KUWAIT OIL COMPANY (K.S.C.)

A subsidiary of Kuwait Petroleum Corporation

إحدى شركات مؤسسة البترول الكويتية
A Subsidiary of Kuwait Petroleum Corporation

PRODUCTION & PROJECTS (GAS) GROUP

GAS PROJECTS TEAM-II

Mutriba remote boosting facility (MRBF)
At North Kuwait

Appendix 8C

List of International Codes & Standards

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LIST OF INTERNATIONAL CODES & STANDARDS

Listed below are the International Codes & Standards applicable for this Project.

Sl. No.	DOCUMENT NO.	DESCRIPTION
CIVIL & STRUCTURAL :		
1.	ACI 318M	Building Code Requirements for Structural Concrete (ACI 318-19) Commentary on Building Code Requirements for Structural Concrete (ACI 318R-19)
2.	ACI 351.3R	Report on Foundations for Dynamic Equipment
3.	ACI SP-66	ACI Detailing Manual
4.	AISC 325	Steel Construction Manual
5.	AISC 326	Detailing for Steel Construction
6.	AISC 327	AISC Seismic Design Manual
7.	AISC 360	Specification for Structural Steel Buildings
8.	ASTM A6/A6M	Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling
9.	ASTM A36/A36M	Standard Specification for Carbon Structural Steel
10.	ASTM A53/A53M	Standard Specification for Pipe, Steel, Black and HotDipped, Zinc-Coated, Welded and Sea
11.	ASTM 123/A123M	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
12.	ASTM A153/A153M	Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
13.	ASTM A307	Standard Specification for Carbon Steel Bolts, Studs and Threaded Rod 60,000 PSI Tensile Strength
14.	ASTM A529/A529M	Standard Specification for High-Strength Carbon Manganese Steel of Structural Quality
15.	ASTM A563/A563M	Standard Specification for Carbon and Alloy Steel Nuts (Inch and Metric)
16.	ASTM A588/A588M	Standard Specification for High-Strength Low-Alloy Structural Steel, up to 50 ksi [345 MPa] Minimum Yield Point, with Atmospheric Corrosion Resistance

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Sl. No.	DOCUMENT NO.	DESCRIPTION
17.	ASTM A615/A615M	Standard Specification for Deformed and Plain CarbonSteel Bars for Concrete Reinforcement
18.	ASTM C94/C94M	Standard Specification for Ready-Mixed Concrete
19.	ASTM C150/C150M	Standard Specification for Portland Cement
20.	ASTM F436/F436M	Standard Specification for Hardened Steel Washers Inch and Metric Dimensions
21.	ASTM F1554	Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength
22.	ASCE 7	Minimum Design Loads and Associated Criteria for Buildings and Other Structures
23.	ASCE 10	Design of Latticed Steel Transmission Structures
24.	ASCE 41080	Wind Load Design for Petrochemical and Other Industrial Facilities – Second Edition
25.	ASCE 41088	Design of Blast Resistant Buildings in Petrochemical Facilities
26.	ASCE 41140	Seismic Evaluation and Design of Petrochemical and Other Industrial Facilities
27.	ASCE 40262	Wind Load and Anchor Bolt Design for Petrochemical Facilities
28.	ASCE ANCHORAGE DESIGN	Anchorage Design for Petrochemical Facilities
29.	AWS D1.1/D1.1M	Structural Welding Code- Steel
30.	AWS D1.4/D1.4M	Structural Welding Code – Steel Reinforcing Bars
31.	NFPA 557	Standard for Determination of Fire Loads for Use in Structural Fire Protection Design
32.	UBC	Uniform Building Code
ELECTRICAL :		
1.	IEC 60034	Rotating Electrical Machines
2.	IEC 60044	Instrument Transformers

