

DEP SPECIFICATION

GLOBAL TECHNICAL STANDARDS INDEX

DEP 00.00.05.05-Gen.

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DESIGN AND ENGINEERING PRACTICE



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These views are based on the experience acquired during involvement with the design, construction, operation and maintenance of processing units and facilities. Where deemed appropriate DEPs are based on, or reference international, regional, national and industry standards.

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All administrative queries should be directed to the DEP Administrator in Shell GSI.

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PART I INTRODUCTION**1.1 SCOPE**

This index lists the global technical standards in circulation on the date of issue.

In Part II, the current set of standards is listed, organized by engineering discipline. In Part III, the standards are listed in numerical order. Part III also shows standards that have been withdrawn. The Custodian of each standard is also shown in Part III.

In addition to DEPs, this index includes other types of global technical standards administered by the Technical Standards Group; see (Part I, 1.2).

Standard drawings, standard forms and standard requisitions are not covered in this index, as they are covered in separate indices; see (Part I, 1.3).

This index replaces the previous index dated September 2013; see (Part I, 1.8) regarding the main changes.

1.2 DEPS AND OTHER TYPES OF TECHNICAL STANDARDS

The DEPs and other technical standards administered by the Technical Standards Group are classified as follows:

Classification	Type	Purpose/Comment
DEP-Gen.	DEP-Specification ⁽¹⁾	For project use in engineering, procurement and construction. Provides a basis for understanding between the Principal, Contractor and Manufacturer/Supplier, specifying requirements for a product, process or service
	DEP-Informative ⁽²⁾	A companion document to the DEP Specification of the same number. Explains the reasons for certain requirements in the DEP Specification and contains background information. For Shell use – not intended to be given to Engineering Contractor or Manufacturers/Suppliers.
DWS-Gen.	Deepwater Standard ⁽³⁾	Restricted access within Shell only. Provides a basis for understanding between the Principal, Contractor and Manufacturer/Supplier, specifying requirements for a product, material or process specifically for deepwater installations.
RMP-Gen.	Run & Maintain Practice ⁽⁴⁾	For internal Shell use. A temporary document containing run and maintain content formerly in the DEPs that will be moved into the business operating frameworks. Applies to the “operate, inspect and maintain” phase of an asset life.

- NOTES:
1. Distributed via “Shell DEPs Online”. Distributed under license agreement to authorised Customers and, where necessary, to Shell nominated Contractors and Manufacturers/Suppliers.
 2. Distributed for use within Shell and to authorised, select Customers via “Shell DEPs Online”.
 3. Restricted access within Shell via the Technical Standards Portal.
 4. Access within Shell via the Technical Standards Portal.

Wells Standards have been withdrawn from the DEP system and are no longer administered by the Technical Standards Group. In Shell, information on Wells Standards is provided through the following web site:

http://swwww.shell.com/pt/business_units/wells/technical_assurance_standards/TA.html

1.3 STANDARD DRAWINGS, STANDARD FORMS AND REQUISITIONS

Standard Drawings are indexed in DEP 00.00.06.06-Gen.

Standard Forms are indexed in DEP 00.00.10.05-Gen.

Requisition sheets are indexed in DEP 30.10.01.10-Gen.

1.4 DISTRIBUTION OF DEPS

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NOTE: DEP Informatives are for internal use and are not to be distributed outside of Shell, except under license agreement to authorised select Customers only.

In the past, each version of the DEPs has been released on a separate DVD-ROM. The distribution via DVD-ROM has been discontinued. Current and future releases of the DEPs will be distributed exclusively using the Shell DEPs Online system.

1.5 DISTRIBUTION OF OTHER GLOBAL TECHNICAL STANDARDS

Global Technical Standards other than DEPs, as described in (Part I, 1.2), are made available via the Technical Standards web portal at www.shell.com/standards. Updates to these documents generally coincide with the distribution of the DEPs as described in (Part I, 1.4).

Standard Drawings, Standard Forms and Requisitions are distributed via "Shell DEPs Online" in the same manner as DEPs.

1.6 AMENDMENTS

For revisions up until DEP version 36 (February 2013), between formal revisions, if an amendment was required to a standard, an Amendment was issued. These Amendments were numbered A0x, where "x" is a sequential number of the amendments for the particular document.

Amended standards are indicated in the 2nd column of Part III of this index.

1.7 CUSTODIANSHIP

The Custodians responsible for active standards are identified in the 4th column of the numerical index (Part III).

1.8 SUMMARY OF MAIN CHANGES

This index is a full revision of the index of the same number dated September 2013.

In Part III, changes are indicated by a vertical line (|) in the left margin of the index. The specific changes are shown in red text.

1.9 COMMENTS ON THIS DEP

Comments on this DEP may be submitted to the Administrator using one of the following options:

Shell DEPs Online (Users with access to Shell DEPs Online)	Enter the Shell DEPs Online system at https://www.shelldeps.com Select a DEP and then go to the details screen for that DEP. Click on the "Give feedback" link, fill in the online form and submit.
DEP Feedback System (Users with access to Shell Wide Web)	Enter comments directly in the DEP Feedback System which is accessible from the Technical Standards Portal http://swwww.shell.com/standards . Select "Submit DEP Feedback", fill in the online form and submit.
DEP Standard Form (Other users)	Use DEP Standard Form 00.00.05.80-Gen. to record feedback and email the form to the Administrator at standards@shell.com .

Feedback that has been registered in the DEP Feedback System by using one of the above options will be reviewed by the DEP Custodian for potential improvements to the DEP.

