NORSOK STANDARD

DESIGN PRINCIPLES
CODING SYSTEM

Z-DP-002
Rev. 1, January 1995
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1. **FOREWORD**

This standard has been developed by the NORSOK standardisation work group for the widest possible national and international application.

For the purpose of assisting those using this document the following information is given:

The coding system in this standard is based on a functional breakdown of **systems** into **subsystems** and **units**. This is due to the following main objectives:

- Compliance with the functional system specific NORSOK standards.
- To relate all documentation to systems, subsystems and units to ensure traceability and use.
- To enable commissioning and operation activities on systems, subsystems and units without additional coding.
- To enable contractors and suppliers to number their deliveries and documentation with a minimum of centralised coordination.
- To minimize the requirements for documentation of identical items on different systems, subsystems or units.

All annexes are normative except annex I, Application Examples, which is informative.

2. **SCOPE**

This coding system has been developed for tag coding and technical document coding by breakdown of an installation into functions.

In addition identification of bulk components/components have been established with a possible future relation to a new article coding system.

3. **NORMATIVE REFERENCES**

ISO 3511-1 (NS 1438) Process Measurement Control Functions and Instrumentation Symbolic Representation Part I: Basic Requirements

ISO 3511-2 Process Measurement Control Functions and Instrumentation Symbolic Representation Part II: Extension of Basic Requirements

4. DEFINITIONS AND ABBREVIATIONS

4.1 Definitions

A  =  Alphabetic character
N  =  Numeric character
Z  =  Alphanumeric character

System
A platform consists of systems which performs process, utility and service functions etc.

Subsystem
The systems may be broken down into functional subsystems.

Sub-subsystems
The subsystems may be broken down into project specific sub-subsystems.

Unit
The subsystems/sub-subsystems may be broken down into project specific units.

Subunit
The unit may be broken down into project specific subunits.

Item
The unit/subunit may be broken down into project specific items. An item is the lowest level of functional identification.

Bulk component
Units or items which do not require an individual physical identity (tag no.). A bulk component shall be identified by manufacturer's name and model/type identification.

Component
Items which does require an individual physical identity. A component shall be identified by manufacturer's name, model/type identification and serial number.

(Note that functional systems, subsystems and units shall not be identified as a component because it has a serial number, but because of additional requirements for identification/traceability (recertification, non-interchangeable spare parts etc.))

Part
Part is any part of a bulk component/component. Part shall be identified by manufacturer's model/type identification.

Article code
Unique operator specific numbers assigned by the individual operators to all physical parts that fulfill identical functional and interface requirements.
4.2 Abbreviations

ISO  International Standardisation Organisation
NS  "Norsk standard"
IEC  International Electrotechnical Commission
DFO  Documentation for Operation

5. CODING SYSTEM APPLICATION

The application of the coding system is described for systems, subsystems, units, items and documents in clauses 7, 8 and 9 below.

Coding for lower levels, like assembly, bulk component or part is not part of this standard (see also clause 10).

The specific coding details consists of the following elements:

- System and subsystem codes (Annex A)
- Type and function codes (Annex B)
- Pipeline and piping codes (Annex C)
- Discipline and administration codes (Annex D)
- Document type codes (Annex E)
- Area codes (Annex F)
- Revision, status and acceptance codes (Annex G)
- Originator and responsible party codes (Annex H)

6. PROJECT CODING

The project identification/number is standardised to a maximum of six alphanumeric characters.

The project number will be used as a reference in all tag and document coding. The project number shall be used as an attribute to the coding system (available in the data systems) and will therefore not be a visible part of a tag or document code.

7. FUNCTION CODING ELEMENTS

7.1 General Format

Functional coding consists of system, subsystem, unit and item identification. It is usually grouped in system and item functions.

7.2 System Function

The system code consists of six numeric characters, broken down as follows:
Example of system code:

For cooling medium pumping, Subsystem 30:

<table>
<thead>
<tr>
<th>System</th>
<th>Subsystem</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>30</td>
<td>00</td>
</tr>
</tbody>
</table>

For pump unit, Unit 10:

<table>
<thead>
<tr>
<th>System</th>
<th>Subsystem</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>

For systems that are not broken down, the various relevant characters shall be set to 0 (zero).

7.2.1 **System**

The systems are defined by the first and second numeric character of the six-character functional code.

Reference is made to Annex A, System and Subsystem Coding.

Interfaces to other systems shall be set at items serving isolation and separation purposes (e.g. valves, junction boxes, distribution boards, termination racks etc.).

7.2.2 **Subsystem**

The subsystems are defined by the third and fourth numeric character of the six-character functional code.

Reference is made to Annex A, System and Subsystem Coding.

The interfaces between subsystems shall be defined as for systems.
7.2.3 Sub-subsystem

The fourth numeric character may be used for additional breakdown of subsystems into sub-subsystems.

The sub-subsystems shall be defined by the individual project.

The differentiation of the fourth numeric character may be required for mechanical completion, precommissioning, commissioning and operation activities.

Example of system, subsystem and sub-subsystem code:

Cooling medium and refrigeration system, System 40:

| Cooling medium and refrigeration system, System 40: | 40 | 00 | 00 |

For cooling medium pumping, Subsystem 30:

| For cooling medium pumping, Subsystem 30: | 40 | 30 | 00 |

For project specific sub-system 31:

| For project specific sub-system 31: | 40 | 31 | 00 |

7.2.4 Unit

The units are defined by the fifth and sixth numeric character of the six-character functional coding.

The units shall be defined by the individual project.

7.2.5 Subunit

The sixth numeric character may be used for additional breakdown of units into subunits.

The unit code shall define main units in steps of ten as 10, 20, 30, 40 etc. Subunits may be identified as 11, 12, 13 etc. within unit 10 etc.

Example of unit and subunit code:

For pump unit in subsystem, Unit 10:

<p>| For pump unit in subsystem, Unit 10: | 40 | 30 | 10 |</p>
<table>
<thead>
<tr>
<th>Subunit</th>
<th>Number 1</th>
<th>Number 2</th>
<th>Number 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subunit 11:</td>
<td>40</td>
<td>30</td>
<td>11</td>
</tr>
<tr>
<td>Subunit 12:</td>
<td>40</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>Subunit 13:</td>
<td>40</td>
<td>30</td>
<td>13</td>
</tr>
</tbody>
</table>
7.3 Item function

The item function code consists of maximum seven characters, broken down as follows:

- **AAAA**  NN  Z
  - Item according to Annex B (max four char.)
  - Sequence number (max two characters)
  - Parallel items (one character)

Examples:

- Temperature switch: TSHH01 (sequence number 01), TSHH01A (parallel item A)
- Junction box: EJ01 (sequence number)

Item codes are unique within a system but common to all identical items in various systems.
Examples:

Valve, pump, antenna, temperature transmitter, pressure switch, electrical motor, junction box.

8. TAG CODING

8.1 General format

The actual tag coding consists of the following elements (described in clause 7):

- System function coding.
- Item function coding.

Tagging means to equip an item function with a label that gives it a unique identification. A tag is also allocated to a location.

Note: Tagging shall identify the lowest item function.

The tag code consists of:

<table>
<thead>
<tr>
<th>System</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-31-11</td>
<td>TSHH01A</td>
</tr>
</tbody>
</table>

System: Cooling medium and refrigeration system
Subsystem: Cooling medium pumping
Unit: Pump
Item: Temperature switch high high

Tag label:

<table>
<thead>
<tr>
<th>System</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-30-11</td>
<td>TSHH01A</td>
</tr>
</tbody>
</table>

Tag label example:

| 40-30-11 | TSHH01A |
8.2 Piping

Piping shall be labelled according to the system and item function coding in clause 8.1. Item identification shall be according to Annex C, Pipeline and Piping Codes.

8.3 Junction box and cable numbering

Junction box and cable coding consists of system and item function coding as defined in clause 8.1.
The item code consists of:

```
AA  A  NN
```

“Discipline” code
- (EL - Electrical low voltage)
- (EH - Electrical low voltage)
- (EG - Electrical ground)
- (ET - Electrical heat tracing)
- (I - Instrumentation)
- (T - Telecommunication)

J - Junction box
W - Cable

Sequence number

For certain junction boxes with multiple system cabling, the junction boxes shall be numbered with system 87, as detailed in Annex A, System and Subsystem Codes.