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Sl. No.	DOCUMENT NO.	DESCRIPTION
3.	IEC 60076 (Various Parts)	Power Transformers
4.	IEC 60051	Direct Acting Indicating Analogue Electrical Measuring Instrument and their Accessories
5.	IEC 60079-0	Electrical Apparatus for Explosive Gas Atmospheres
6.	IEC 60092-3	Part 3: Cables (Construction, Testing and Installation)
7.	IEC 60183	Guide to the Selection of High Voltage Cables
8.	IEC 60228	Conductors of Insulated Cables
9.	IEC 60255	Electrical Relays
10.	IEC 60269	Low Voltage Fuses
11.	IEC 60287	Calculation of the Continuous Current rating of cables (100% Load Factor)
12.	IEC 60331	Fire Resisting Characteristics of Electrical Cables
13.	IEC 60332	Tests on Electric Cables Under Fire Conditions
14.	IEC 60502 1, 2, & 4	Power Cables with Extruded Insulation and their Parts Accessories for Rated Voltage from 1 kV up to 30 kV
15.	IEC 60529	Degrees of Protection Provided by Enclosure
16.	IEC 60747-6	Semi-Conductor Devices - Thyristors
17.	IEC 60831	Shunt Power Capacitors of the Self-Healing Type for AC Systems Having a Rated Voltage up to 1000 V
18.	IEC 60871	Shunt Capacitors for AC Power Systems Having A Rated Voltage Above 1000 V
19.	IEC 60909 (0 – 4)	Short Circuit Current in Three Phase Systems
20.	IEC 60947	Low Voltage Switchgear and Controlgear
21.	IEC 60439	Low Voltage Switchgear and Controlgear Assemblies
22.	IEC 61000	Electromagnetic Compatibility

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Sl. No.	DOCUMENT NO.	DESCRIPTION
23.	IEC 61642	Industrial AC Networks Affected by Harmonics – Application of Filters and Shunt Capacitors
24.	IEC 61869	Instrument Transformers
25.	IEC 61921	Power Capacitors - Low Voltage Power Factor Correction Banks
26.	IEC 62040	Uninterruptible Power Systems (UPS)
27.	IEC 62271 - 200	High Voltage Switchgear and Controlgear – Part 200 AC Metal Enclosed Switchgear and Controlgear for Rated Voltages above 1 kV up to and including 52 kV
28.	IEC 62305	Protection Against Lightning
29.	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
30.	API RP 540	Recommended Practice for Electrical Installations in Petroleum Processing Plants
31.	APR RP545	Recommended Practice for Lightning Protection of Aboveground Storage Tanks for Flammable or Combustible Liquids
32.	BS 7430	Code of Practice for Protective Earthing of Electrical Installations
33.	BS 2754	Memorandum. Construction of Electrical Equipment for Protection Against Electric Shock
34.	BS 4568 Part 1 and 2	Specification for Steel Conduit and Fittings with Metric Threads and ISO form for Electrical Installations
35.	BS 5345	Code of Practice for Selection, Installation, Maintenance of Electrical Apparatus for Use in Potentially Explosive Atmospheres
36.	BS 5501 Part 1	Electrical Apparatus for Potentially Explosive Atmospheres
37.	IEEE 141	Recommended Practice for Electric Power Distribution for Industrial Plants
38.	IEEE 519	Recommended Practice and Requirements for Harmonic Control in Electrical Power Systems
39.	IP Model Code of Practice Part 15	Area Classification Code for Installations Handling Flammable Liquids
40.	NFPA 70	National Electrical Code

