothing for firefighters. Performance requirements for protective clothing for firefighting*

NO	URAIAN KEGIATAN	STANDAR	
		EN 11611	*Body Protection against risk from welding activities*
		ISO 11612	*Protective clothing - Clothing to protect against heat and flame*
		NFPA 2112	*Inherently Flame Retardant Coverall (IFCR)*
		EN 1149-5	*Protective clothing - Electrostatic properties - Part 5: Material performance and design requirements*
		NFPA 1992	*Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials*
		ISO 12402-1	*Personal flotation devices - Part 1: Lifejackets for seagoing ships - Safety Requirements*
2	Standar Perlindungan Pekerjaan di Tempat Tinggi	ANSI A10.14	*Fall Protection Standard*
		EN 341	*Personal protective equipment against falls from a height. Descender devices*
		EN 361	*Personal protective equipment against falls from a height. Full body harnesses*
		EN 363	*Personal fall protection equipment - Personal fall protection systems*
		ISO 10333	*Personal fall arrest systems*
		ANSI Z352	*Full body harness*
		EN 354	*Lanyard Standard*
		EN 355	*Energy absorber Standard*
3	Standar Perlindungan Telinga	ANSI S3 & S12	*earplugs & earmuffs*
		BS EN 352	*Hearing Protection Standard (Ear Plugs)*
		EN 352	*Hearing protectors*
		ANSI Z24	*Hearing Protection Standard*
4	Standar Perlindungan Mata	ANSI Z87	*Eye, Face & Respiratory Protection*
		EN 166	*Personal Eye Protection Standard*
5	Standar Perlindungan Kepala	ANSI Z89.1-2	*Safety Requirement for Industrial Head Protection*
		EN374, 381, 388, 407, 421, 511, 659, 60903	*Head protection*
		EN 397	*Industrial Safety Helmet Standard*
		EN 443	*Helmets for fire-fighting in buildings and other structures*
		NFPA 1972	*Helmet for structural fire fighting*
6	Standar Perlindungan Kaki	ANSI Z41 or ASTM 2413	*Foot Protection*
		ASTM F2413	*Foot Protection Standard*
		EN 20344	*Safety Shoes Standard*
		ISO 20345	*Personal protective equipment - Safety footwear*
7	Standar Perlindungan Tangan	BS EN 407	*Protective Gloves for Thermal Risk*
		BS EN 50237	*Gloves and Mitts with Mechanical Protection for electrical Purposes*
		EN 388	*Protective Hand Gloves against Mechanical Risk Standard*
		EN 420+A1	*Protective gloves - General requirements*
		NFPA 1973	*Gloves for structural fire fighting*
8	Standar Perlindungan Pernafasan	EN 137	*Respiratory Protective devices - Self-contained open circuit compressed air breathing apparatus with full face mask - Requirements, testing, marking*

NO	URAIAN KEGIATAN	STANDAR	
		EN 250	*Respiratory equipment. Open-circuit self-contained compressed air diving apparatus. Requirements, testing, marking*
		EN 403	*Respiratory protective devices for self-rescue.*
		ANSI K13.1	*Identification of Air-Purifying Respirator Canisters and Cartridges*
		ANSI Z88.2	*Standard Practice for Respiratory Protection*
		BS EN 12021	*Breathing air quality standards*
		NFPA 1981	*Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services*
		NFPA 1989	*Standard on Breathing Air Quality for Emergency Services Respiratory Protection*
		NFPA 1991	*Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies*
		NFPA 1852	*Standard on Selection, Care, and Maintenance of Open-Circuit Self-Contained Breathing Apparatus (SCBA)*
9	Standar Pemadaman Api Ringan	NFPA 10	*Standard for Portable Fire Extinguishers*