Examples:

Junction box in system 84-20:

```
84 - 20 - 01 - ELJ01
```

System: Emerg. power generation and distrib.
Subsystem: Emergency power distribution
Unit: Switch gear unit
Item: Junction box

Tag label example:
```
84 -20 -01
ELJ01
```
Junction box in system 86-11:

System: Telecommunication
Subsystem: Public address and alarm
Unit: Possible subsystem
Item: Junction box

Tag label example: 86 - 11 - 00 - TJ01

9. DOCUMENT CODING

9.1 General Format

All documents produced shall be traceable by the project document code.

Project specific documentation from manufacturer/supplier shall be identified according to this standard.

9.2 Document Number

The identification structure is:

<table>
<thead>
<tr>
<th>Project</th>
<th>Function</th>
<th>Sequence number</th>
</tr>
</thead>
</table>

(ZZZZZZ) - NN-NN-NN - NNN

Project identification (attribute)
System identification
Sequence number (max three characters)

The sequence number relates to the lowest level of identification. Number allocation shall be done by the system/unit designer.
Documentation of manufacturer's standard units and standard bulk components/components shall be identified according to manufacturer's normal identification system. In addition necessary project identification shall be given as required to enable registration and tracing in the project.

This will provide the required connection between documents to:

- System/subsystem/units/items (tags).
- Bulk component/component identification.
- Manufacturer's normal identification system.

Note: Documents not related to a specific system shall be identified as: ZZZZZZ 00-00-00 NNN.

Piping GA drawings shall be identified as: ZZZZZZ 90-10-00 NNN.

### 9.3 Mandatory attributes

Mandatory attributes to documents shall be used to enable the necessary tracing without having long and complex document numbers.

Acceptance Code (Annex G)
Acceptance Status Code (Annex G)
Area Code (Annex F)
Discipline (Annex D)
Document Title/Subject
Document Type (Annex E)
Originator Code (Annex H)
Responsible Party (Annex H)
Revision Code (Annex G)
Revision Date

Sheet number shall be used as required.

### 10. BULK COMPONENT/COMPONENT IDENTIFICATION

The third element of identification is the bulk component/component identification.

The part element is physical equipment identified by manufacturer's name and model/type. A serial number may be identified if additional identification/traceability is required.
Fig. 3  Relation between functional tag (system/subsystem/unit/item) coding and bulk component/component equipment identification.

The bulk component/component identification should be related to an article coding system for simple identification of items to simplify spare part administration and documentation.

<table>
<thead>
<tr>
<th>Tag</th>
<th>Manufacturer</th>
<th>Real Manufacturer</th>
<th>Article Code / Company Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>Mod./Type/Part</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>40-11-24 PA01C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6&quot; / 10&quot; (34P) FIK 9 STG</td>
<td>Matter &amp; Platt</td>
<td>31 69 01 467 1</td>
</tr>
<tr>
<td>Part</td>
<td>111261P-9</td>
<td>Matter &amp; Platt</td>
<td>31 69 94 010 2</td>
</tr>
<tr>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Part</td>
<td>A29443P-1</td>
<td>Matter &amp; Platt</td>
<td>31 69 94 122 2</td>
</tr>
<tr>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

Fig. 4  Relation between functional tag coding and physical equipment identification.

Note that the article code system is not part of this coding system standard. An article code system should be administrated by the industry.

11. INFORMATIVE REFERENCES

This coding system structure and elements are based on:

AIR Transport Association of America (ATA), ATA-100
International Atomic Energy Agency Coding System

Hydro, Coding manual
Saga, Engineering Numbering System, ENS ASG-004
Statoil, Statoil Engineering Numbering System, SENS A-SG-014
ANNEX A
SYSTEM AND SUBSYSTEM CODES
(NORMATIVE)
**SYSTEM CODES**

The following main grouping of platform systems is used.

<table>
<thead>
<tr>
<th>System</th>
<th>System Main Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 - 09</td>
<td>Reserved for systems that are specific to a particular plant</td>
</tr>
<tr>
<td>10 - 19</td>
<td>Drilling and well related systems for oil and gas production (Well Related systems for oil and gas Production)</td>
</tr>
<tr>
<td>20 - 39</td>
<td>Process Systems that comprise the systems directly involved in the production of the plant</td>
</tr>
<tr>
<td>40 - 49</td>
<td>Process Support and Feed/Product Storage that comprise all systems which have a mass or heat interaction with the process system</td>
</tr>
<tr>
<td>50 - 69</td>
<td>Utility Systems that comprise all systems necessary for the plant to operate, but are not part of the actual production</td>
</tr>
<tr>
<td>70 - 79</td>
<td>Safety and Facility Systems</td>
</tr>
<tr>
<td>80 - 89</td>
<td>Electrical - Telecommunication - Instrumentation Systems</td>
</tr>
<tr>
<td>90 - 99</td>
<td>Structural, Civil Systems</td>
</tr>
</tbody>
</table>
10 DRILLING SYSTEMS

10 - 10 Derrick/mast and hoisting
10 - 20 Rotary equipment
10 - 30 Pipehandling
10 - 40 Drillfloor and substructure with equipment
10 - 50 Coil tubing
10 - 60 Snubbing
10 - 70 Well testing

11 DRILLING PROCESS SYSTEMS

11 - 10 Bulk
11 - 20 Mud mixing and storage
11 - 30 High pressure mud
11 - 40 Mud treatment
11 - 50 Cementing
11 - 60 Cutting disposal
11 - 70 Mud base fluid
11 - 80 Completion fluid

12 DRILLING WELLCONTROL SYSTEMS

12 - 10 Kill and choke manifold
12 - 20 BOP, diverter and drilling riser
12 - 30 Kill subsystem
12 - 40 Well control subsystem
12 - 50 Well logging subsystem, rental equipment

13 RISER AND WELL SYSTEM

13 - 10 Well subsystem
13 - 20 Production / injection riser
13 - 30 Oil export riser
13 - 40 Gas export riser
13 - 50 Downhole equipment

14 RISER OPERATIONS SYSTEMS

14 - 10 Riser guidance subsystem
14 - 20 Marine growth cleaning subsystem
14 - 30 Riser position reference subsystem
14 - 40 Riser inspection subsystem
14 - 50 ROV subsystem
15 WELL RELATED PRODUCTION SYSTEMS TOPSIDE

15 - 10 Wellbay production subsystem
15 - 20 Well testing subsystem
15 - 30 Kill subsystem
15 - 40 Subsea manifold
15 - 50 Subsea pigging

16 GAS AND WATER INJECTION WELL SYSTEM TOPSIDE

16 - 10 Water injection to subsea templates
16 - 20 Water injection to platform wells
16 - 30 Water injection to pigging subsystems
16 - 40 Gas injection to platform wells

17 SUBSEA PRODUCTION SYSTEM - INSTALLATION, MAINTENANCE AND WORKOVER SYSTEMS

17 - 10 Drilling equipment
17 - 20 Handling equipment
17 - 30 Completion riser subsystem
17 - 40 Workover control subsystem
17 - 50 Pull-in and connection subsystem
17 - 60 ROMV subsystem
17 - 70 Testing subsystem
17 - 80 Running tool subsystem
17 - 90 Dummy wellbay subsystem
17 - 95 Leveling system-templates

18 NOT DEFINED

19 SUBSEA PRODUCTION SYSTEM

19 - 10 Wellhead equipment
19 - 15 Manifold equipment
19 - 20 Downhole equipment
19 - 25 Flowlines
19 - 30 Flexible risers and jumpers
19 - 35 Flexible jumpers
19 - 40 Subsea control subsystem and umbilicals
19 - 50 Subsea tree subsystem
19 - 60 TFL system
19 - 70 Wellbay subsystem
19 - 80 Tubing hanger subsystem

20 SEPARATION AND STABILIZATION

20 - 10 Production manifold/headers
20 - 20 Heaters and separators

21 CRUDE HANDLING

21 - 10 Crude pumping (storage/pipeline/loading)
21 - 20 Crude storage
21 - 30 Crude metering
21 - 40 Crude offshore loading
21 - 41 FPU/FPSO offloading
21 - 42 Articulated loading column
21 - 43 SPAR busy
21 - 44 Single point mooring buoy
21 - 45 Anchor leg mooring
21 - 46 UKOLS offloading
21 - 47 STL (Submerged turret loading)