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Sl. No.	DOCUMENT NO.	DESCRIPTION
41.	NFPA 70E	Standard for Electrical Safety in the Work Place
42.	NFPA 72	National Fire Alarm and Signaling Code
43.	NFPA 850	Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations
INSTRUMENTATION :		
1.	AGA 5	Natural Gas Energy Measurement
2.	AGA 8	Compressibility Factors of Natural Gas and Other Related Hydrocarbon Gases
3.	AGA 9	Measurement of gas by Multipath Ultrasonic meters
4.	AGA 10	Speed of sound in Natural Gas and other related Hydrocarbon Gases
5.	API 520	Sizing selection and installation of pressure relieving devices in refineries, Part 1 Design, Part 2 Installation
6.	API 521	Guide for pressure relieving and depressurizing systems
7.	API 526	Flanged steel pressure relief valves
8.	API 527	Seat tightness of pressure relief valves
9.	API RP 551	Process Measurement
10.	ANSI/API RP 553	Refinery Valves and Accessories for Control and Safety Instrumented Systems
11.	API RP 554	Process Control Systems
12.	API 555	Process Analyzers
13.	API STD 598	Valve Inspection and Testing
14.	API 670	Machinery Protection System
15.	API MPMS	Manual of Petroleum Measurement Standards – All Chapters
16.	ASME B16.5	Pipe Flanges and Flanged Fittings NPS ½ Through NPS 24 Metric/Inch Standard
17.	ASME B16.47	Large Diameter Steel Flanges NPS 26 Through NPS 60 Metric/Inch Standard
18.	ASME B16.10	Face-to-Face and End-to-End Dimensions of Valves

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Sl. No.	DOCUMENT NO.	DESCRIPTION
19.	ASME B16.34	Valves-Flanged, Threaded, and Welding End
20.	ASME B1.20.1	Pipe Threads, General Purpose (Inch)
21.	ASTM A269	Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service
22.	ASTM A193/A193M	Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications
23.	ASTM D 1066	Standard practice for sampling steam
24.	ASTM D 6667	Standard test method for determination of total volatile sulphur in gaseous hydrocarbons and liquefied petroleum gases by ultraviolet fluorescence
25.	BS 7671	Requirements for Electrical Installations. IEE (Institution of Electrical Engineers) wiring regulations – 17th edition July 2011
26.	EIA - RS422B	Electrical Characteristics of Balanced Voltage Digital Interface Circuits
27.	EIA - RS485A	Electrical Characteristics of Generators and Receivers for use in Balanced Digital Multipoint Systems
28.	FCI 70-2	Control Valve Seat Leakage
29.	IEC 50262	Cable Glands for electrical installations.
30.	IEC 60079-0	Explosive atmospheres - Part 0: Equipment - General Requirements
31.	IEC 60079-1	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures “d”
32.	IEC 60079-7	Explosive atmospheres - Part 7: Equipment protection by increased safety “e”
33.	IEC 60079-10	Explosive atmospheres - Part 10-1 : Classification of areas - Explosive gas atmospheres
34.	IEC 60079-11	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i”
35.	IEC 60079-14	Explosive Atmospheres Part14: Electrical Installations Design, Selection, and Erection
36.	IEC 60269-1	Low voltage fuses Part 1- General Requirements. (Fuses for voltages up to and including 1000V ac and 1500V dc)
37.	IEC 60488	Parts 1 & 2 Standard Digital Interface for Programmable Instrumentation
38.	IEC 60529	Degrees of Protection provided by enclosures (IP code)
39.	IEC 60584	Thermocouples – All Parts
40.	IEC 60617	Graphical Symbols for Diagrams
41.	IEC 60751	Industrial platinum resistance thermometer sensors and platinum temperature sensors

