

DIN EN ISO 10855-1:2018-11 (E)

Offshore containers and associated lifting sets - Part 1: Design, manufacture and marking of offshore containers (ISO 10855-1:2018); English version EN ISO 10855-1:2018

Contents		Page
Foreword		v
Introduction		vi
1 Scope		1
2 Normative references		1
3 Terms and definitions		3
4 Symbols		5
5 Design		5
5.1 General.....		5
5.2 Structural strength.....		6
5.2.1 General.....		6
5.2.2 Lifting loads.....		7
5.2.3 Impact loads.....		8
5.2.4 Internal forces on container walls.....		9
5.2.5 Minimum material thickness.....		9
5.3 Welding.....		9
5.4 Additional design details.....		9
5.4.1 Floor.....		9
5.4.2 Doors and hatches.....		10
5.4.3 Intermediate cargo decks.....		10
5.4.4 Driving ramps.....		10
5.4.5 Internal lashing points.....		10
5.4.6 Fork lift pockets.....		10
5.4.7 Top protection.....		11
5.4.8 Pad eyes.....		11
5.4.9 ISO-corner fittings.....		12
5.4.10 Equipment.....		12
5.4.11 Coating and corrosion protection.....		12
5.5 Tank containers.....		13
5.5.1 General.....		13
5.5.2 Frame.....		13
5.5.3 Tanks for fluids.....		13
5.5.4 Impact protection on tank containers for dangerous cargoes.....		13
5.6 Containers for bulk solids.....		13
6 Materials		14
6.1 Steel — General.....		14
6.2 Rolled and extruded steels in offshore container structures.....		15
6.2.1 General requirements.....		15
6.2.2 Groups of steels.....		15
6.2.3 Stainless steel.....		15
6.2.4 Steel forgings.....		15
6.2.5 Steel castings in ISO-corner fittings.....		16
6.3 Aluminium.....		16
6.4 Non-metallic materials.....		17
6.5 Material documents.....		18

7	Type testing	18
7.1	General.....	18
7.2	Test equipment and calibration.....	19
7.2.1	Test mass/test load.....	19
7.2.2	Calibration.....	19
7.3	Lifting test.....	19
7.3.1	General.....	19
7.3.2	All-point lifting.....	19
7.3.3	Two-point lifting.....	20
7.3.4	Post-lifting test inspection and examination.....	20
7.4	Vertical impact test.....	20
7.5	Other tests.....	20
8	Production	21
8.1	General.....	21
8.2	Primary structure.....	21
8.2.1	General.....	21
8.2.2	Approved welders.....	21
8.2.3	Examination of welds.....	21
8.3	Secondary structure.....	23
8.4	Production testing.....	23
8.4.1	Lifting test.....	23
8.4.2	Weather proofness testing.....	23
8.5	Failure of production containers.....	24
9	Marking	24
9.1	Safety marking.....	24
9.2	Identification markings.....	24
9.3	Information markings.....	24
9.4	Other markings.....	25
10	Container data plate	25
10.1	General.....	25
10.2	Contents of data plate.....	25
11	Certificate of conformity	26
11.1	General.....	26
11.2	Documentation.....	26
11.3	Contents of the certificate of conformity.....	27
	Annex A (informative) Regulations for offshore containers	28
	Bibliography	30