

# ISO 10855-1:2018 (E)

## Offshore containers and associated lifting sets — Part 1: Design, manufacture and marking of offshore containers

---

### Contents

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

- 6.5 Material documents
- 7 Type testing
  - 7.1 General
  - 7.2 Test equipment and calibration
    - 7.2.1 Test mass/test load
    - 7.2.2 Calibration
  - 7.3 Lifting test
    - 7.3.1 General
    - 7.3.2 All-point lifting
    - 7.3.3 Two-point lifting
    - 7.3.4 Post-lifting test inspection and examination
  - 7.4 Vertical impact test
  - 7.5 Other tests
- 8 Production
  - 8.1 General
  - 8.2 Primary structure
    - 8.2.1 General
    - 8.2.2 Approved welders
    - 8.2.3 Examination of welds
      - 8.2.3.1 General
      - 8.2.3.2 Non-destructive examination (NDE) methods
      - 8.2.3.3 Weld acceptance criteria
      - 8.2.3.4 Non-destructive examination (NDE) operators
  - 8.3 Secondary structure
  - 8.4 Production testing
    - 8.4.1 Lifting test
    - 8.4.2 Weather proofness testing
  - 8.5 Failure of production containers
- 9 Marking
  - 9.1 Safety marking
  - 9.2 Identification markings
  - 9.3 Information markings
  - 9.4 Other markings
- 10 Container data plate
  - 10.1 General
  - 10.2 Contents of data plate
- 11 Certificate of conformity
  - 11.1 General
  - 11.2 Documentation
  - 11.3 Contents of the certificate of conformity
- Annex A (informative) Regulations for offshore containers
  - A.1 General
  - A.2 General certification requirements for offshore containers
  - A.3 International requirements for freight containers
  - A.4 Tank containers for dangerous goods
  - A.5 Gas Cylinder Bundles
  - A.6 Additional requirements for offshore service containers
  - A.7 ATEX (EC Directive 2014/34/EU)