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Sl. No.	DOCUMENT NO.	DESCRIPTION
42.	IEC 61000-2-4	Electromagnetic compatibility (EMC) Part 2-4: Environment - Compatibility Levels for Low-Frequency Conducted Disturbances
43.	IEC 61082-1	Preparation of Documents used in Electro technology
44.	IEC 61508	Functional Safety of Electrical/electronic/ programmable Electronic Safety-Related Systems
45.	IEC 61511 - All Parts	Functional Safety - Safety Instrumented Systems for Process Industry Sector
46.	ISA 5.1	Instrumentation Symbols and Identifications
47.	ISA 5.3	Graphic Symbols for Distributed Control /Shared Display Instrumentation, Logic and Computer Systems.
48.	ISA 50.00.01	Compatibility of Analogue Signals for Electronic Industrial Process Instruments
49.	ISA 71.04	Environmental Conditions for Process Measurement and Control Systems: Airborne Contaminants
50.	ISA 75.01.01	Flow Equations for Sizing Control Valves
51.	ISA 75.02.01	Control Valve Capacity Test Procedures
52.	ISA 75.05.01	Control Valve Terminology
53.	ANSI/ISA-95-00 Series	Enterprise Control System Integration
54.	ISA MC96.1	Temperature Measurement Thermocouples
55.	ISA 99	Security for Industrial Automation and Control Systems
56.	ISO 5168	Measurement of fluid flow – Procedures for evaluation of Uncertainties
57.	ISO 6142	Gas Analysis - Preparation of calibration gas mixtures - Gravimetric method
58.	ISO 6326	Natural gas — Determination of sulphur compounds
59.	ISO 6570	Natural Gas - Determination of Potential Hydrocarbon Liquid Content - Gravimetric Methods
60.	ISO 6974-1	Natural gas - Determination of composition with defined uncertainty by gas chromatography, Part 1: General guidelines and calculation of composition
61.	ISO 6974-3	Natural Gas - Determination of Composition with Defined Uncertainty by Gas Chromatography - Part 3: Determination of Hydrogen, Helium, Oxygen, Nitrogen, Carbon Dioxide and Hydrocarbons up to C8 Using Two Packed Columns
62.	ISO 6976	Natural gas - Calculation of calorific values, density, relative density and Wobbe index from composition

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Sl. No.	DOCUMENT NO.	DESCRIPTION
63.	ISO 6978	Natural Gas - Determination of Mercury - Part 1: Sampling of mercury by chemisorption on iodine
64.	ISO 10715	Natural Gas - Sampling Guidelines
65.	ISO 10723	Natural gas - Performance evaluation for on-line analytical systems
66.	ISO 12213-2	Natural gas Calculation of compression factor Part 2: Calculation using molar-composition analysis
67.	ISO 12213-3	Natural gas — Calculation of compression factor — Part 3: Calculation using physical properties
68.	ISO 13443	Natural Gas - Standard Reference Conditions
69.	ISO 14111	Natural gas - Guidelines to traceability in analysis
70.	ISO 15970	Natural gas — Measurement of properties — Volumetric properties: density, pressure, temperature and compression factor
71.	ISO 17089-1	Measurement of fluid flow in closed conduits — Ultrasonic meters for gas — Part 1: Meters for custody transfer and allocation measurement
72.	ISO 18453	Natural gas Correlation between water content and water dew point
73.	ISO 19739	Natural gas Determination of sulphur compounds using gas chromatography
74.	MIL-STD 810F	Testing Standard for Reliability and Ruggedness Notice 3
75.	NACE MR 0175/ ISO 15156	Petroleum and Natural Gas Industries - Materials for use in H2S - Containing Environments in Oil and Gas Production
76.	NAMUR NE-43	Standardization of the signal level for the failure information of digital transmitters Issued by: NAMUR Geschäftsstelle
77.	NFPA 72	National Fire Alarm Code and Signaling Code
78.	NFPA 85	Boiler and Combustion Systems Hazards Code
79.	OIML R-137-1	Gas Meters – Part 1 - Metrological and technical requirements
80.	OIML R 137-2	Gas Meters – Part 2 - Metrological controls and performance tests
81.	OIML R 140	Measuring systems for gaseous fuel
MECHANICAL & PIPING :		
1.	ASME SEC II	Materials
2.	ASME SEC V	Non Destructive Examination