PART II CURRENT STANDARDS LISTED BY ENGINEERING DISCIPLINE**1. ADMINISTRATIVE (INDICES)**

DEP Number	Title
DEP 00.00.05.05-Gen.	Global technical standards index
DEP 00.00.06.06-Gen.	Standard drawings index
DEP 00.00.10.05-Gen.	Standard forms index
DEP 30.10.01.10-Gen.	Requisitions index

2. ADMINISTRATIVE (TECHNICAL STANDARDS TEAM)

DEP 00.00.00.30-Gen.	Procedure for global technical standards publications
DEP 00.00.07.10-Gen.	Design class tables
DEP 00.00.07.30-Gen.	Application of a functional specification (endorsement of ISO 13879, ISO 13880 and ISO/TR 13881)
DEP 00.00.20.10-Gen.	The use of SI quantities and units (endorsement of ISO/IEC 80000)

3. ANALYTICAL

DEP 32.31.56.30-Gen.	Implementation of near-infrared systems for main fuels blending
DEP 34.17.10.31-Gen.	Laboratories

4. CIVIL, STRUCTURAL & OFFSHORE

DEP 30.46.00.31-Gen.	Thermal insulation
DEP 30.48.00.34-Gen.	Phosphate-conversion coatings for marine equipment
DEP 30.48.30.31-Gen.	Cement lining of pipes (based on EN 10298)
DEP 30.48.60.12-Gen.	Design and installation of chemical-resistant protection systems for concrete surfaces (based on EN 14879-Parts 1, 3, 5 and 6)
DEP 31.06.15.10-Gen.	Marine loading arms (amendments/supplements to OCIMF design and construction specification for marine loading arms)
DEP 31.40.10.22-Gen.	Top Tension Riser Tensioning Systems
DEP 34.00.01.10-Gen.	Earthquake design for onshore facilities - Seismic hazard assessment
DEP 34.00.01.30-Gen.	Structural design and engineering of onshore structures
DEP 34.11.00.10-Gen.	Onshore and nearshore site investigations
DEP 34.11.00.11-Gen.	Site preparation and earthworks including tank foundations and tank farms
DEP 34.11.00.12-Gen.	Geotechnical and foundation engineering – onshore
DEP 34.13.20.31-Gen.	Roads, paving, surfacing, cable trenches, slope protection and fencing
DEP 34.14.20.31-Gen.	Drainage systems and primary treatment facilities
DEP 34.17.00.32-Gen.	Design and engineering of buildings
DEP 34.17.10.30-Gen.	Design of blast resistant onshore buildings, control rooms and field auxiliary rooms
DEP 34.17.10.33-Gen.	Portable blast resistant modules
DEP 34.17.10.34-Gen.	Requirements for mobile and construction camps
DEP 34.19.19.11-Gen.	Grouting of equipment and structure bases
DEP 34.19.20.11-Gen.	Passive fire protection for onshore facilities
DEP 34.19.20.31-Gen.	Reinforced concrete structures

DEP 34.24.26.31-Gen.	Chimneys selection, design and engineering (based on EN 1992-1-1, EN 1993-3-2, EN 1443, EN 13084 Parts 1, 2, 4, 5, 6, 7 and 8)
DEP 34.28.00.31-Gen.	Onshore steel structures
DEP 34.28.00.33-Gen.	Onshore ancillary steel structures
DEP 34.51.01.32-Gen.	Full containment refrigerated LNG tanks
DEP 34.51.01.34-Gen.	Full containment refrigerated LPG tanks
DEP 35.00.00.10-Gen.	Vessel Integrity, Marine Systems - Requirements for Selection and Operation of Vessels (Endorsement of DNV RP-H104)
DEP 35.00.10.10-Gen.	Design of jetty facilities (amendments/supplements to BS 6349-1/2/4)
DEP 35.00.10.11-Gen.	Jetty gangways
DEP 37.00.10.10-Gen.	Metoccean design and operating considerations (endorsement of ISO 19901-1:2005)
DEP 37.00.10.11-Gen.	Metoccean data acquisition – definition, implementation and analysis
DEP 37.00.10.12-Gen.	Metoccean data acquisition - Real time systems
DEP 37.01.10.11-Gen.	Design of offshore topsides facilities against fire and blast loading (amendments/supplements to API RP 2FB)
DEP 37.11.00.30-Gen.	Site specific assessment of mobile offshore jack-up units
DEP 37.14.10.10-Gen.	Drain systems for offshore installations
DEP 37.17.10.10-Gen.	Design of offshore living quarters
DEP 37.17.10.11-Gen.	Design of offshore temporary refuges
DEP 37.19.00.10-Gen.	Offshore structures - General requirements (endorsement of ISO 19900)
DEP 37.19.00.12-Gen.	Offshore topsides structures (amendments/supplements to ISO 19901-3:2010)
DEP 37.19.00.13-Gen.	Fixed concrete offshore structures (amendments/supplements to ISO 19903:2006)
DEP 37.19.00.14-Gen.	Seismic design procedures and criteria - offshore (amendments/supplements to ISO 19901-2)
DEP 37.19.00.30-Gen.	Fixed steel offshore structures (amendments/supplements to ISO 19902:2007)
DEP 37.19.10.30-Gen.	Weldable structural steels for fixed offshore structures (amendments/supplements to EN 10225 and EN 10025)
DEP 37.19.10.31-Gen.	Glass reinforced plastic (GRP) gratings for offshore installations
DWS 37.19.20.11-Gen.	Weight management plan for floating platforms (amendments/supplements to ISO 19901-5)
RMP 37.19.60.50-Gen.	Structural inspection of offshore installations
DEP 37.81.00.11-Gen.	Offshore coordination team management and construction hook-up work planning
DEP 37.81.10.10-Gen.	Generic design and analysis for steel catenary risers and catenary umbilical systems for offshore structures
DWS 37.81.10.11-Gen.	Design and analysis of top tension risers for deepwater offshore floating structures (based on API RP 2RD/ISO WD 13628-12)
DEP 37.81.10.12-Gen.	Design of anchor piles for deepwater mooring systems (based on API RP 2SK)
DEP 37.81.10.13-Gen.	Global design and analysis of permanently moored deepwater floating production systems (amendments/supplements to API RP 2FPS, API RP 2SK and API RP 2SM)
DEP 37.81.10.14-Gen.	Global design and analysis of deepwater tension leg platforms (amendments/supplements to API RP-2T)
DWS 37.81.10.18-Gen.	Design specification for deepwater tension leg platform, semisubmersible and spar hull (based on API RP 2T and API RP 2FPS)
DEP 37.81.10.19-Gen.	Marine operations requirements - loadout, transportation and installation deepwater structures (amendments/supplements to ISO 19901-6 or API RP 2MOP)
DEP 37.81.10.20-Gen.	Design of driven pile foundations for tension leg platforms (based on API RP 2T)
DEP 37.81.10.21-Gen.	Structural design of tendon systems for deepwater offshore tension leg platforms (amendments/supplements to API RP 2T)
DEP 37.81.10.30-Gen.	Design, fabrication and testing requirements for deepwater project VIV suppression strakes for SCR's, TTR's, umbilicals, TLP tendons and jumpers