22 NOT DEFINED

23 GAS RECOMPRESSION, COOLING AND SCRUBBING

23 - 10 Gas cooling and scrubbing
23 - 20 Gas recompression

24 GAS TREATMENT

24 - 10 Gas cooling and scrubbing
24 - 20 Gas dehydration
24 - 30 Regeneration

25 NOT DEFINED
26  GAS REINJECTION TO RESERVOIR

26 - 10  Reinjection gas cooling and scrubbing
26 - 20  Reinjection gas compression
26 - 30  Reinjection manifold

27  GAS PIPELINE COMPRESSION, METERING AND TRANSFER

27 - 10  Gas cooling and scrubbing
27 - 20  Gas pipeline compression
27 - 30  Gas metering

28  GAS SWEETENING

28 - 10  H₂S removal
28 - 20  CO₂ removal

29  NOT DEFINED

30  OIL PIPELINE, EXPORT STABILIZED OIL

30 - 10  Pipeline
30 - 20  Pig launching

31  CONDENSATE EXPORT PIPELINE

31 - 10  Pipeline
31 - 20  Pig Launching

32  GAS EXPORT PIPELINE

32 - 10  Pipeline
32 - 20  Pig launching

33  NOT DEFINED
34 WATER PIPELINE HIGH PRESSURE

34 - 10 Risers
34 - 20 Pipeline
34 - 30 Pig launching

35 METHANOL PIPELINE

35 - 10 Risers
35 - 20 Pipeline
35 - 30 Pig launching

36 PIPELINE WELLSTREAM, MULTIPHASE

36 - 10 Risers
36 - 20 Pipeline
36 - 30 Pig launching

37 - 39 NOT DEFINED

40 COOLING MEDIUM AND REFRIGERATION SYSTEM

40 - 10 Cooling medium
40 - 20 Cooling medium expansion
40 - 30 Cooling medium pumping
40 - 40 Cooling medium cooling
40 - 50 Cooling medium distribution
40 - 70 Refrigeration

41 HEATING MEDIUM SYSTEM

41 - 10 Heating medium
41 - 20 Heating medium expansion
41 - 30 Heating medium pumping
41 - 40 Heating medium heating
41 - 50 Heating medium distribution
42 CHEMICAL INJECTION SYSTEM

42 - 10 Methanol injection
42 - 11 Methanol storage
42 - 12 Methanol pumping
42 - 13 Methanol distribution topside
42 - 14 Methanol distribution subsea
42 - 20 Chlorination
42 - 21 Hypochlorite production
42 - 22 Hypochlorite storage
42 - 23 Hypochlorite distribution
42 - 30 Injection chemicals
42 - 31 Antifoam
42 - 32 Biocid
42 - 33 Oxygen scavenger
42 - 34 Corrosion inhibitor
42 - 35 De-emulsifier
42 - 36 Scale inhibitor
42 - 37 Polyelectrolyte
42 - 40 Glycol regeneration
42 - 41 Glycol filtration
42 - 42 Glycol treatment
42 - 43 Glycol distribution

43 FLARE, VENT AND BLOW-DOWN SYSTEMS

43 - 10 High pressure flaring
43 - 11 HP flare header/knock-out drum
43 - 12 HP flare and metering
43 - 20 Low pressure flaring
43 - 21 LP flare header/knock-out drum
43 - 22 LP flare and metering
43 - 30 Maintenance flaring
43 - 31 Maintenance header/knock-out drum
43 - 32 Maintenance flare and metering
43 - 40 Atmospheric venting
43 - 50 Flame generation and pilot flaring

44 OILY WATER TREATMENT

44 - 10 Produced water treatment
44 - 11 Produced water hydrocyclones
44 - 12 Produced water degassing drum and reclaimed sump
44 - 20 Ballast water treatment
44 - 30 Sludge treatment
44 - 40 Bilge subsystem

45 FUEL GAS

45 - 10 HP fuel gas
45 - 11 HP fuel gas heating/scrubbing
45 - 12 HP fuel gas distribution
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>45-20</td>
<td>LP fuel gas</td>
</tr>
<tr>
<td>45-21</td>
<td>LP fuel gas heating/scrubbing</td>
</tr>
<tr>
<td>45-22</td>
<td>LP fuel gas distribution</td>
</tr>
</tbody>
</table>

**46-49** NOT DEFINED

**50** SEA WATER SYSTEMS (LOW TO MEDIUM PRESSURE)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-10</td>
<td>Sea water lift</td>
</tr>
<tr>
<td>50-20</td>
<td>Sea water filtration</td>
</tr>
<tr>
<td>50-30</td>
<td>Sea water lift pumping</td>
</tr>
<tr>
<td>50-50</td>
<td>Medium pressure seawater</td>
</tr>
<tr>
<td>50-60</td>
<td>Medium pressure seawater pumping</td>
</tr>
<tr>
<td>50-70</td>
<td>Medium pressure seawater distribution</td>
</tr>
</tbody>
</table>

**51** SEA WATER SYSTEM (HIGH PRESSURE)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>51-10</td>
<td>Water injection</td>
</tr>
<tr>
<td>51-20</td>
<td>Water injection filtering/deaeration</td>
</tr>
<tr>
<td>51-30</td>
<td>Water injection pumping</td>
</tr>
<tr>
<td>51-40</td>
<td>Water injection manifold</td>
</tr>
<tr>
<td>51-50</td>
<td>Jet water system</td>
</tr>
<tr>
<td>51-60</td>
<td>Jet water header</td>
</tr>
<tr>
<td>51-70</td>
<td>Jet water distribution</td>
</tr>
</tbody>
</table>

**52** BALLAST WATER SYSTEM

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>52-10</td>
<td>Ballast water inlet/filtering</td>
</tr>
<tr>
<td>52-20</td>
<td>Ballast water control tank</td>
</tr>
<tr>
<td>52-30</td>
<td>Ballast water pumping</td>
</tr>
<tr>
<td>52-40</td>
<td>Ballast water distribution</td>
</tr>
<tr>
<td>52-60</td>
<td>Temporary ballast water</td>
</tr>
</tbody>
</table>

**53** FRESH WATER SYSTEM

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>53-10</td>
<td>Water desalination (fresh water makers)</td>
</tr>
<tr>
<td>53-20</td>
<td>Desalinated water storage</td>
</tr>
<tr>
<td>53-30</td>
<td>Desalinated water distribution</td>
</tr>
<tr>
<td>53-40</td>
<td>Potable water sterilization</td>
</tr>
<tr>
<td>53-50</td>
<td>Potable water storage</td>
</tr>
<tr>
<td>53-60</td>
<td>Potable water distribution</td>
</tr>
</tbody>
</table>

**54** NOT DEFINED
55  STEAM, CONDENSATE AND HOT WATER SYSTEM
55 - 10  Steam generation and distribution
55 - 20  Hot water generation and distribution

56  OPEN DRAIN SYSTEM
56 - 10  Non-hazardous open drain
56 - 11  Non-hazardous open drain collection
56 - 12  Non-hazardous open drain separator/pumps
56 - 20  Hazardous open drain
56 - 21  Hazardous open drain collection
56 - 22  Hazardous open drain separator/pump
56 - 30  Shale disposal
56 - 40  Drain water treatment

57  CLOSED DRAIN SYSTEM
57 - 10  Closed drain collection
57 - 20  Closed drain separator/pumps

58 - 59  NOT DEFINED

60  DRY AND WET BULK LOADING

61  JET FUEL SYSTEM
61 - 10  Jet fuel storage/pumping
61 - 20  Jet fuel filtering/dispensing

62  DIESEL OIL SYSTEM
62 - 10  Untreated diesel oil storage
62 - 20  Untreated diesel oil distribution
62 - 30  Treatment untreated diesel oil
62 - 40  Treated diesel oil storage
62 - 50  Treated diesel oil distribution

63  COMPRESSED AIR SYSTEM
63 - 10 Instrument air compression
63 - 20 Instrument air drying/receiving
63 - 30 Instrument air distribution
63 - 50 Plant air subsystem
63 - 60 Black start subsystem
63 - 61 Black start compression
63 - 62 Black start air receiver
63 - 63 Topping-up compression
63 - 70 Bleed air subsystem