2. Standar Perlindungan Peralatan

NO	URAIAN KEGIATAN	STANDAR	
1	Standar Perlindungan *Overfill*	API STD 2350	*Overfill Protection for Storage Tanks in Petroleum Facilities*
2	Standar Perlindungan Kebakaran	EN 12845	*Fixed firefighting systems – Automatic sprinkler – Design, installation and maintenance*
		EN 12845:2008 + A2:2009	*Fixed firefighting systems – Automatic sprinkler – Design,installation and maintenance*
		EN 13501	*Fire classification of construction products and building elements*
		EN 3 / NFPA 10	*Standard for Portable fire extinguishers*
		EN 54	*Fire detection and fire alarm system*
		EN 694	*Fire-fighting hoses. Semi-rigid hoses for fixed systems*
		IP code Part 19	*Model code of safe practice in the petroleum industry; Part 19: Fire Precautions at Refineries and Bulk Storage Installations*
		NFPA 72	*National Fire Alarm code*
		NFPA 72E	*Automatic Fire Detectors"*
		NFPA 750	*Standard on Water Mist Fire Protection Systems*
		BS EN 61779-4	*Electrical apparatus for the detection and measurement of flammable gases.*
		ISO 13702	*Petroleum and natural gas industries – Control and mitigation of fires and explosions on offshore production installations – Requirements and guidelines*
		ISO 14520	*Gaseous fire-extinguishing systems - Physical properties and system design*
		ISO 22899	*Determination of the resistance to jet fires of passive fire protection materials*
		ISO 6183	*Fire protection equipment - Carbon dioxide extinguishing systems for use on premises- Design and installation*
		ISO 7240	*Fire detection and alarm systems*
		NFPA 15	*Standard for Water Spray Fixed Systems for Fire Protection*

NO	URAIAN KEGIATAN	STANDAR	
		NFPA 17	*Standard for Dry Chemical Extinguishing Systems*
		NFPA 170	*Standard for Fire Safety and Emergency Symbols*
		NFPA 17A	*Standard for Wet Chemical Extinguishing Systems*
		NFPA 18	*Standard on wetting agents*
		NFPA 1963	*Fire hose connection*
		NFPA 1964	*Standard for Spray Nozzles*
		NFPA 80	*Standard for Fire Doors and Other Opening Protectives*
		NFPA 512	*Truck fire protection*
		NFPA 403	*Standard for Aircraft Rescue and Fire-Fighting Services at Airports*
		NFPA 405	*Standard for the Recurring Proficiency of Airport Fire Fighters*
		NFPA 408	*Standard for Aircraft Hand Portable Fire Extinguishers*
		NFPA 412	*Standard for Evaluating Aircraft Rescue and Fire-Fighting Foam Equipment*
		NFPA 414	*Standard for Aircraft Rescue and Fire-Fighting Vehicles*
		NFPA 24	*Standard for the Installation of Private Fire Service Mains and Their Appurtenances*
		NFPA 22	*Standard for Water Tanks for Private Fire Protection*
		NFPA 221	*Standard for High Challenge Fire Walls, Fire Walls and Fire Barrier Walls*
		NFPA 20	*Standard for the Installation of Stationary Pumps for Fire Protection*
		NFPA 11 / 11A	*Standard for Low-, Medium-, and High-Expans ion Foam*
		NFPA 13	*Standard for the Installation of Sprinkler Systems*
		NFPA 11C	*Standard for Mobile Foam Apparatus*
		NFPA 12	*Standard on Carbon Dioxide Extinguishing Systems*
		NFPA 14	*Standard for the Installation of Standpipe and Hose Systems*
		NFPA 16	*Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems*
		NFPA 18A	*Standard on Water Additives for Fire Control and Vapor Mitigation*
		NFPA 2001	*Standard on Clean Agent Fire Extinguishing Systems*
		NFPA 204	*Standard for Smoke and Heat Venting*
		NFPA 298	*Standard on Foam Chemicals for Wildland Fire Control*
		NFPA 299	*Standard for Protection of Life and Property from Wildfire*
		NFPA 25	*Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*
		NFPA 274	*Standard Test Method to Evaluate Fire Performance Characteristics of Pipe Insulation*
		NFPA 290	*Standard for Fire Testing of Passive Protection Materials for Use on LP-Gas Containers*
		NFPA 295	*Standard for Wildfire Control*
		NFPA 303	*Fire Protection Standard for Marinas and Boatyards*
		Recommended Practice	