DEP 37.81.10.31-Gen.	Structural steel design of small deepwater offshore skids, facility packages, and subsea sleds and manifolds (based on AISC Steel Construction Manual ASD, API RP 2A-WSD and AWS D1.1)
DEP 37.81.10.32-Gen.	Structural steel fabrication of small deepwater offshore skids, facility packages, and subsea sleds and manifolds (based on AISC steel construction manual ASD, API RP 2A-WSD and AWS D1.1)
DEP 37.81.10.33-Gen.	Structural welding and inspection of deepwater floating production systems (amendments/supplements to AWS D1.1/D1.1M:2008)
DEP 37.81.10.34-Gen.	Structural fabrication of deepwater floating production systems
DWS 37.81.10.36-Gen.	Structural steel design of deepwater offshore topsides decks for floating systems
DEP 37.81.10.38-Gen.	Design, fabrication and testing requirements of permanent VIV suppression fairing systems for offshore structures
DEP 37.81.20.30-Gen.	Manufacture, testing, and inspection of carbon and low-alloy steel castings Grades 345-586 N/mm ² (50-85 KSI) for primary steel applications in deepwater offshore structures and pipelines
DEP 37.81.20.33-Gen.	Manufacture, testing, and inspection of weldable structural steel plate grades 345 552 N/mm ² (50-80 ksi) for special/critical steel applications in deepwater offshore structures (based on ASTM A20)
DEP 37.81.20.34-Gen.	Manufacture, testing, and inspection of weldable structural steel plate grades 345-552 N/mm ² (50-80 ksi) for primary steel applications in deepwater offshore structures (based on ASTM A6)
DWS 37.81.20.35-Gen.	Technical specification for elastomeric flexible joints for use in deepwater offshore dynamic riser applications
DEP 37.81.20.36-Gen.	Syntactic foam buoyancy modules for use in deepwater offshore dynamic riser applications
DEP 37.81.20.37-Gen.	Manufacture, testing, and inspection of carbon and low-alloy steel forgings for special/critical steel applications in deepwater offshore structures and pipelines
DEP 37.81.20.38-Gen.	Manufacture, testing, and inspection of weldable structural rolled shapes grades 345-483 N/mm ² (50-70 KSI) for primary steel applications in deepwater offshore structures (based on ASTM A6)
DEP 37.81.20.39-Gen.	Manufacture, testing, and inspection of carbon and low-alloy steel forgings for primary steel applications in deepwater offshore structures and pipelines (based on ASTM A788, ASTM A961 and MSS SP-75)
DEP 37.81.21.30-Gen.	Manufacture, testing, and inspection of permanent mooring system chain and accessories for floating structures (based on DNV-OS-E302)
DEP 37.81.21.31-Gen.	Permanent Mooring System Wire Rope, Sockets, Pins and Connectors for Deepwater Floating Structures (Based on DNV-OS-E304)
DEP 37.81.21.32-Gen.	Surface preparation, materials, application, and quality control testing of aluminum-ceramic basecoat with resin-bonded fluorocarbon topcoat coating systems for deepwater offshore equipment
DEP 37.81.21.33-Gen.	Surface preparation, materials, application, and quality control testing of low friction corrosion resistant fluorocarbon coating systems for deepwater offshore equipment
DEP 37.81.21.34-Gen.	Thermal-sprayed ceramic coating requirements
DEP 37.81.21.35-Gen.	General requirements for top tensioned riser tendon and mooring equipment for deepwater floating production systems
DEP 37.81.41.40-Gen.	9-5/8 inch riser threaded connector, gauging specification/quality plan
DEP 37.81.41.41-Gen.	10-3/4 inch riser threaded connector, gauging specification/quality plan
DEP 37.81.41.42-Gen.	12-3/4 inch riser threaded connector, gauging specification/quality plan
DEP 37.81.41.43-Gen.	14 inch riser threaded connector, gauging specification/quality plan
DEP 37.90.10.32-Gen.	Dynamically positioned (DP) vessels for construction, drilling/completions/well intervention activities – selection and operation
DEP 37.90.10.34-Gen.	Selection and application of synthetic rope for wet towing of large offshore structures
DEP 37.91.10.10-Gen.	Single point mooring (SPM) systems
DEP 37.91.10.11-Gen.	Mobile mooring systems (based on API RP 2SK, API RP 2SM and API RP 2I)
DEP 37.91.10.30-Gen.	Mooring and berthing systems, including fenders, quick release hooks, and docking aid systems
DEP 37.91.20.30-Gen.	Oil loading and discharge hoses for offshore mooring installations (amendments/supplements to OCIMF guide to manufacturing and purchasing hoses for offshore moorings (GMPHOM 2009))
DEP 37.92.10.30-Gen.	Offshore pedestal-mounted cranes (amendments/supplements to API Spec 2C)

DEP 39.01.20.36-Gen.	TLP tendon and floating structure top-tensioned riser girth welding and inspection requirements
DEP 39.40.20.32-Gen.	Elastomeric flexible elements for use in TLP tendons
DEP 40.10.01.12-Gen.	Polyester rope for deepwater mooring (amendments/supplements to abs guidance notes on the application of fiber rope for offshore mooring)
DEP 60.00.10.13-Gen.	Mobile crane foundation assessment
DEP 80.00.10.11-Gen.	Layout of onshore facilities
DEP 80.00.10.12-Gen.	Layout of offshore facilities
DEP 80.80.00.10-Gen.	Lifeboats and rescue boats (amendments/supplements to SOLAS, LSA and DNV-OS-E406)
DEP 80.80.00.14-Gen.	Offshore facilities life-saving appliance requirements