64 INERT PURGE SYSTEM

64 - 10 Inert gas generation and distribution

65 HYDRAULIC POWER SYSTEMS

65 - 10 Hydraulic power pack and distribution top-side
65 - 20 Hydraulic power pack and distribution subsea
65 - 30 Hydraulic power pack and distribution wellhead

66 SEWAGE TREATMENT

66 - 10 Sewage collection and treatment package

67 - 69 NOT DEFINED

70 FIRE AND GAS DETECTION

71 FIRE WATER SYSTEM

71 - 10 Fire water pumping
71 - 20 Fire water distribution
71 - 50 Deluge
71 - 60 Sprinkler
71 - 70 Water spray/AFFF
71 - 80 Monitor
71 - 90 Hose reel

72 MISCELLANEOUS FIRE FIGHTING SYSTEMS

72 - 10 AFFF storage and pumping
72 - 20  AFFF distribution  
72 - 50  CO₂ system  
72 - 60  Fire extinguishers  
72 - 70  Smoke diving equipment  
72 - 80  Dry chemicals

73  MATERIAL HANDLING

73 - 10  Pedestal cranes  
73 - 20  Overhead cranes  
73 - 30  Trolleys/hoist  
73 - 40  Monorails and lugs  
73 - 50  Elevators  
73 - 60  Winches

74  ACCOMMODATION FACILITIES

74 - 10  Sleeping facilities  
74 - 20  Food service system  
74 - 30  Recreation  
74 - 40  Administration and control  
74 - 50  Helideck

75  PASSIVE FIRE PROTECTION SYSTEMS

75 - 10  Structural fire protection  
75 - 50  Fire walls

76  ESCAPE AND PERSONNEL SAFETY

76 - 10  Life boats  
76 - 20  Life boats davits  
76 - 30  Life rafts/MOB  
76 - 40  Escape provisions (survival suits, ropes etc.)  
76 - 50  Personal protection (first aid, eye washers, etc.)  
76 - 60  Escape chute
77 HEATING AND VENTILATION

77 - 10 HVAC living quarter
77 - 20 HVAC other areas
77 - 21 Air handling
77 - 22 Damper
77 - 50 Hot and cold water makers
77 - 60 Hot and cold water distribution

78 WORKSHOP AND STORAGE

78 - 10 Workshop facilities
78 - 20 Storage facilities

79 EMERGENCY SHUTDOWN AND BLOWDOWN SYSTEM

79 - 10 Emergency shutdown
79 - 20 Blowdown

80 MAIN POWER GENERATION AND DISTRIBUTION HIGH VOLTAGE (> 6.6 kV)

80 - 10 Main power generation
80 - 20 Main power distribution

81 MAIN POWER GENERATION AND DISTRIBUTION HIGH VOLTAGE (1.0 kV - 6.6 kV)

81 - 10 Main power generation
81 - 20 Main power distribution

82 MAIN POWER GENERATION AND DISTRIBUTION LOW VOLTAGE (< 1.0 kV)

82 - 10 Main power generation
82 - 20 Main power distribution
83 ESSENTIAL POWER GENERATION AND DISTRIBUTION

- 83 - 10 Essential power generation
- 83 - 20 Essential power distribution

84 EMERGENCY POWER GENERATION AND DISTRIBUTION

- 84 - 10 Emergency power generation
- 84 - 20 Emergency power distribution

85 BATTERY AND NO-BREAK SYSTEM

- 85 - 10 24V DC power supply
- 85 - 20 48V DC power supply
- 85 - 40 110V DC power supply
- 85 - 50 230V AC UPS

86 TELECOMMUNICATION

- 86 - 10 Sound subsystems
- 86 - 11 Public address and alarm
- 86 - 12 Drillers intercom
- 86 - 20 Network subsystems
- 86 - 21 PABX
- 86 - 22 Multiplexer
- 86 - 23 Office data network (servers, bridges/routers etc.)
- 86 - 24 Office data and telephone cabling network
- 86 - 25 Platform intercom
- 86 - 30 External carriers
- 86 - 31 Radio links
- 86 - 35 Satellite links
- 86 - 37 Private radio network
- 86 - 38 Cable links
- 86 - 39 Fibre optic links
- 86 - 40 Radio subsystems
- 86 - 41 Mandatory radio (GMDSS) and general radio.
  (GMDSS, Global Maritime Distress and Safety)
- 86 - 42 VHF radio and paging
- 86 - 43 Audio and video entertainment
- 86 - 50 Surveillance subsystems
- 86 - 51 Closed circuit television (CCTV)
- 86 - 52 Meteorological observation
- 86 - 53 Marine radar
- 86 - 54 Aviation radar
- 86 - 55 Communication recorder
86 - 60 Telemetry
86 - 61 Shuttle tanker loading telemetry
86 - 62 Work-over telemetry
86 - 63 Pipeline telemetry
86 - 70 Navigational aids
86 - 71 Distance measuring equipment (DMF)
86 - 72 ATIS/AFTN for aviation
86 - 73 Positioning
86 - 80 Common subsystems
86 - 81 MDF (main distribution frame)
86 - 82 Telecom power supply
86 - 83 Real time clock
86 - 84 TSS, Telecom Surveillance subsystem incl. TMS, Traffic Management subsystem
86 - 90 Temporary subsystems (subsystems used during installation, hook-up, commissioning and start-up)

87 INSTRUMENTATION SYSTEMS

87 - 00 Multipurpose systems (cables and junction boxes)
87 - 10 Process control systems
87 - 20 Process shutdown systems
87 - 30 Emergency shutdown systems
87 - 40 Fire and gas systems
87 - 50 Wellhead control system (incl. hydraulic power unit)
87 - 60 Environmental condition monitoring systems
87 - 70 Power distribution system
87 - 80 General CCR equipment

88 EARTHING AND LIGHTNING

88 - 10 Earthing and lightning protection
88 - 20 Electrical lightning protection

89 NOT DEFINED

90 STRUCTURAL/CIVIL SYSTEMS

90 - 10 Piping general arrangement
90 - 20 Piping layouts
90 - 30 Piping plot plans

91 DECK STRUCTURES
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>91 - 10</td>
<td>Primary structures</td>
</tr>
<tr>
<td>91 - 20</td>
<td>Secondary structures</td>
</tr>
<tr>
<td>91 - 30</td>
<td>Outfitting/non-structural</td>
</tr>
<tr>
<td>91 - 40</td>
<td>Protection systems (bumpers etc.)</td>
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<tr>
<td>91 - 90</td>
<td>Temporary structures</td>
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<tr>
<td>92 - 10</td>
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<tr>
<td>92 - 20</td>
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<tr>
<td>92 - 30</td>
<td>Outfitting/non-structural</td>
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<tr>
<td>92 - 40</td>
<td>Prestressing reinforcements</td>
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<td>92 - 50</td>
<td>Ordinary reinforcements</td>
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<tr>
<td>92 - 60</td>
<td>Protection systems (boat bumpers etc.)</td>
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<tr>
<td>92 - 70</td>
<td>Jacking subsystems (jack-ups)</td>
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<tr>
<td>92 - 90</td>
<td>Temporary structures</td>
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<tr>
<td>93 - 10</td>
<td>Primary structures</td>
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<td>Outfitting/non-structural</td>
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<td>Temporary structures</td>
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<td>Anchors</td>
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<td>Anchor lines</td>
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<td>Tether anchors</td>
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<td>94 - 60</td>
<td>Dynamic positioning</td>
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<td>94 - 70</td>
<td>Propulsion</td>
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<td>94 - 71</td>
<td>Power supply</td>
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<td>94 - 72</td>
<td>Thruster</td>
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<td>95 - 10</td>
<td>Primary structures</td>
</tr>
<tr>
<td>95 - 20</td>
<td>Secondary structures</td>
</tr>
<tr>
<td>95 - 30</td>
<td>Outfitting/non-structural</td>
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<tr>
<td>95 - 40</td>
<td>Roads</td>
</tr>
<tr>
<td>95 - 50</td>
<td>Bridges</td>
</tr>
<tr>
<td>95 - 60</td>
<td>Pads</td>
</tr>
</tbody>
</table>
95 - 70 Quays
95 - 80 Tunnels/caverns
95 - 90 Temporary structures

96 SUBSEA PRODUCTION SYSTEMS

96 - 10 Primary structure
96 - 20 Secondary structure
96 - 90 Temporary structure

97 WELL TEMPLATES

97 - 10 Primary structure
97 - 20 Secondary structure
97 - 90 Temporary structure

98 CORROSION PROTECTION SYSTEMS

98 - 10 Painting
98 - 20 Cathodic protection
98 - 30 Corrosion monitoring

99 MISCELLANEOUS SYSTEMS

99 - 10 Structural monitoring
99 - 20 Lifting (spreader bars etc.)
99 - 30 Installation aids
99 - 40 Transportation aids
99 - 50 Grillage/seafastening
ANNEX B
ITEM FUNCTION CODES
(NORMATIVE)
ITEM FUNCTION CODES

International standards are the primary identification principles to be used.