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Sl. No.	DOCUMENT NO.	DESCRIPTION
3.	ASME SEC VIII-DIV 1	Boilers & Pressure Vessels
4.	ASME SEC IX	Welding and Brazing Qualifications
5.	ASME Sec X	Fiber-Reinforced Plastic Pressure Vessels
6.	NACE-MR-0175 / ISO15156	Sulphide Stress Cracking Resistant Metallic Materials for Oil Field Equipment
7.	NACE-TM-0284	T-Method for Resistant of Steels to Stepwise Cracking
8.	NACE MR 0103	Petroleum, petrochemical and natural gas industries — Metallic materials resistant to sulfide stress cracking in corrosive petroleum refining environments
9.	ASME B31.3	Process Piping
10.	ASME B31.4	Liquid Transportation System for Hydrocarbons, LPG, Anhydrous Ammonia & Alcohol.
11.	ASME B31.8	Gas Transmission and Distribution Piping Systems
12.	ASME B36.10	Welded and Seamless Wrought Steel Pipe
13.	ASME B16.5	Pipe Flanges and Flanged Fittings
14.	ASME B16.9	Wrought Steel Butt-Welding Fittings
15.	ASME B16.11	Forged Steel Fittings, Socket Welding and Threaded.
16.	ASME B16.20	Metallic Gaskets for Pipe Flanges
17.	ASME B16.21	Nonmetallic Flat Gaskets for Pipe Flanges
18.	ASME B16.36	Stainless Steel Pipe
19.	ASME B16.47	Large Diameter Steel Flanges
20.	ASME B16.48	Line Blanks
21.	API RP 550	Instln. of Refinery Inst. & Control Systems
22.	API RP 590	Steel Line Blanks
23.	API 5L	Specification for Line Pipe

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Sl. No.	DOCUMENT NO.	DESCRIPTION
24.	API 6D	Specification for Pipeline and Piping Valves
25.	API 11P	Packaged Reciprocating Compressors for Oil and Gas Production Services
26.	API 610	Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries
27.	API 675	Positive Displacement Pumps-Controlled Volume for Petroleum, Chemical, and Gas Industry Services
28.	API 676	Positive Displacement Pumps—Rotary
29.	ASME B 73.1	Specification for Horizontal End Suction Centrifugal Pumps for Chemical Process
30.	ASME B73.2	Specification for Vertical In-Line Centrifugal Pumps for Chemical Process
31.	ASME B73.3	Specification for Sealless Horizontal End Suction Centrifugal Pumps for Chemical Process
32.	API 616	Gas Turbines for the Petroleum, Chemical, and Gas Industry Services
33.	API 617	Axial and Centrifugal Compressors and Expanders / Compressors
34.	API 618	Reciprocating Compressors for Petroleum, Chemical and Gas Industry Services
35.	API 619	Rotary-type Positive Displacement Compressors for Petroleum, Petrochemical and Natural Gas Industries
36.	API 672	Packaged, Integrally Geared Centrifugal Air Compressors for Petroleum, Chemical, and Gas Industry Services
37.	API 681	Liquid Ring Vacuum Pumps and Compressors for Petroleum, Chemical, and Gas Industry Services
38.	ISO 13631	Petroleum and natural gas industries - Packaged Reciprocating Gas Compressors
39.	API 682	Pumps—Shaft Sealing Systems for Centrifugal and Rotary Pumps
40.	API 673	Centrifugal Fans for Petroleum, Chemical, and Gas Industry Services
41.	TEMA	Tubular Exchanger Manufacturers Assn Standard
42.	API 660	Shell and Tube Heat Exchangers