5. ELECTRICAL

DEP 33.64.10.10-Gen.	Electrical engineering design
DEP 33.64.10.12-Gen.	Electrical supply and generation - design and operation
DEP 33.64.10.17-Gen.	Application of protective functions for electrical systems
DEP 33.64.10.32-Gen.	Electrical network monitoring and control system for industrial networks
DEP 33.64.10.33-Gen.	Electromagnetic compatibility (EMC)
DEP 33.64.20.10-Gen.	Electrical engineering design for North American application
DEP 33.64.30.30-Gen.	Electrical packaged equipment requirements for North American application
DEP 33.65.11.31-Gen.	Synchronous AC machines (amendments/supplements to IEC 60034-1 and IEC 60034-14)
DEP 33.65.11.32-Gen.	Packaged alternating current generator sets
DEP 33.65.11.34-Gen.	Synchronous AC machines for North American application (amendments/supplements to API 546)
DEP 33.65.11.35-Gen.	Packaged unit AC generator sets for North American applications
DEP 33.65.40.31-Gen.	Power transformers (amendments/supplements to IEC 60076-1 and IEC 60076-11)
DEP 33.65.40.32-Gen.	Liquid-immersed transformers for North American application
DEP 33.65.50.31-Gen.	Static DC uninterruptible power supply (DC UPS) units
DEP 33.65.50.32-Gen.	Static A.C. uninterruptible power supply unit (static A.C. UPS unit)
DEP 33.65.50.33-Gen.	Design and fabrication of AC uninterruptible power supplies for North American applications
DEP 33.65.50.34-Gen.	Design and fabrication of DC uninterruptible power supplies for North American applications
DEP 33.65.60.30-Gen.	Solar power systems
DEP 33.66.05.31-Gen.	Electrical machines - Cage-induction types (amendments/supplements to IEC 60034-1 and IEC 60034-14)
DEP 33.66.05.32-Gen.	AC electrical adjustable speed drive systems - Rated 375 KW and larger for North American application (amendments to IEEE STD 1566:2005)
DEP 33.66.05.33-Gen.	A.C. electrical variable speed drive systems
DEP 33.66.05.35-Gen.	LV induction motors for North American application (amendments/supplements to IEEE Std 841)
DEP 33.66.05.36-Gen.	MV induction motors for North American application (amendments/supplements to API 541)
DEP 33.66.05.37-Gen.	General-purpose form-wound squirrel cage induction motors – 250 horsepower and larger for North American application (amendments/supplements to API 547)
DEP 33.66.05.38-Gen.	Design and fabrication of MV motor control centres for North American application (amendments to UL 347/CAS C22.2 No. 253-09)
DEP 33.66.05.39-Gen.	Design and fabrication of low voltage motor control centres for North American application (amendments to UL 845/CSA C22.2 NO. 254-05)
DEP 33.67.01.31-Gen.	Low voltage switchgear and controlgear assemblies (amendments/supplements to IEC 61439)
DEP 33.67.01.32-Gen.	Design and fabrication of LV switchgear for North American applications

DEP 33.67.40.30-Gen.	Design and fabrication of MV switchgear for North American applications (amendments/supplements to IEEE C37.20.2)
DEP 33.67.40.31-Gen.	Design and fabrication of MV metal-enclosed interrupter switchgear for North American applications (amendments/supplements to IEEE C37.20.3:2006)
DEP 33.67.51.31-Gen.	High-voltage switchgear and control gear assemblies for rated voltages between 1 kV and 52 kV (amendments/supplements to IEC 62271-200)
DEP 33.67.51.32-Gen.	Gas-insulated, metal-enclosed switchgear and controlgear for rated voltages above 52 kV (amendments/supplements to IEC 62271-203)
DEP 33.68.30.31-Gen.	Electrical heating system for frost heave prevention of refrigerated hydrocarbon storage tanks
DEP 33.68.30.32-Gen.	Electrical trace heating
DEP 33.68.30.33-Gen.	Electrical process heaters
DEP 33.68.30.34-Gen.	Electrical trace heating for North American application
DEP 33.80.00.30-Gen.	Navigational aids for fixed offshore structures
DEP 34.17.10.37-Gen.	Design and fabrication of modular electrical power centers for North American application
DEP 63.10.08.11-Gen.	Field commissioning of electrical installations and equipment
DEP 63.10.08.14-Gen.	Field commissioning and testing of electrical installations and equipment for North American application
RMP 63.10.08.50-Gen.	Maintenance of electrical installations and equipment
DEP 63.20.08.10-Gen.	Electrical installation for North American application
DEP 80.00.10.13-Gen.	Area classification and electrical equipment spacing for North American application (amendments/supplements to API RP505/API RP500)
DEP 80.64.10.10-Gen.	Electrical safety rules
DEP 80.64.10.11-Gen.	Static electricity

6. HEALTH

DEP 30.00.60.10-Gen.	Human factors engineering in projects
DEP 30.00.60.13-Gen.	Human factors engineering – valves
DEP 30.00.60.14-Gen.	Human factors engineering - application during construction
DEP 30.00.60.15-Gen.	Human factors engineering - control room design
DEP 30.00.60.16-Gen.	Human factors engineering - Human machine interface design for situation awareness
DEP 30.00.60.18-Gen.	Human factors engineering - design and procurement of skid-packaged units
DEP 30.00.60.19-Gen.	Human factors engineering – Design for process safety critical tasks
DEP 30.00.60.20-Gen.	Human factors engineering – Workspace design
DEP 30.00.60.21-Gen.	Human factors engineering – labelling of facilities, equipment and piping

7. MARITIME OPERATIONS

DEP 35.00.00.11-Gen.	Wet towing of mobile offshore (drilling) units
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8. MECHANICAL, MATERIALS & INTEGRITY