As supplement for not defined type and function codes in international standards as referenced pr. type and function in this appendix, the following codes shall be applied:

ARCHITECTURAL

AA  Kitchen Equipment
AB  Laundry Equipment
AC  Sanitary Equipment
AX
AD  Doors

DRILLING

BD  BOP/Accumulator Equipment
BG  Drawwork/Rotary table
BH  Riser
BI  Choke manifold
BJ  Top drive
BM  Skid-Jack
BN  Diverter
BS  Drilling manifold
BT  Through flowline equipment
BX  Other drilling equipment

MISC. MECHANICAL

CA  Filter/Strainer
CB  Air driven motor/Starter
CC  Centrifuge
CD  Conclition engine
CE  Cyclone
CF  Mechanical separator/Shaker
CG  Gear Box
CH  Hydraulic cylinder
CJ  Mixers/Agitator/Blender
CN  Solid waste disposal unit
CP  Pig
CQ  Eductor and ejector
CR  Trash rack/Collector
CT  Gas turbine/Expander
CU  Steam turbine
CV  Hydraulic motor
CX  Other mechanical equipment
CY  Spring support
COMMISSION PACKAGE

(codes to be allocated?)

ELECTRICAL EQUIPMENT

Electrical equipment shall be identified according to IEC 750. Additional codes are:

EA Distribution board/switchgear for <400V, 400V<1kV and >1kV, Control equipment/interface panel <230V
EC Capacitors
EE Lighting fixtures, other electrical equipment
EG Battery/battery charger, generator
EI Navigation aid
EJ Electrical junction boxes
EM Electric motor
EQ Circuit breaker/disconnector (isolator)
ER Resistor
ET Transformer
EU Rectifier and inverter, frequency converter
EW Electrical cables, earthing bar, bus bar/bus duct
EX Socket outlets, terminals, plugs

HEATER, FURNACE AND BOILER

FA Oil fired boiler including stack and ducting
FB Electrode boiler including stack and ducting
FC Warm water maker
FD Flare
FE Electric heating element
FM Mud burner
FX Other heater, furnace, boiler

HEATING, VENTILATION AND AIR CONDITIONING

GA Air handling unit
GB Fan coil unit
GD Centrifugal fan
GE Axial fan/Mixed flow fan
GF Air filters
GG Roof hood
GH Coding Coil/Heating Coil
GK Humidifier
GL Sound attenuator
GM Fire damper
GN Shut off damper
GO Pressure control damper
GP  Coalescers
GQ  Weather louvre
GR  Balancing damper
GV  Supply grille/Diffuser
GW  Extract grille
GX  Other HVAC equipment
GZ  Inlet guide vanes/Flow measuring device/Sampling point

HEAT TRANSFER

HA  Shell and tube heat exchanger
HB  Plate heat exchanger
HC  Radiator
HE  Miscellaneous cooler and condenser
HW  Waste heat recovery unit
HX  Other heat transfer equipment

INSTRUMENT (not for field tagged instrument)

IA  Air distribution header
IC  Controller/computer cabinet
ID  Desk/console
IE  Electrical distribution/power supply cabinet
IF  Field cabinet
IH  Hydraulic power unit
IJ  Instrument junction boxes
IK  Field termination cabinet/cross connection cabinet
IL  Logger/printer/copies
IM  Matrix-/mimic panel
IO  Operator station, workstation, PC, VDU etc.
IP
IR  Misc. instruments
IS
IT
IV  Valve control assembly
IW  Instrument cables

FIRE AND GAS (field equipment)

AB  Gas detector
BF  Fire detector - fire
BS  Fire detector - smoke
BH  Fire detector - heat
### COMPRESSOR AND BLOWER

<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>KA</td>
<td>Centrifugal compressor</td>
</tr>
<tr>
<td>KB</td>
<td>Reciprocating compressor</td>
</tr>
<tr>
<td>KC</td>
<td>Screw/Rotary compressor</td>
</tr>
<tr>
<td>KE</td>
<td>Fan</td>
</tr>
<tr>
<td>KF</td>
<td>Blower</td>
</tr>
<tr>
<td>KH</td>
<td>Axial compressor</td>
</tr>
<tr>
<td>KJ</td>
<td>Diaphragm compressor</td>
</tr>
<tr>
<td>KX</td>
<td>Other compressor/Blower</td>
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</table>

### MATERIAL HANDLING

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<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>MA</td>
<td>Pedestal Crane/Jib crane</td>
</tr>
<tr>
<td>MB</td>
<td>Gantry crane</td>
</tr>
<tr>
<td>MC</td>
<td>Overhead traveling crane</td>
</tr>
<tr>
<td>MD</td>
<td>Electrical/Air driven hoist</td>
</tr>
<tr>
<td>ME</td>
<td>Manual driven hoist</td>
</tr>
<tr>
<td>MF</td>
<td>Lift</td>
</tr>
<tr>
<td>MG</td>
<td>Escalator</td>
</tr>
<tr>
<td>MH</td>
<td>Skyclimber, personnel basket etc.</td>
</tr>
<tr>
<td>MJ</td>
<td>Screw feeder</td>
</tr>
<tr>
<td>MK</td>
<td>Winch</td>
</tr>
<tr>
<td>ML</td>
<td>Conveyor</td>
</tr>
<tr>
<td>MM</td>
<td>Loading/Discharging equipment</td>
</tr>
<tr>
<td>MN</td>
<td>Forklift, truck, transporter etc.</td>
</tr>
<tr>
<td>MP</td>
<td>Yoke, block, sheave, hook etc.</td>
</tr>
<tr>
<td>MQ</td>
<td>Workshop machine</td>
</tr>
<tr>
<td>MR</td>
<td>Tool</td>
</tr>
<tr>
<td>MS</td>
<td>Pipe handling equipment (drilling only)</td>
</tr>
<tr>
<td>MT</td>
<td>Weighting equipment</td>
</tr>
<tr>
<td>MU</td>
<td></td>
</tr>
<tr>
<td>MV</td>
<td>Packing equipment</td>
</tr>
<tr>
<td>MX</td>
<td>Other material and misc. products handling equipment</td>
</tr>
<tr>
<td>MY</td>
<td>Runway beam</td>
</tr>
<tr>
<td>MZ</td>
<td>Padeye/Lifting lug</td>
</tr>
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</table>

### SPECIAL ITEM

<table>
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<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>NP</td>
<td>Special item</td>
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</table>

### PUMP

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>PA</td>
<td>Centrifugal pump</td>
</tr>
<tr>
<td>PB</td>
<td>Reciprocating pump</td>
</tr>
<tr>
<td>PC</td>
<td>Rotary pump</td>
</tr>
<tr>
<td>PD</td>
<td>Special metering pump</td>
</tr>
</tbody>
</table>
### SAFETY, ESCAPE AND FIRE FIGHTING EQUIPMENT