NO	URAIAN KEGIATAN	STANDAR	
		ISA-TR84.00.07	*Guidance on the Evaluation of Fire, Flammable Gas and Toxic Gas Systems Effectiveness*
		API RP 14FZ	*Recommended Practice for Design, Installation, and Maintenance of Electrical Systems for Fixed and Floating Offshore Petroleum Facilities for Unclassified and Class I, Zone 0, Zone 1, and Zone 2 Locations*
		API RP 500	*Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Division 2*
		API RP 505	*Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, Zone 1, and Zone 2*
		API pub.2030	*Guidelines for Applications of Water Spray Systems for Fire Protection in the Petroleum Industry*
		API pub. 2021	*Fighting Fires In and Around Flammable and Combustible Liquid Atmosphere Storage Tanks*
		API RP 2001	*Recommended Practice for Fire Protection in Refineries*
		API RP 2003	*Recommended Practice for Protection Against Ignitions Arising out of Static, Lighting and Stray Currents*
		API RP 2021	*Management of Atmospheric Storage Tank Fires*
		API RP 14G	*Recommended Practice for Fire Prevention and Control on Open Type Offshore Production Platforms*
		API RP 2005	*Service Station Safety*
		UKOOA	*United Kingdom Offshore Operators Association – Fire and Explosion Hazard Management Guidelines*
		NFPA 77	*Recommended Practice on Static Electricity.*
		API RP 2216	*Ignition Risk of Hydrocarbon Liquids and Vapors by Hot Surfaces in the Open Air*
		API RP 2030	*Guidelines for Application of Water Spray Systems for Fire Protection in the Petroleum Industry Process Safety Systems codes & Standards*
		API RP 2216	*Ignition Risk of Hydrocarbon Liquids and Vapors by Hot Surfaces in the Open Air*
3	Standar Perlindungan Terhadap Ledakan	EN 13463	*Standard for non-electrical equipment for use in potentially explosive atmospheres*
		IEC 60079-10	*International Electrotechnical Commision, Electrical Apparatus for Explosive Gas Atmosphere – 60079 series Part 10: Classification of Hazardous Areas; and*
		NFPA 68	*Explosion protection by deflagration venting*
		NFPA 69	*Standard on Explosion Prevention Systems*
4	Standar Perlindungan Terhadap Tekanan Tinggi	API STD 521	*Guide for Pressure Relieving and Depressuring Systems*
		API STD 520 s	*Sizing, Selection, and Installation of Pressure-relieving Devices in Refineries*
		ANSI Z57-1965	*Compressed gas cylinder valve outlet and inlet connection*
		ISO 23251/API 521	*Petroleum, petrochemical and natural gas industries Pressure-relieving and depressuring systems*