DEP 02.00.00.10-Gen.	Preparation of technical drawings
DEP 30.10.02.11-Gen.	Metallic materials – Selected standards
DEP 30.10.02.13-Gen.	Non-metallic materials - selection and application
DEP 30.10.02.14-Gen.	Carbon steel corrosion engineering manual for upstream facilities

DEP 30.10.02.15-Gen.	Materials for use in H ₂ S-containing environments in oil and gas production (amendments and supplements to ISO 15156:2009)
DEP 30.10.02.16-Gen.	Evaluation of pipeline and pressure vessel steels for resistance to hydrogen-induced cracking (amendments/supplements to NACE TM0284)
DEP 30.10.02.17-Gen.	Wet H ₂ S requirements for downstream pressure vessels and piping
DEP 30.10.02.31-Gen.	Metallic materials - prevention of brittle fracture in new assets
DEP 30.10.02.32-Gen.	Materials and fabrication requirements for 2¼Cr-1Mo, 2¼Cr-1Mo-¼V, 3Cr-1Mo & 3Cr-1Mo-¼V heavy wall pressure vessels (amendments/supplements to API RP 934-A)
DEP 30.10.02.34-Gen.	Casting requirements for pressure retaining and rotating equipment components
DEP 30.10.02.35-Gen.	Technical requirements for the supply of components in 6Mo austenitic, 22Cr duplex and 25Cr super duplex stainless steel
DEP 30.10.02.36-Gen.	Materials and fabrication requirements for 1¼Cr-½Mo pressure vessels (amendments/supplements to API RP 934-C and API RP 934-E)
RMP 30.10.02.50-Gen.	Metallic materials - Prevention of brittle fracture in existing assets
DEP 30.10.05.11-Gen.	Plant model construction and review
DEP 30.10.60.18-Gen.	Welding of metals (amendments/supplements to API RP 582)
DEP 30.10.60.30-Gen.	Welding on pressurized pipes (amendments/supplements to API Standard 1104)
DEP 30.10.60.31-Gen.	Oxidation of stainless steel weldments
DEP 30.10.73.10-Gen.	Cathodic protection
DEP 30.10.73.31-Gen.	Design of cathodic protection systems for onshore buried pipelines and on-plot piping (amendments/supplements to ISO 15589-1:2003)
DEP 30.10.73.32-Gen.	Cathodic Protection Systems for Subsea Pipelines and Hardware (Amendments/Supplements to ANSI/NACE SP0607-2007/ISO 15589-2)
DEP 30.10.73.33-Gen.	Installation and commissioning of onshore cathodic protection systems
DEP 30.48.00.31-Gen.	Protective coatings for onshore and offshore facilities
DEP 30.48.00.32-Gen.	Coating of fasteners
DEP 30.48.40.31-Gen.	Thermal spray coatings of aluminum
DEP 30.48.60.10-Gen.	Rubber-lined process equipment
DEP 30.48.60.13-Gen.	Design and installation of chemical-resistant brick lining for process equipment (based on EN 14879-Parts 1, 4 and 6)
DEP 30.55.03.30-Gen.	Validation of NDE for fabrication inspection
DEP 31.01.10.10-Gen.	Chemical injection systems for upstream production facilities
DEP 31.01.10.11-Gen.	Corrosion prevention and control of water injection systems
DEP 31.10.00.10-Gen.	Positive material identification (PMI) program
DEP 31.10.00.31-Gen.	Noise control (amendments/supplements to ISO 15664)
DEP 31.10.03.10-Gen.	Symbols and identification system - Mechanical
DEP 31.22.00.12-Gen.	UT in lieu of RT for code construction of pressure equipment
DEP 31.22.00.30-Gen.	Equipment criticality in pressure vessel design
DEP 31.22.00.31-Gen.	Unfired pressure vessels
DEP 31.22.10.35-Gen.	Manufacturing report for pressure vessels
DEP 31.22.30.14-Gen.	Glass-fibre reinforced plastic vessels
DEP 31.24.40.12-Gen.	Fabric expansion joints (endorsement of RAL-GZ 719)
DEP 31.24.40.31-Gen.	Materials for high-temperature conversion process furnace parts
DEP 31.24.49.31-Gen.	Fabrication of heater piping
DEP 31.36.10.30-Gen.	Hydraulic systems for the operation of on/off valves in protective functions
DEP 31.38.01.10-Gen.	Piping class - Basis of design
DEP 31.38.01.11-Gen.	Piping - General requirements
DEP 31.38.01.12-Gen.	Piping classes - Refining and chemicals
DEP 31.38.01.13-Gen.	Compilation of bill of material for piping isometrics