(lifeboat, raft, extinguisher etc.)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>Lifeboat and raft</td>
</tr>
<tr>
<td>SB</td>
<td>Pickup boat</td>
</tr>
<tr>
<td>SC</td>
<td>Life saving equipment (cabinet, survival suit, lifebuoy, breathing apparatus, ladder, torche, etc.)</td>
</tr>
<tr>
<td>SD</td>
<td>First aid equipment (stretcher, shower, eyewash, etc.)</td>
</tr>
<tr>
<td>SE</td>
<td>Fire fighting equipment (cabinet, smoke diving equipment, tool, etc.)</td>
</tr>
<tr>
<td>SF</td>
<td>Portable fire extinguisher</td>
</tr>
<tr>
<td>SG</td>
<td>Fire/Safety station</td>
</tr>
<tr>
<td>SH</td>
<td>CO₂ equipment</td>
</tr>
<tr>
<td>SJ</td>
<td>Fixed foam unit</td>
</tr>
<tr>
<td>SK</td>
<td>Dual agent unit</td>
</tr>
<tr>
<td>SL</td>
<td>Dry chemical unit</td>
</tr>
<tr>
<td>SM</td>
<td>Fire monitor</td>
</tr>
<tr>
<td>SP</td>
<td>Fire hose cabinet</td>
</tr>
<tr>
<td>SR</td>
<td>Fire hose reel</td>
</tr>
<tr>
<td>SS</td>
<td>Sprinkler valve</td>
</tr>
<tr>
<td>ST</td>
<td>Fire door</td>
</tr>
<tr>
<td>SU</td>
<td>Utility station</td>
</tr>
<tr>
<td>SW</td>
<td>Deluge equipment</td>
</tr>
<tr>
<td>SX</td>
<td>Other safety, escape and fire fighting equipment</td>
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</table>

### TANK (atmospheric)

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<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>TA</td>
<td>Storage tank cylindrical</td>
</tr>
<tr>
<td>TB</td>
<td>Storage tank rectangular</td>
</tr>
<tr>
<td>TD</td>
<td>Water lock</td>
</tr>
<tr>
<td>TE</td>
<td>Drain collector/Drain pot</td>
</tr>
<tr>
<td>TF</td>
<td>Mud pit</td>
</tr>
<tr>
<td>TG</td>
<td>Sump</td>
</tr>
<tr>
<td>TH</td>
<td>Shaft skimmer (GBS)</td>
</tr>
<tr>
<td>TP</td>
<td>Water pond</td>
</tr>
<tr>
<td>TX</td>
<td>Other atmospheric tank</td>
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### SUBSEA EQUIPMENT

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>UA</td>
<td>Wellhead, tieback, PGS equipment</td>
</tr>
<tr>
<td>UB</td>
<td>Tubing hanger system</td>
</tr>
<tr>
<td>UC</td>
<td>X-mas tree/cap system</td>
</tr>
<tr>
<td>UD</td>
<td>Lower safety block (LRP/SWIB)</td>
</tr>
</tbody>
</table>
UE  Running tool (EQDP/URT/TCRT)
UF  Work over riser system
UG  Upper safety block system
UH  Workover control system
UI  Subsea structure/manifold system
UJ  Pigging system
UK  Flow and servicelines
UL  Hydraulic/Electrical control system
UM  Pull-in systems
UN  Connection systems
UO  Control pod system
UP  Control pod running tool system
UQ  Intervention control system
UR  Production control system
US  ROV tools and test equipment
UT  Other intervention tools systems
UU
UV
UW
UX  Other subsea equipment
UY
UZ  Aux. equipment

VESSELS AND COLUMN

VA  Separator
VB  Accumulator
VC  Gas bottle
VD  Settling tank, knockout drum, flash tank
VE  Column
VG  Scrubber
VH  Deaerator
VJ  Coalescer
VK  Dryer
VL  Receiver and surge vessel, expansion and head tank
VM  Pig launcher and receiver
VN  Storage tank
VS  Slug catcher
VV  Special purpose vessel
VW  Pulsation damper
VX  Other vessel and column
VZ  Storage cell (GBS)

EQUIPMENT PACKAGE/SKID

XX  Equipment package/skid
INSTRUMENT AND CONTROL FUNCTION CODES

The function code for loop level instruments and control functions comprises 2-4 alphabetic characters according to ISO 3511.

FIRE AND GAS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>AB</td>
<td>Gas detector IR, Beam</td>
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<tr>
<td>AX</td>
<td>Gas detector</td>
</tr>
<tr>
<td>AZ</td>
<td>Gas detector duct mounted</td>
</tr>
<tr>
<td>AT</td>
<td>Gas transmitter</td>
</tr>
<tr>
<td>BU</td>
<td>Flame detector ultra violet</td>
</tr>
<tr>
<td>BX</td>
<td>Flame detector infra-red</td>
</tr>
<tr>
<td>BS</td>
<td>Smoke detector, ionization</td>
</tr>
<tr>
<td>BO</td>
<td>Smoke detector, optical indicator</td>
</tr>
<tr>
<td>BQ</td>
<td>Smoke detector, high sensitivity</td>
</tr>
<tr>
<td>BR</td>
<td>Heat detector rate of rise</td>
</tr>
<tr>
<td>BC</td>
<td>Heat detector rate compensated</td>
</tr>
<tr>
<td>CA</td>
<td>Extinguisher agent pre-discharge alarm</td>
</tr>
<tr>
<td>CD</td>
<td>Extinguisher agent pre-discharge lamp</td>
</tr>
<tr>
<td>CI</td>
<td>Extinguisher agent status indicator</td>
</tr>
<tr>
<td>DR</td>
<td>Door release units</td>
</tr>
<tr>
<td>ES</td>
<td>Emergency shutdown switch</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS</td>
<td>Gas detector H₂S</td>
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<tr>
<td>AR</td>
<td>Gas detector IR, point</td>
</tr>
<tr>
<td>AI</td>
<td>Gas detector remote indicator</td>
</tr>
<tr>
<td>BD</td>
<td>Addressable unit</td>
</tr>
<tr>
<td>BF</td>
<td>Fixed heat detector</td>
</tr>
<tr>
<td>BM</td>
<td>Manual fire alarm</td>
</tr>
<tr>
<td>BI</td>
<td>Smoke detector remote</td>
</tr>
<tr>
<td>BW</td>
<td>Water release switch</td>
</tr>
<tr>
<td>BE</td>
<td>Manual electrical isolation</td>
</tr>
<tr>
<td>BL</td>
<td>Electric isolation status light</td>
</tr>
<tr>
<td>CN</td>
<td>Extinguisher agent release unit</td>
</tr>
<tr>
<td>CO</td>
<td>Extinguisher agent timer</td>
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</table>

TELECOMMUNICATION

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>Antenna</td>
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<tr>
<td>AW</td>
<td>Antenna tuning unit</td>
</tr>
<tr>
<td>AX</td>
<td>Antenna socket</td>
</tr>
<tr>
<td>AP</td>
<td>Antenna amplifier</td>
</tr>
<tr>
<td>CA</td>
<td>Cable amplifier</td>
</tr>
<tr>
<td>CS</td>
<td>Cable splitter</td>
</tr>
<tr>
<td>CT</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>CO</td>
<td>CAS outlet</td>
</tr>
<tr>
<td>DA</td>
<td>Display unit</td>
</tr>
<tr>
<td>EC</td>
<td>Equipment cabinet</td>
</tr>
<tr>
<td>HH</td>
<td>Acoustic hood</td>
</tr>
<tr>
<td>IX</td>
<td>Intercom unit (Ex)</td>
</tr>
<tr>
<td>LG</td>
<td>Flashing light, green</td>
</tr>
<tr>
<td>LY</td>
<td>Flashing light, yellow</td>
</tr>
<tr>
<td>TE</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>TM</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>TV</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>TW</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>TX</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>TY</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>U</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>V</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>W</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>X</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>Y</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>Z</td>
<td>Cable tapper</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>LS</td>
<td>Loudspeaker</td>
</tr>
<tr>
<td>MC</td>
<td>Met. sensor, cloud height</td>
</tr>
<tr>
<td>MH</td>
<td>Met. sensor, humidity</td>
</tr>
<tr>
<td>MP</td>
<td>Met. sensor, pressure</td>
</tr>
<tr>
<td>MR</td>
<td>Met. sensor, wave radar</td>
</tr>
<tr>
<td>MT</td>
<td>Met. sensor, temperature</td>
</tr>
<tr>
<td>MW</td>
<td>Met. sensor, wind</td>
</tr>
<tr>
<td>NM</td>
<td>Network socket, multipoint (telephone, data, LAN etc.)</td>
</tr>
<tr>
<td>NT</td>
<td>Network socket, telephone</td>
</tr>
<tr>
<td>ND</td>
<td>Network socket, data/LAN</td>
</tr>
<tr>
<td>NX</td>
<td>Ex telephone</td>
</tr>
<tr>
<td>OC</td>
<td>Operator console</td>
</tr>
<tr>
<td>OP</td>
<td>Operator/control panel (access unit)</td>
</tr>
<tr>
<td>PA</td>
<td>Power amplifier</td>
</tr>
<tr>
<td>RU</td>
<td>Radio unit</td>
</tr>
<tr>
<td>SP</td>
<td>Service panel</td>
</tr>
<tr>
<td>TC</td>
<td>CCTV camera</td>
</tr>
<tr>
<td>TJ</td>
<td>Telecom junction box</td>
</tr>
<tr>
<td>TR</td>
<td>Tape recorder</td>
</tr>
<tr>
<td>TV</td>
<td>TV (video) monitor</td>
</tr>
<tr>
<td>TW</td>
<td>Telecom cable</td>
</tr>
<tr>
<td>WR</td>
<td>Remote unit</td>
</tr>
</tbody>
</table>
PIPELINE AND PIPING CODES

The type and function code to be incorporated in the tag number for topside piping is "L" and pipelines "Y".