NO	URAIAN KEGIATAN	STANDAR	
5	Standar Perlindungan Terhadap Uap dan Gas Beracun	EN 45544	*Workplace atmospheres detection and direct concentration measurement of toxic gases and vapours for measuring concentrations in the region of limit values*
		ISA 12.15	*Performance Requirements for Hydrogen Sulfide Detection Instruments*
		ISA RP 12.1	*Electrical Instruments in Hazardous Atmospheres*
		NFPA 306	*Standard for the Control of Gas Hazards on Vessels*
		Recommended Practice	
		API pub. 2557	*Vapour Collection and Control Options for Storage and Transfer Operations in the Petroleum Industr*
		EN 45544	*Workplace atmospheres detection and direct concentration measurement of toxic gases and vapours for measuring concentrations in the region of limit values*
		API RP 55	*Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide*
6	Standar Identifikasi Material dan Bahaya	IEC 61882	*Hazard and operability studies (HAZOP studies), Application guide*
		ANSI Z48.1-1954 ASTM	*Marking Portable Compressed Gas Containers to identify the material contained*
		EI 15 / API 500 / API 505	*Model code of safe practice Part 15 – Area classification for installations handling flammable fluids*
		ISO 7010	*Graphical symbols- Safety colours and safety signs- Safety signs used in workplaces and public areas*
		NFPA 400	*Hazardous Materials Code*
		NFPA 704	*Standard System for the Identification of the Hazards of Materials for Emergency Response*
		NFPA 57	*Liquefied Natural Gas (LNG) Vehicular Fuel Systems Code*
		NFPA 55	*Compressed Gases and Cryogenic Fluids Code*
		NFPA 495	*Explosive Materials Code*
		NFPA 101	*Life Safety Code*
		NFPA 30	*Flammable and combustible liquids code*
		IEC 61882	*Hazard and operability studies (HAZOP studies), Application guide*
		Recommended Practice	
		NFPA 497	*Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas, 2008 Edition; and*
		NFPA 499	*Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas, 2008 Edition.*
		API RP 753	*Management of Hazards Associated with Location of Process Plant Portable Buildings*
		API RP 754	*Process Safety Performance Indicators for the Refining and Petrochemical Industries - First Edition*
7	Standar Perlindungan Terhadap Sambaran Petir	NFPA 780	*Standard for the Ins tallation of Lightning Protection Systems*

NO	URAIAN KEGIATAN	STANDAR	
8	Standar Perlindungan Ruang Sempit	NSC Z117.1	*Safety Requirements for Confined Spaces*
9	Standar Keselamatan Pemilihan, Penggunaan, dan Pemeliharaan Peralatan	BS 7121	*code of Procedure for safe use of cranes*
		BS EN 12811-1	*code of Practice for Access and Working Scaffold.*
		ISO 21789	*Gas turbine applications – Safety*
		NFPA 59A	*Standard for The Production, Storage and Handling of LNG*
		NFPA 58	*Storage and Handling of Liquefied Petroleum Gas*
		NFPA 5000	*Building Construction and Safety code*
		ANSI Z49.1	*Safety in Welding and Cutting*
		NFPA 307	*Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves*
		Recommended Practice	
		API RP 2009	*Safe Welding, Cutting, and Hot Work Practices in the Petroleum and Petrochemical Industries*
		API Spec-2C, RP-2D	*Operation and Maintenance of Offshore Cranes*
		ASM, 2008	*ASM Consortium Guidelines Effective Operator Display Design*
10	Penilaian aspek keselamatan Infrastruktur lepas pantai	*Recommended Practice*	
		DNV Technical	*Guide to offshore QRA – Part 2 Appendix X – Collisions*
		DNV Technica – CMPT	*Guide to quantitative risk assessment for offshore installations*
		UKOOA HS010	*Guidelines for safety related telecommunication systems on fixed offshore installations*
		API RP 14C	*Recommended Practice for Analysis, Design, Installation, andTesting of Basic Surface Safety System for Offshore Production Platform.*
		UKOOA HS010	*Guidelines for safety related telecommunication systems on fixed offshore installations*
		API 14FZ	*Recommended Practice for Design and Installation of Electrical Systems for Fixed and Floating Offshore Petroleum Facilities for Unclassified and Class I, Zone 0, Zone 1 and Zone 2 Locations*
		API RP 14C	*Recommended Practice for Analysis, Design, Installation, and Testing of Basic Surface Safety System for Offshore Production Platforms*
		API RP 14G	*Recommended Practice for Fire Prevention and Control on Open Type Offshore Production Installations*
		DNV Technica	*Guide to offshore QRA – Part 2 Appendix X – Collisions*
		DNV Technica – CMPT	*Guide to quantitative risk assessment for offshore installations*