DEP 31.38.01.15-Gen.	Piping classes - Exploration and production
DEP 31.38.01.19-Gen.	Water injection in downstream hydroprocessing units for corrosion control
DEP 31.38.01.20-Gen.	Design of injection points, injection systems, and corrosive mix points for downstream processing applications
DEP 31.38.01.21-Gen.	Compilation of a specification for piping systems
DEP 31.38.01.29-Gen.	Pipe supports
DEP 31.38.01.31-Gen.	Shop and field fabrication of piping
DEP 31.38.30.11-Gen.	Protective heating of piping systems (non-electrical)
RMP 31.40.00.50-Gen.	Corrosion mitigation strategy for wet sour gas carbon steel pipelines
DEP 31.40.10.19-Gen.	Glass-fibre reinforced plastic pipeline and piping systems
DEP 31.40.10.20-Gen.	Spoolable fibre-reinforced plastic pipes
RMP 31.40.10.50-Gen.	Glass-fibre reinforced plastic pipeline and piping systems - Maintenance and repair
DEP 31.40.20.32-Gen.	CRA clad and CRA-lined steel pipe (amendments/supplements to API Spec 5LD)
DEP 31.40.20.33-Gen.	Linepipe induction bends (amendments/supplements to ISO 15590-1)
DEP 31.40.20.34-Gen.	Welded and seamless duplex and super duplex stainless steel line pipe (amendments/supplements to API Spec 5LC)
DEP 31.40.20.36-Gen.	Weldable martensitic stainless steel line pipe for use in oil and gas operations (amendments/supplements to API SPEC 5LC)
DEP 31.40.20.37-Gen.	Line pipe for critical service (amendments/supplements to ISO 3183:2012 and API SPEC 5L 45th edition)
DEP 31.40.20.39-Gen.	High density polyethylene pipelines and piping systems for oilfield applications
DEP 31.40.21.30-Gen.	Pipeline fittings (amendments/supplements to ISO 15590-2) and low temperature process piping fittings
DEP 31.40.21.34-Gen.	Carbon and low alloy steel pipeline flanges for use in oil and gas operations (amendments/supplements to ISO 15590-3) and low temperature carbon steel flanges for piping (amendments/supplements to ASTM A350 GR LF2)
DEP 31.40.30.31-Gen.	External polyethylene and polypropylene coating for line pipe (amendments/supplements to ISO/DIS 21809-1:2009)
DEP 31.40.30.32-Gen.	External fusion-bonded epoxy powder coating for line pipe (amendments/supplements to ISO 21809-2:2007)
DEP 31.40.30.33-Gen.	Bituminous enamel coating of steel linepipe
DEP 31.40.30.34-Gen.	Thermoplastic lined pipelines for onshore use
DEP 31.40.30.35-Gen.	Internal coating of line pipe for non-corrosive gas transmission service (amendments/supplements to ISO 15741)
DEP 31.40.30.36-Gen.	Elastomer coatings and Monel sheathing for offshore riser protection
DEP 31.40.30.37-Gen.	External field joint and rehabilitation coating systems for line pipe (amendments/supplements to ISO 21809-3:2008)
DEP 31.40.30.39-Gen.	Internal fusion-bonded epoxy powder coating for water injection line pipe
DEP 31.46.00.31-Gen.	Acoustic insulation for piping (amendments/supplements to ISO 15665)
DEP 31.76.10.10-Gen.	Heating, ventilation and air conditioning for plant buildings
DEP 34.51.01.31-Gen.	Vertical steel storage tanks – Selection design and construction (amendments/supplements to EN 14015)
DEP 34.51.01.33-Gen.	Aboveground vertical storage tanks (amendments/supplements to API Standard 650)
DEP 34.51.01.35-Gen.	Shop welded vertical tanks for storage of production liquids (amendments/supplements to API 12F)
DEP 34.51.11.30-Gen.	Mounded horizontal cylindrical vessels for pressurised storage of LPG at ambient temperatures (amendments/supplements to EEMUA 190)
DEP 34.51.90.10-Gen.	Demolition of storage tanks (endorsement of EEMUA 154)
DEP 37.19.30.30-Gen.	Cathodic protection systems for fixed offshore steel structures (amendments/supplements to NACE SP0176-2007)
DEP 37.76.10.10-Gen.	HVAC for offshore installations (amendments/supplements to ISO 15138)
DEP 37.81.20.31-Gen.	Galvanic anodes for marine structures and pipelines – Specification and qualification – Modifications to ISO 15589-2

DEP 37.81.20.40-Gen.	Impressed current laboratory testing of aluminum alloy anodes (amendments/supplements to NACE Std TM0190-2006)
DEP 37.81.40.30-Gen.	Syntactic foam insulation for flowlines
DEP 37.81.40.34-Gen.	Insulation for pipe-in-pipe (PIP) flowlines
DEP 37.81.40.39-Gen.	Welding of subsea hardware and tie-in components (amendments/supplements to ASME boiler and pressure vessel code section IX)
DEP 37.81.40.40-Gen.	External Monel clad riser pipe
DEP 37.81.40.41-Gen.	Hyperbaric welding of pipelines (amendments/supplements to ISO 13847)
DEP 37.81.41.36-Gen.	Deepwater syntactic foam insulation for subsea structures
DEP 37.81.41.37-Gen.	Qualification of insulation for deepwater applications
DEP 39.01.10.11-Gen.	Selection of materials for life cycle performance (upstream facilities) - Materials selection process
DEP 39.01.10.12-Gen.	Selection of materials for life cycle performance (Upstream facilities) - Equipment
DEP 39.01.10.13-Gen.	Selection of materials for carbon capture and sequestration systems
DEP 39.01.10.30-Gen.	Specification for nickel base alloy 625 plus (UNS N07716) and alloy 725 (UNS N07725) for oil and gas drilling and production equipment
DEP 39.01.10.32-Gen.	Specification of nickel base alloy 718 (UNS N07718) for oil and gas drilling and production equipment (amendments/supplements to API Standard 6A718)
DEP 44.24.32.30-Gen.	Unshaped refractory materials for monolithic refractory linings
DEP 44.24.32.31-Gen.	Classification of unshaped refractory lining materials
DEP 44.24.32.32-Gen.	Specification for sampling and testing of unshaped refractory lining materials
DEP 44.24.32.33-Gen.	Specification for anchoring systems of unshaped refractory lining materials
DEP 44.24.32.34-Gen.	High temperature insulating materials for refractory applications
DEP 44.24.90.31-Gen.	Refractory bricks and shapes
DEP 44.24.90.32-Gen.	Classification of refractory bricks and shapes
DEP 44.24.90.33-Gen.	Specification for sampling and testing of refractory bricks and shapes
DEP 44.24.90.34-Gen.	Classification, specification and testing for ancillary materials for refractory brick construction
DEP 44.24.90.35-Gen.	Specification and quality control for precast or specialty cast refractory baffle wall tile (shapes)
DEP 61.10.08.11-Gen.	Field inspection prior to commissioning of mechanical equipment
DEP 61.38.10.10-Gen.	Shop and field fabrication of orifice meter runs
DEP 61.40.20.30-Gen.	Welding of pipelines and related facilities (amendments/supplements to ISO 13847:2000)
DEP 61.40.20.31-Gen.	Field welding of duplex and super duplex stainless steel pipelines (amendments/supplements to API 1104)
DEP 61.40.20.36-Gen.	Welding of CRA-clad or CRA-lined pipe materials (amendments/supplements to API STD 1104:21st edition)
DEP 64.24.32.11-Gen.	Refractory linings for sulphur recovery units (Claus and SCOT)
DEP 64.24.32.12-Gen.	Refractory lining for fluidized catalytic cracking unit (FCCU)
DEP 64.24.32.31-Gen.	Construction details for refractory brick and shape construction
DEP 64.24.32.33-Gen.	Guidelines for curing, drying and firing of unshaped refractory lining materials
DEP 64.24.32.34-Gen.	Refractory contractor selection and applicator qualification for installation of unshaped refractory lining materials
DEP 64.24.32.35-Gen.	Construction design details of unshaped refractory materials
DEP 70.10.70.11-Gen.	Preservation of new and old equipment standing idle
RMP 70.10.70.50-Gen.	Preservation of new and old equipment standing idle
RMP 70.51.10.50-Gen.	Field inspection, maintenance and repair of vertical steel storage tanks (amendments/supplements to API 653 and EEMUA159)
DEP 74.00.10.10-Gen.	Shop and field pressure testing of piping systems
DEP 80.36.00.30-Gen.	Relief devices - Selection, sizing and specification
DEP 80.45.10.10-Gen.	Design of pressure relief, flare and vent systems
DEP 80.46.30.11-Gen.	Interlocking systems for pressure relief valves