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Sl. No.	DOCUMENT NO.	DESCRIPTION
43.	API 661	Petroleum, Petrochemical, and Natural Gas Industries—Air-cooled Heat Exchangers
44.	API 662	Plate and Frame Heat Exchangers
45.	API 620	Design and Construction of Large, Welded, Low-pressure Storage Tanks
46.	API 650	Welded Steel Tanks for Oil Storage.
47.	API 651	Cathodic Protection of Above Ground Storage Tanks.
48.	API STD 653	Tank Inspection, Repair, Alteration & Reconstruction
49.	API 12F	Specification for Shop Welded Tanks.
50.	API 12D	Specification for Field Welded Tanks.
51.	API 12P	Specification for Fiberglass Reinforced Plastic Tanks
52.	API 560	Fired Heaters for General Refinery Service
53.	API 535	Burners for Fired Heaters in General Refinery Services
54.	ASME STS-1	Steel Stacks
55.	API 520	RP for Sizing, Selection and Installation of Pressure - Relieving Devices in Refineries.
56.	API 537	Flare Details for General Refinery and Petrochemical Service
57.	API STD 2000	Venting Atmospheric and Low Pressure Storage Tanks.
58.	API RP 2003	Protection against Ignition Arising out of Static, Lightning and Stray Currents
59.	API RP 945	Avoiding Environmental Cracking in Amine Units
60.	API 2555	Method for Liquid Calibration of Tanks
61.	API Manual	Manual of Petroleum Management Standards: Sections 2A & 2B.
62.	API RP 2201	Safe Hot Tapping Practices in the Petroleum & Petrochemical Industries.
63.	AWS D1.1	Structural Welding Code
64.	BS 729 & 443	Hot Dip Galv. Coatings on Iron and Steel Articles

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Sl. No.	DOCUMENT NO.	DESCRIPTION
65.	BS EN 10029	Specification for Tolerances on Dimensions, Shape and Mass for Hot Rolled Plates 3mm Thick or above.
66.	BS EN 10113(Parts 1-3)	Hot-Rolled Products in Weldable Fine Grain Structural Steels.
67.	BS EN 10137(Parts 1-3)	Plates and Wide Flats Made of High Yield Strength Structural Steels in the Quenched and Tempered or Precipitation Hardened Steels- Delivery Conditions.
68.	BS EN ISO1461	Metallic Coating – Hot Dip Galvanized Coatings on Fabricated Ferrous Products – Requirements.
69.	ANSI B 16.22	Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings
70.	ANSI B 16.3	Malleable Iron Threaded Fittings.
71.	ASCE 7-05	Minimum Design Loads for Buildings and other Structures
72.	ASTM B 88	Specification for Seamless Copper Water Tube
73.	ASTM A615 / A615M	Standard Specification for Deformed and Plain Billet – Steel Bars for Concrete Reinforcement
74.	ASTM A36 / A36M	Standard Specification for Carbon Structural Steel
75.	ASTM A242 / A242-93	Standard Specification for High Strength Low Alloy Structural Steel
76.	ASTM A216	Standard Specification for Steel Casting, Carbon, Suitable for Fusion Welding for High- Temperature Service.
77.	ASTM A325M	Standard Specification for High Strength Bolts for Structural Steel Joints (Metric)
78.	ASTM F1554	Standard Specification for Anchor Bolts, Steel 36, 55 and 105-ksi Yield Strength
79.	ASTM A153/ A153M	Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware
80.	ASTM F1637	Standard Practice for Safe Walking Surface
81.	ASTM A490M	Standard Specification for High Strength Steel Bolts, Classes 10.9 and 10.9.3 for Structural Steel Joints (Metric)
82.	ASTM A497	Standard Specification for Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement.