For piping the following specific attributes to the item identification are used:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line size</td>
<td>NNN</td>
</tr>
<tr>
<td>Pipe classification</td>
<td>AA</td>
</tr>
<tr>
<td>Insulation class</td>
<td>N</td>
</tr>
</tbody>
</table>

**Example:**

The piping classification code is interpreted as follows:

**First letter - Piping pressure rating code**

<table>
<thead>
<tr>
<th>Letter</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>150 pounds rating according to ANSI codes</td>
</tr>
<tr>
<td>B</td>
<td>300</td>
</tr>
<tr>
<td>D</td>
<td>600</td>
</tr>
<tr>
<td>E</td>
<td>900</td>
</tr>
<tr>
<td>F</td>
<td>1500</td>
</tr>
<tr>
<td>G</td>
<td>2500</td>
</tr>
<tr>
<td>J</td>
<td>5000</td>
</tr>
<tr>
<td>K</td>
<td>10000</td>
</tr>
</tbody>
</table>

**Second letter - Material classification code**

<table>
<thead>
<tr>
<th>Letter</th>
<th>Material classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Aluminium and aluminium alloys</td>
</tr>
<tr>
<td>B</td>
<td>Concrete</td>
</tr>
<tr>
<td>C</td>
<td>Carbon steel</td>
</tr>
<tr>
<td>D</td>
<td>Duplex stainless steel</td>
</tr>
<tr>
<td>F</td>
<td>Ferritic and martensitic stainless steel</td>
</tr>
<tr>
<td>G</td>
<td>Galvanized carbon steel</td>
</tr>
<tr>
<td>K</td>
<td>Copper and copper alloys</td>
</tr>
<tr>
<td>L</td>
<td>Lined material (non-metallic lining)</td>
</tr>
<tr>
<td>N</td>
<td>Nickel and nickel base alloys</td>
</tr>
<tr>
<td>P</td>
<td>Plastic and reinforces pipes (GRP)</td>
</tr>
<tr>
<td>S</td>
<td>Austenitic stainless steel</td>
</tr>
<tr>
<td>T</td>
<td>Titanium</td>
</tr>
<tr>
<td>V</td>
<td>Alloied steels - low temperature grades</td>
</tr>
<tr>
<td>W</td>
<td>Alloied steels - high temperature grades</td>
</tr>
<tr>
<td>X</td>
<td>Alloied steels</td>
</tr>
<tr>
<td>Y</td>
<td>Structural steel</td>
</tr>
<tr>
<td>Z</td>
<td>Other materials not specified above</td>
</tr>
</tbody>
</table>
The insulation class code means:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heat conservation</td>
<td>HC</td>
</tr>
<tr>
<td>2</td>
<td>Cold medium conservation</td>
<td>CC</td>
</tr>
<tr>
<td>3</td>
<td>Personnel protection</td>
<td>PP</td>
</tr>
<tr>
<td>4</td>
<td>Frost proofing</td>
<td>FP</td>
</tr>
<tr>
<td>5</td>
<td>Fire proofing (insulation)</td>
<td>FI</td>
</tr>
<tr>
<td>6</td>
<td>Acoustic 10 dB</td>
<td>AI</td>
</tr>
<tr>
<td>7</td>
<td>Acoustic 20 dB</td>
<td>AI</td>
</tr>
<tr>
<td>8</td>
<td>Acoustic 30 dB</td>
<td>AI</td>
</tr>
<tr>
<td>9</td>
<td>External condensation protection</td>
<td>EP</td>
</tr>
<tr>
<td></td>
<td>No insulation</td>
<td>NI</td>
</tr>
</tbody>
</table>
ANNEX D

DISCIPLINE AND ADMINISTRATION CODING

(NORMATIVE)
DISCIPLINE AND ADMINISTRATION CODING

The discipline code is used as attribute to the documentation identification and it consists of a one character alphabetic code as follows:

A Administration
B Procurement
C Civil/architect
D Drilling
E Electrical
F Project control/cost/economy
G Geology
H HVAC
I Instrumentation/metering
J Marine operation
K Inspection
L Piping/layout
M Material technology
N Structural
O Operation
P Process
Q Quality management
R Mechanical
S Safety
T Telecommunication
U Subsea
W Weight control
X Reservoir
Y Pipeline
Z Multidiscipline
ANNEX E

DOCUMENT TYPE CODES
(NORMATIVE)
### DOCUMENT TYPE CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>Accounting</td>
</tr>
<tr>
<td>BA</td>
<td>Budget</td>
</tr>
<tr>
<td>CA</td>
<td>Analysis, test and calculation</td>
</tr>
<tr>
<td>CB</td>
<td>Cause and effect</td>
</tr>
<tr>
<td>DS</td>
<td>Data sheets</td>
</tr>
<tr>
<td>DA</td>
<td>Data sheets for health, environment and safety</td>
</tr>
<tr>
<td>EA</td>
<td>Estimate</td>
</tr>
<tr>
<td>FA</td>
<td>Principal decision</td>
</tr>
<tr>
<td>FB</td>
<td>Philosophy</td>
</tr>
<tr>
<td>FC</td>
<td>Design basis</td>
</tr>
<tr>
<td>GA</td>
<td>Authorities document</td>
</tr>
<tr>
<td>HA</td>
<td>Standard</td>
</tr>
<tr>
<td>KA</td>
<td>Procedures</td>
</tr>
<tr>
<td>KB</td>
<td>System function test procedure</td>
</tr>
<tr>
<td>KC</td>
<td>Performance test procedure</td>
</tr>
<tr>
<td>KD</td>
<td>Work instruction</td>
</tr>
<tr>
<td>LA</td>
<td>Indexes</td>
</tr>
<tr>
<td>LB</td>
<td>Registers</td>
</tr>
<tr>
<td>LC</td>
<td>Main equipment list</td>
</tr>
<tr>
<td>LD</td>
<td>Instrument index</td>
</tr>
<tr>
<td>LE</td>
<td>Cable list</td>
</tr>
<tr>
<td>LF</td>
<td>Legends</td>
</tr>
<tr>
<td>LG</td>
<td>List of special tools</td>
</tr>
<tr>
<td>MA</td>
<td>Operation and maintenance instruction</td>
</tr>
<tr>
<td>MB*</td>
<td>Technical description</td>
</tr>
<tr>
<td>MC*</td>
<td>Corrective maintenance</td>
</tr>
<tr>
<td>MD*</td>
<td>Operating instruction</td>
</tr>
<tr>
<td>ME*</td>
<td>Predictive maintenance</td>
</tr>
<tr>
<td>MG*</td>
<td>Equipment handling instruction</td>
</tr>
<tr>
<td>MF</td>
<td>Parts and spare parts list</td>
</tr>
<tr>
<td>MH</td>
<td>Lubrication schedule</td>
</tr>
<tr>
<td>NA</td>
<td>Catalogue</td>
</tr>
<tr>
<td>OA</td>
<td>Work package</td>
</tr>
</tbody>
</table>

* Primary delivery MA, separate codes is used only for separate delivery
PA  Purchase orders
PB  Blanket order/frame agreement
PC  Call off order
PD  Major contract
PE  Minor contract
PF  Work order
PG  Material take off (MTO)
PH  Material release note (MRN)
PI  Material movement ticket (MMT)
PJ  Material receiving report (MRR)
PK  Over, shortage and damage report (OS & D)

QA  Query

RA  Report
RB  Technical report
RC  Non conformance report
RD  Corrective action

SA  Specification
SC  Special technical specification
SD  Project design criterias, philosophies etc.