9. OPERATIONS EXCELLENCE & ASSET MANAGEMENT

DEP 01.00.09.10-Gen.	Operational tagging requirements
DEP 70.08.10.11-Gen.	Mechanical and electrical maintenance equipment and tools
DEP 70.10.90.11-Gen.	Spare parts
DEP 82.00.10.30-Gen.	Engineering information specification (EIS)

10. PETROLEUM ENGINEERING

DEP 25.80.10.10-Gen.	Formation pore pressure, fracture gradient (PP/FG) and borehole stability prediction for exploration, appraisal and development wells, well entries, and abandonments
DEP 25.80.10.11-Gen.	Formation tops, fault intersections, and fluid fill prediction for exploration, appraisal, and development wells
DEP 25.80.10.12-Gen.	Prepare and maintain data in support of well emergencies - New wells and new activities on existing wells
DEP 25.80.10.13-Gen.	Geohazards assessment for offshore exploration, appraisal and development operations
DEP 25.80.10.14-Gen.	Geohazards and surface location assessment for onshore exploration, appraisal and development operations
DEP 25.80.10.15-Gen.	Design a logging program
DEP 25.80.10.16-Gen.	Compaction and subsidence prediction
DEP 25.80.10.18-Gen.	Hydrogen sulphide prediction for produced fluids from new and existing wells in oil and gas fields
DEP 25.80.10.19-Gen.	Sand failure assessment for wells to be completed and produced
DEP 25.80.10.20-Gen.	Planning and design of geophysical surveys
DEP 25.80.10.21-Gen.	Well stimulation
DEP 25.80.10.22-Gen.	Top-seal integrity assessment for primary recovery, waterflood, EOR and CO2 storage

11. PIPELINES, FLOW ASSURANCE SYSTEMS & SUBSEA

DEP 31.27.00.20-Gen.	Design and supply of bulk solids bins and hoppers
DEP 31.27.00.21-Gen.	Vibrating fluid bed drier/cooler systems
DEP 31.27.00.22-Gen.	Enclosed drag conveyors
DEP 31.27.00.23-Gen.	General purpose screw conveyors
DEP 31.27.00.24-Gen.	Loss-in-weight feeders
DEP 31.27.00.25-Gen.	Pressure Process Filters and Systems - Technology Selection, Design and Manufacture
DEP 31.27.00.26-Gen.	Trough belt conveyors
DEP 31.27.00.27-Gen.	Dilute phase pneumatic conveying systems
DEP 31.27.00.28-Gen.	Filter presses technology selection, design and manufacture
DEP 31.27.00.29-Gen.	Vacuum belt filter selection, design and manufacture
DEP 31.27.00.30-Gen.	Rotary drum vacuum filter selection, design and manufacture
DEP 31.27.00.31-Gen.	Decanter centrifuge selection, design and manufacture
DEP 31.27.00.32-Gen.	General purpose baghouse dust collectors selection, design and manufacture
DEP 31.27.00.33-Gen.	Design and manufacture of rotary valves (rotary air locks)
DEP 31.36.00.30-Gen.	Pipeline transportation systems - pipeline valves (amendments/supplements to ISO 14313)
DEP 31.38.60.10-Gen.	Hot-tapping on pipelines, piping and equipment
DEP 31.40.00.10-Gen.	Pipeline engineering (amendments/supplements to ISO 13623:2009)