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Sl. No.	DOCUMENT NO.	DESCRIPTION
83.	ASTM A563	Standard Specification for Carbon Alloy Steel Nuts
84.	ASTM F436	Standard Specification for Hardened Steel Washers.
85.	ASTM D1556	Test Method for Density and Unit Weight of Soil in Place by the Sand- Cone-Method.
86.	AISC	Manual of Steel Construction (Allowable Stress Design) – Ninth Edition.
87.	ANSI / AWS D1.1	Structural Welding Code – Steel
88.	BS 864	Copper Alloy Compression Fittings.
89.	BS EN 1254	Copper & Copper Alloys: Plumbing Fittings.
90.	BS 6700	Sterilization of hot and cold potable water services and tanks
91.	MSS-SP-25	Standard Marking System for Valves
92.	MSS-SP-44	Steel Pipeline Flanges
93.	PFI-ES7	Min. Length & Spacing of Nozzles
94.	ISO 9001-2000	Quality Management Systems
95.	NFPA	Fire related Standards
96.	NFPA 1	Fire Code
97.	NFPA 10	Standard for Portable Fire Extinguishers
98.	NFPA 11-11A	Low, Medium and High-Expansion Foam
99.	NFPA 11C	Mobile Foam Apparatus
100.	NFPA 12	Carbon Dioxide Extinguishing Systems
101.	NFPA 13	Installation of Sprinkler Systems
102.	NFPA 14	Standard for the Installation of Standpipe and Hose Systems
103.	NFPA 15	Water Spray Fixed Systems for Fire Protection
104.	NFPA 16	Foam-Water Sprinkler and Foam Water Spray systems
105.	NFPA 17	Dry Chemical Fire extinguishers

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Sl. No.	DOCUMENT NO.	DESCRIPTION
106.	NFPA 17A	Wet Chemical Extinguishers
107.	NFPA 20	Installation of Stationary Pumps for Fire
108.	NFPA 22	Standard for Water Tanks for Fire Protection
109.	NFPA 24	Installation of Private Fire Service Main
110.	NFPA 25	Based Fire Protection Systems.
111.	NFPA 30	Flammable and Combustible Liquids Code
112.	API RP 2001	Fire Protections in Refineries
113.	API RP 2030	Application of Fixed Water Spray Systems for Fire Protection in the Petroleum and Petrochemical Industries
114.	NFPA 22	Standard for Water Tanks for Fire Protection
115.	NFPA 24	Installation of Private Fire Service Main
116.	NFPA 25	Standard for the Inspection, Testing, and Maintenance of Water- Based Fire Protection Systems.
117.	NFPA 30	Flammable and Combustible Liquids Code
118.	API RP 2001	Fire Protections in Refineries
119.	ASME B16.25	Butt welding Ends
120.	ASME B18.2.1	Square Hex Heavy Hex and Askew head bolts and Hex Heavy Hex, Hex Flange, Lobed Head and Lag Screw
121.	ASME B18.2.2	Nuts for General Application, Machnie screw nuts, Hex square, Hex Flange and coupling Nuts.
122.	API 594	Check Valves
123.	API 600	Bolted Bonnet Steel Gate Valves.
124.	API 602	Steel Gate, Globe and Check Valves for Size DN 100 and Smaller.
125.	API 607	Fire test for soft seated quarter turn valves
126.	API 608	Metal Ball valves

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Sl. No.	DOCUMENT NO.	DESCRIPTION
127.	API 609	Butterfly valves
128.	BS 1868	Specification for steel check valves for petroleum, petrochemical and allied industries
129.	BS 1873	Specification for steel Globe and Globe stop and Check valves for petroleum, petrochemical and allied industries
130.	BS EN ISO 15761	Steel Gate, Globe, and Check valves for size DN 100 and smaller, for petroleum and natural gas industries
131.	BS EN ISO 17292	Metal Ball valves for petroleum, petrochemical and allied industries
132.	ISO 10434	Bolted Bonnet steel Gate valves for petroleum, petrochemical and allied industries
133.	ISO 10497	Testing of valves- fire type-testing requirements
134.	ISO 14313	Petroleum and Natural Gas Industries-pipeline transportation systems-pipeline valves
135.	MSS-SP-080	Bronze, Gate Globe, Angle and Check valves
136.	NACE MR 0175/ ISO 15156 Parts 1 to 3 including Technical circular	Petroleum and Natural Gas Industries- Materials for use in H2S containing environments in Oil& Gas Production
137.	NACE-TM0284	Evaluation of pipeline and pressure vessel steel for resistance to hydrogen induced cracking.
138.	NACE-TM0177	Laboratory testing of metals for resistance to Sulphide stress cracking and stress corrosion cracking in H_2S environments