3. Standar Kualifikasi Personil

NO	URAIAN KEGIATAN	STANDAR	
		RECOMMENDED PRACTICE	
1	Standar Kualifikasi Personil	OHSAS 18001	*Occupational Health and Safety Management System*
		OPITO 4500	*Offshore Emergency Response Team Member*
		OPITO 4550	*urther Offshore Emergency Response Team Member*
		OPITO 4600	*Offshore Emergency Response Team Leader*

NO	URAIAN KEGIATAN	STANDAR	
		RECOMMENDED PRACTICE	
		OPITO 4650	*Further Offshore Emergency Response Team Leader*
		OPITO 5095	*Helicopter Underwater Escape Training*
		OPITO 5151	*Offshore Lifeboat Coxswain Initial Training (Single Fall)*
		OPITO 5152	*Offshore Lifeboat Coxswain Initial Training (Twin Fall)*
		OPITO 5153	*Offshore Lifeboat Coxswain Initial Training (Free Fall)*
		OPITO 5181	*Offshore Lifeboat Coxswain Further Training (Single Fall)*
		OPITO 5182	*Offshore Lifeboat Coxswain Further Training (Twin Fall)*
		OPITO 5183	*Offshore Lifeboat Coxswain Further Training (Free Fall)*
		OPITO 5184	*Offshore Lifeboat Coxswain Supplementary Fall Training (Single Fall)*
		OPITO 5185	*Offshore Lifeboat Coxswain Supplementary Fall Training (Twin Fall)*
		OPITO 5195	*Tropical Helicopter Underwater Escape Training*
		OPITO 5501	*Tropical Basic Offshore Safety Induction & Emergency Training*
		OPITO 5502	*Tropical BOSIET and Travel Safely by Boat*
		OPITO 5504	*Tropical HUET and Travel Safely by Boat*
		OPITO 5513	*Tropical FOET and Travel Safely by Boat*
		OPITO 5523	*Tropical FOET and Further Travel Safely by Boat*
		OPITO 5605	*Travel Safely by Boat - Initial Training*
		OPITO 5614	*Tropical Further Offshore Emergency Training*
		OPITO 5655	*Travel Safely by Boat - Further Training*
		OPITO 5700	*Basic Offshore Safety Induction & Emergency Training*
		OPITO 5701	*BOSIET and Escape Chute Training*
		OPITO 5702	*Basic Onshore Emergency Response*
		OPITO 5707	*Basic Offshore Safety Induction & Emergency Training and Travel Safely by Boat*
		OPITO 5750	*Basic Offshore Safety Induction and Emergency Training (BOSIET) with Compressed Air Emergency Breathing System (CA-EBS)*
		OPITO 5751	*Basic Offshore Safety Induction and Emergency Training BOSIET with CA EBS and Escape Chute*
		OPITO 5770	*Escape Chute Training - Initial Training*
		OPITO 5808	*Further Offshore Emergency Training and Travel Safely by Boat*
		OPITO 5857	*Further Onshore Emergency Response*
		OPITO 5858	*Further Offshore Emergency Training*
		OPITO 5859	*FOET and Escape Chute Training*
		OPITO 5860	*Further Offshore Emergency Training FOET with CA EBS and Escape Chute*
		OPITO 5902	*Compressed Air Emergency Breathing System (CA-EBS) Initial Deployment Training*