DEP 31.40.00.11-Gen.	Pipeline and subsea integrity - Design and construction
RMP 31.40.00.51-Gen	Pipeline integrity
DEP 31.40.10.10-Gen.	Riser design
DEP 31.40.10.12-Gen.	Design of multiple-pipe slug catchers
DEP 31.40.10.13-Gen.	Design of pipeline pig trap systems
DEP 31.40.10.15-Gen.	Analysis of spans for submerged pipelines
DEP 31.40.10.16-Gen.	Upheaval buckling of pipelines
DEP 31.40.10.17-Gen.	Pipeline/trawlgear interaction
DEP 31.40.10.18-Gen.	Pipeline engineering - Reliability-based limit states methods (amendments/supplements to ISO 16708)
DEP 31.40.11.32-Gen.	Pipelay survey, positioning and as-built reportings for offshore pipelines
DEP 31.40.21.31-Gen.	Pipeline isolating joints (amendments/supplements to ISO 15590-2:2003)
DEP 31.40.21.33-Gen.	Pig signallers - intrusive type
DEP 31.40.21.37-Gen.	Corrosion resistant alloy overlay subsea pipe and fittings excluding line pipe
DEP 31.40.30.30-Gen.	Concrete coating of linepipe (amendments/supplements to ISO 21809-5)
DEP 31.40.40.38-Gen.	Hydrostatic pressure testing of new pipelines
DEP 31.40.50.30-Gen.	Precommissioning of pipelines
DEP 31.40.60.11-Gen.	Pipeline leak detection
RMP 31.40.60.50-Gen.	Pipeline repairs
DEP 37.80.00.30-Gen.	Subsea production systems
DEP 37.80.00.33-Gen.	Design and operation of subsea production control systems (amendments/supplements to ISO 13628-6)
DEP 37.80.00.35-Gen.	Subsea pipeline valves (amendments/supplements to ISO 14723)
DEP 37.80.00.36-Gen.	Deepwater subsea vertical tree systems (amendments/supplements to ISO 13628-4/API 17D)
DEP 37.80.00.38-Gen.	Deepwater jumper design, measurement, fabrication and testing
DEP 37.80.01.30-Gen.	High pressure subsea valves (amendments/supplements to section 7.10 of ISO 13628-4/API 17D)
DEP 37.80.02.31-Gen.	Seamless super duplex tubing manufacturing specification for umbilicals and subsea distribution hardware
DEP 37.80.02.32-Gen.	Seam Welded Super Duplex Tubing Manufacturing Specification for Umbilicals and Subsea Distribution Hardware
DEP 37.80.02.33-Gen.	Zinc clad duplex tubing manufacturing specification
DEP 37.80.02.35-Gen.	Medium voltage, 6kV ($U_m = 7.2kV$) to 30kV ($U_m = 36kV$), power conductors for deepwater umbilicals
DEP 37.80.02.36-Gen.	Deepwater umbilical manufacturing (amendments/supplements to ISO 13628-5:2009)
DEP 37.80.02.37-Gen.	Deepwater subsea controls, power, and chemical distribution manufacturing specification
DEP 37.80.03.30-Gen.	Umbilical transportation and installation (amendments/supplements to ISO 13628-5:2009)
DEP 37.80.03.31-Gen.	Deepwater subsea distribution hardware installation
DEP 37.80.10.30-Gen.	Deepwater subsea completion/workover systems (amendments/supplements to API SPEC 17G)
DEP 37.81.10.15-Gen.	Pipe-soil interaction on a normally consolidated clay seabed
DEP 37.81.40.31-Gen.	Welding of deepwater pipelines, flowlines and steel catenary risers (amendments and supplements to API 1104)
DEP 37.81.40.32-Gen.	Automated ultrasonic inspection (AUT) of girth welds for carbon steel and CRA lined pipelines, flowlines and catenary risers
DEP 37.81.40.35-Gen.	Deepwater collet type connector systems
DEP 37.81.40.38-Gen.	Deepwater subsea manifold system (amendments/supplements to ISO 13628-15/API RP 17P)

DEP 37.81.41.30-Gen.	Onshore fabrication of deepwater pipelines, flowlines, risers and their appurtenances
DEP 37.81.41.33-Gen.	Offshore construction specification for deepwater pipelines, flowlines and risers
DEP 37.81.41.35-Gen.	Offshore pipeline and umbilical/cable crossings
DEP 37.81.42.30-Gen.	Unbonded flexible pipe for offshore applications (amendments/supplements to ISO 13628-2 & ISO 13628-11)
DEP 37.81.42.31-Gen.	Deepwater pipeline end terminations and midline sleds
DEP 37.81.42.34-Gen.	ROV operations for work-class vehicles
DEP 37.81.42.35-Gen.	Qualification of girthweld inspection with automated ultrasonic inspection (AUT) systems

12. PROCESS AUTOMATION, CONTROL, AND OPTIMIZATION

DEP 31.40.70.30-Gen.	Quarter-turn actuators for on/off valves
DEP 32.00.00.12-Gen.	Fiscal and sales allocation models for Upstream production systems
DEP 32.01.20.12-Gen.	Process Control Domain - Enterprise industrial automation information technology and security
DEP 32.01.23.17-Gen.	Process Control Domain - security requirements for suppliers
DEP 32.01.40.31-Gen.	Requirements for real-time production operations and production-critical real time data
RMP 32.01.20.50-Gen.	Process Control Domain – Enterprise industrial automation information technology and security
DEP 32.10.03.10-Gen.	Instrumentation symbols and identification on process engineering flow schemes
DEP 32.30.20.11-Gen.	Fire, gas and smoke detection systems
DEP 32.30.20.13-Gen.	Intelligent field devices – Design and configuration
DEP 32.30.20.14-Gen.	Instrument asset management
DEP 32.30.20.15-Gen.	DCS basic application standards
DEP 32.30.20.16-Gen.	Baselayer control applications
DEP 32.30.20.17-Gen.	Integration of motor controls into BPCs
DEP 32.30.20.18-Gen.	Real-time optimization project standards
RMP 32.30.20.50-Gen.	Fire, gas and smoke detection systems
DEP 32.31.00.32-Gen.	Instruments for measurement and control
DEP 32.31.00.34-Gen.	Instrumentation documents and drawings
DEP 32.31.00.35-Gen.	Smartplant instrumentation (SPI) - Project execution
DEP 32.31.09.31-Gen.	Instrumentation for equipment packages
DEP 32.31.50.10-Gen.	On-line process analysers
DEP 32.31.50.13-Gen.	Analyser housing
DEP 32.32.00.11-Gen.	Custody transfer measurement systems for liquids
DEP 32.32.00.12-Gen.	Custody transfer measurement systems for gases and vapours
DEP 32.32.00.13-Gen.	Flow rate measurement in wet gas environments by means of Venturi tubes and tracer dilution technology
DEP 32.36.01.17-Gen.	Control valves - Selection, sizing, and specification
DEP 32.36.01.18-Gen.	Selection and procurement of actuators for on-off valves
DEP 32.37.10.11-Gen.	Installation of on-line instruments
DEP 32.37.20.10-Gen.	Instrument signal lines
DEP 32.45.10.10-Gen.	Instrumentation of depressuring systems
RMP 32.45.10.50-Gen.	Instrumentation of depressuring systems
DEP 32.80.10.10-Gen.	Instrumented protective functions (IPF)
DEP 32.80.10.14-Gen.	Alarm management