TA  Schedule
TB  Planning schedule
TC  Work plan
TD  Cable schedule/cable transit schedule
TE  Schedules architect
TF  Pipe support schedules
TG  Spring schedules

VA  Manufacturing record and verifying documentation
VB  Certificate of conformance
VC  Traceability lists
VD  List of certificates, reports, procedures and calculations
VE  Third party verification and certification
VF  Certificates for cranes and lifting equipment
VG  Type approval certificate

WA  Isometric drawing hydrotest
WB  Pipe support drawing
WC  Structural fire protection drawings
WD  Acoustic/thermal insulation and fire protection plan

XA  Drawings, misc.
XB  Flow diagrams
XC  Pipe & instrument diagram (P&ID / D&ID)
XD  General agreement
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XE</td>
<td>Layout drawings</td>
</tr>
<tr>
<td>XF</td>
<td>Detail crosssectional drawings with parts list</td>
</tr>
<tr>
<td>XG</td>
<td>Location drawing</td>
</tr>
<tr>
<td>XH</td>
<td>Cable rack and tray layout</td>
</tr>
<tr>
<td>XI</td>
<td>Area classification drawing</td>
</tr>
<tr>
<td>XJ</td>
<td>Fire area location drawing</td>
</tr>
<tr>
<td>XK</td>
<td>Foundation drawing</td>
</tr>
<tr>
<td>XL</td>
<td>Pipe connections</td>
</tr>
<tr>
<td>XM</td>
<td>Isometric fabrication drawing</td>
</tr>
<tr>
<td>XN</td>
<td>Isometric drawing stress test</td>
</tr>
<tr>
<td>XO</td>
<td>Isometric design drawing</td>
</tr>
<tr>
<td>XQ</td>
<td>System block diagram</td>
</tr>
<tr>
<td>XP</td>
<td>Termination drawing for external connections</td>
</tr>
<tr>
<td>XS</td>
<td>Single line diagram</td>
</tr>
<tr>
<td>XT</td>
<td>Field equipment installation drawings</td>
</tr>
<tr>
<td>XU</td>
<td>Logic diagram</td>
</tr>
<tr>
<td>XV</td>
<td>Loop diagram</td>
</tr>
<tr>
<td>XW</td>
<td>Nodal diagram</td>
</tr>
<tr>
<td>XX</td>
<td>Wiring diagram</td>
</tr>
<tr>
<td>XY</td>
<td>Hook up drawing</td>
</tr>
<tr>
<td>ZA</td>
<td>EDP documentation</td>
</tr>
<tr>
<td>ZB</td>
<td>Software documentation</td>
</tr>
<tr>
<td>ZC</td>
<td>System documentation</td>
</tr>
<tr>
<td>ZD</td>
<td>VDU pictures</td>
</tr>
</tbody>
</table>
ANNEX F
AREA CODES
(NORMATIVE)
AREA CODING

General

An installation is divided on a geographic/coordinate basis by means of area coding. The area codes are used as attributes to plant items and documentation identification codes.

Format

The area code shall be:

\[
\text{A NN ZZ}
\]

Main area (alpha character)
Sub area (numeric character)
Section (alpha numeric character)

Three characters shall always be used.

Main Area (A)

A single alphabetic character defines a main area type or major division within the plant as follows:

<table>
<thead>
<tr>
<th>A</th>
<th>Template</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Bridge</td>
</tr>
<tr>
<td>C</td>
<td>Load transfer frame (LTF)/Cellar deck</td>
</tr>
<tr>
<td>D</td>
<td>Drilling</td>
</tr>
<tr>
<td>E</td>
<td>Export pipelines</td>
</tr>
<tr>
<td>F</td>
<td>Flare</td>
</tr>
<tr>
<td>G</td>
<td>Gravity base structure (GBS)</td>
</tr>
<tr>
<td>H</td>
<td>Helideck</td>
</tr>
<tr>
<td>J</td>
<td>Jacket</td>
</tr>
<tr>
<td>L</td>
<td>Living quarter</td>
</tr>
<tr>
<td>M</td>
<td>Modules</td>
</tr>
<tr>
<td>P</td>
<td>Process</td>
</tr>
<tr>
<td>Q</td>
<td>Utility</td>
</tr>
<tr>
<td>R</td>
<td>Risers/j-tubes/umbilicals</td>
</tr>
<tr>
<td>S</td>
<td>Pipelines</td>
</tr>
<tr>
<td>T</td>
<td>Topside</td>
</tr>
<tr>
<td>U</td>
<td>Subsea</td>
</tr>
<tr>
<td>W</td>
<td>Wellhead</td>
</tr>
<tr>
<td>X</td>
<td>General (all areas)</td>
</tr>
<tr>
<td>Y</td>
<td>Tender support vessel (TSV)</td>
</tr>
<tr>
<td>Z</td>
<td>General</td>
</tr>
</tbody>
</table>

Sub Area (NN)

A two character numeric code defines sub divisions of the main area. Sub areas will be defined according to the needs of each plant.

Section (A)

Section is a subdivision of sub areas and is defined by a two character number. The first character is used to split the subarea into sections, e.g. 10 = section 1, 20 = section 2. The second character is used to identify rooms within each section or subarea.
Examples

Process area:

P10  Module P10,  general
P11  Module P10,  level 1
P12  Module P10,  level 2 (mezzanine)
P1210 Module P10, level 2 (mezzanine), section 1

Living quarters:

L1124 Module L10,  level 1, section/room 24
L2236 Module L20,  level 2, section/room 36

Fire Area Coding

Fire areas are coded according to the area coding principles but identified with the letter F after the number.

Examples:

P1210F  Fire Area is Module P10, Level 2 Mezzanine
P1211F  Fire Area is Control Room located within P12
L2236F  Fire Area is Module L26 Room 36

The fire area code may for certain fire areas differ from the room code. This may be the case when one fire area is covering two or more rooms.
ANNEX G

REVISION, STATUS AND ACCEPTANCE CODES

(NORMATIVE)
GENERAL

This section describes the codes to be used for revision, status and acceptance coding as attributes to the document number. The format for these attributes are as follows:

NN A N (A)

Revision code
Status code
Acceptance code

REVISION CODES

Revision codes (NN)

The purpose of the sequential revision number is to give each revision a unique number.

A two digit sequential number starting at 01 shall be given for the documents first issue and shall be increased with one for each revision.

STATUS CODES

The purpose of the status code is to give each issue an application

The reason/description of status has to be described in the document identification header/matrix and in addition identified in the attributes to the document number with a letter as described below:

A  Approved/accepted for application for granting of production licenses
B  Approved/accepted for exploration
C  Approved/accepted for pre-feasibility study
D  Approved/accepted for feasibility study
E  Approved/accepted for main study, basic engineering or design basis
F  Approved/accepted for detail engineering
G  Approved/accepted for inquiry or tender
H  Approved/accepted for order placement/purchase agreement or contract award
K  Approved/accepted for construction
L  As built

M  Approved (independent of project phases)

N  Voided

**ACCEPTANCE CODES**

An acceptance code shall be assigned to documents submitted for review and acceptance. The following codes shall be used:

Code 1:  Accepted

Code 2A:  Interface information as clouded is accepted and frozen

Code 2:  Accepted with comments incorporated, revise and resubmit

Code 3:  Not accepted, revise and resubmit

(Code 4 according to NS 5820 shall not be used).

The assigned acceptance code shall be shown on the document.
ANNEX H

ORIGINATOR AND RESPONSIBLE PARTY CODES

(NORMATIVE)
GENERAL

Originator, responsible party and transmittal codes are a two or three character alphanumeric code and is used in document coding to identify each contractor, supplier and company. They are also referenced in engineering registers.

ORIGINATOR CODES

The originator code defines which organization has created the document, by four alpha numeric characters. The originator code does not change, even if the responsibility for a document is transferred.

RESPONSIBLE PARTY CODES

The responsible party defines the organizational unit responsible for the original and updating of the document. This organization will, at first, be the same as the originator but may change during a document's life cycle.

For example will a document created by an engineering contractor have it's responsibility transferred to the fabricator and later to a hook-up/commissioning contractor. After hand-over as as-built documentation, the operation unit will be the responsible party for all documents.