NO	URAIAN KEGIATAN	STANDAR	
		RECOMMENDED PRACTICE	
		OPITO 5905	*Tropical BOSIET with EBS*
		OPITO 5906	*Tropical BOSIET with EBS and Travel Safely by Boat*
		OPITO 5917	*Tropical FOET with EBS*
		OPITO 5918	*Tropical FOET with EBS and Travel Safely by Boat*
		OPITO 5928	*Tropical FOET with EBS and Further Travel Safely by Boat*
		OPITO 5996	*Tropical HUET with EBS*
		OPITO 5997	*Tropical HUET with EBS and Travel Safely by Boat*
		OPITO 6100	*ERRV Crew Initial Training Shipboard Operations*
		OPITO 6130	*ERRV Crew Advanced Medical Aid*
		OPITO 6135	*ERRV Further Crew Advanced Medical Aid*
		OPITO 6150	*ERRV Crew Fast Rescue Craft Coxswain*
		OPITO 6160	*ERRV Crew Daughter Craft Coxswain*
		OPITO 6170	*EERV Crew Fast Rescue Boatman*
		OPITO 6180	*Command and Control for ERRV Masters and Mates*
		OPITO 6190	*Ongoing Onboard Development and Training Programme for ERRV Masters and Crews*
		OPITO 6191	*Ongoing Onboard Development and Training Programme for ERRV medical Aid and Care*
		OPITO 6192	*Ongoing Onboard Development and Training Programme for ERRV FRC Coxswain*
		OPITO 6193	*Ongoing Onboard Development and Training Programme for ERRV FRC Boatman*
		OPITO 6194	*Ongoing Onboard Development and Training Programme for ERRV Daughter Craft Coxswain*
		OPITO 6195	*Ongoing Onboard Development and Training Programme for ERRV Command &Control*
		OPITO 7017	*HLO Helideck Emergency Response Team Leader (HERTL) Training*
		OPITO 7018	*Offshore Helicopter Landing Officer*
		OPITO 7019	*Offshore Helideck Assistant (HDA) Initial Training*
		OPITO 7022	*HDA Helideck Emergency Response Team Member (HERTM) Training*
		OPITO 7024	*HDA and HERTM Further Training*
		OPITO 7025	*OIM Controlling Emergencies*
		OPITO 7029	*HLO and HERTL Further Training*
		OPITO 7060	*Offshore Radio Operator During Emergencies*
		OPITO 7228	*Major Emergency Management - Initial Response Training*
		OPITO 9004	*Control Room Operator Emergency Response Standard*
		OPITO 9014	*Basic H2S Training*
		NFPA 1003	*Standard for Airport Fire Fighter Professional Qualifications*
		NFPA 1005	*Standard for Professional Qualifications for Marine Fire Fighting for Land-Based Fire Fighters*

NO	URAIAN KEGIATAN	STANDAR	
		RECOMMENDED PRACTICE	
		NFPA 1006	*Standard for Technical Rescuer Professional Qualifications*
		NFPA 1021	*Standard for Fire Officer Professional Qualifications*
		NFPA 1051	*Standard for Wildland Fire Fighter Professional Qualifications*
		NFPA 1071	*Standard for Emergency Vehicle Technician Professional Qualifications*

4. Standar Latihan Keselamatan

No	URAIAN KEGIATAN	STANDAR	
1	Standar Latihan Keselamatan	NFPA 1670	*Standard on Operations and Training for Technical Search and Rescue Incidents*
		NFPA 1250	*Recommended Practice in Emergency Service Organization Risk Management*
		NFPA 1404	*Standard for Fire Service Respiratory Protection Training*
		NFPA 1410	*Standard on Training for Initial Emergency Scene Operations*

5. Standar Lindungan Lingkungan

NO	URAIAN KEGIATAN	STANDAR	
1	Lindungan Lingkungan	**RECOMMENDED PRACTICE**	
		API Publication 421	*Monographs on Refinery Environmental Control - Management of Water Discharges - Design and Operation of Oil-Water Sepatarors*
		API RP 2216	*Monographs on Refinery Environmental Control - Management of Water Discharges - Design and Operation of Oil-Water Sepatarors*

MENTERI ENERGI DAN SUMBER DAYA MINERAL
REPUBLIK INDONESIA,

ttd.

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