

Australian Standard[®]

**Offshore containers and associated
lifting sets**

**Part 1: Offshore containers—Design,
manufacture and marking
(EN 12079-1:2006, MOD)**

STANDARDS
Australia



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PREFACE

This Standard was prepared by the Standards Australia Committee ME-025, Lifting Tackle.

The objective of this Standard is to improve the alignment of Australian Practice with international practice with regard to inspection, examination and testing of offshore containers and associated lifting sets.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex or appendix to which they apply. A normative annex or appendix is an integral part of a Standard, whereas an informative annex or appendix is only for information and guidance.

This Standard is an adoption, with national variations, of EN 12079-1:2006, *Offshore containers and associated lifting sets, Part 1: Offshore container—Design, manufacture and marking*. The variations for application in Australia are listed in Appendix ZA.

As this Standard is reproduced from a European Standard, the following applies:

- (a) Its number appears on the cover and title page.
- (b) In the source text ‘EN 12079’ should read ‘AS EN 12079’.
- (c) In the source text ‘this European Standard’ should read ‘this Australian Standard’.
- (d) A full point substitutes for a comma when referring to a decimal marker.

Listed below are Australian and Australian/New Zealand Standards with similar scopes (not identical) to the documents referenced in the European Standard.*

<i>Reference to International or European Standard</i>	<i>Australian or Australian/New Zealand Standard</i>	
EN		
287-1	Qualification test of welders—Fusion welding—Part 1: Stick	AS 2980
473	Non destructive testing—Qualification and certification of NDT personnel—General principles	AS 3998
571-1	Non destructive testing—Penetrant testing—Part 1: General principles	AS 2062
970	Non destructive examination of fusion welds—Visual examination	AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5, AS/NZS 1665
1289	Non destructive examination of welds—Penetrant testing of welds—Acceptance levels	AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5
1290	Non-destructive examination of welds—Magnetic particle examination of welds	AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5, AS 1171

* Appendix ZA lists clauses where Australian or Australian/New Zealand Standards may be used.

<i>Reference to International or European Standard</i>	<i>Australian or Australian/New Zealand Standard</i>
EN	
1291 Non-destructive examination of welds—Magnetic particle testing of welds—Acceptance levels	AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5
1435 Non-destructive examination of welds—Radiographic examination of welded joints	AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5, AS 2177
1712 Non-destructive examination of welds—Ultrasonic examination of welded joints—Acceptance levels	AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5
1714 Non-destructive examination of welds—Ultrasonic examination of welded joints	AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5, AS 2062
10002-1 Metallic materials—Tensile testing—Part 1: Method of test at ambient temperature	AS 1391
10025-1 Hot rolled products of structural steels—Part 1: General technical delivery conditions	AS/NZS 3678, AS/NZS 3679.1, AS 1548
10025-2 Hot rolled products of structural steels—Part 2: Technical delivery conditions for nonalloy structural steels	AS/NZS 3678, AS/NZS 3679.1, AS 1548
10025-3 Hot rolled products of structural steels—Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels	AS/NZS 3678, AS/NZS 3679.1
10025-4 Hot rolled products of structural steels—Part 4: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels	AS/NZS 3678, AS/NZS 3679.1
10045-1 Metallic materials—Charpy impact test—Part 1: Test method	AS 1544.2, AS 1544.3
10164 Steel products with improved deformation properties perpendicular to the surface of the product—Technical delivery conditions	
10204 Metallic products—Types of inspection documents	
10210-1 Hot finished structural hollow sections of non-alloy and fine grain structural steels—Part 1: Technical delivery requirements	AS 1074, AS 1163

<i>Reference to International or European Standard</i>	<i>Australian or Australian/New Zealand Standard</i>
EN	
10219-1 Cold formed welded structural hollow sections of non-alloy and fine grain steels— Part 1: Technical delivery requirements	AS 1074, AS 1163
10250-2 Open die steel forgings for general engineering purposes— Part 2: Non-alloy quality and special steels	AS 1448
10250-3 Open die steel forgings for general engineering purposes— Part 3: Alloy special steels	
12517-1 Non-destructive testing of welds— Part 1: Evaluation of welded joints in steel, nickel, titanium and their alloys by radiography— Acceptance levels	AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5
30042 Arc-welded joints in aluminium and its weldable alloys—Guidance on quality levels for imperfections (ISO 10042:1992)	AS 1665
EN ISO	
5817 Welding—Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded)— Quality levels for imperfections (ISO 5817:2003)	
7500-1 Metallic materials—Verification of static uniaxial testing machines— Part 1: Tension/compression testing machines—Verification and calibration of the force-measuring system (ISO 7500-1:2004)	AS 2193
9606-2 Qualification test of welders— Fusion welding— Part 2: Aluminium and aluminium alloys (ISO 9606-2:2004)	AS 1665
15607 Specification and qualification of welding procedures for metallic materials—General rules (ISO 15607:2003)	AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5, AS/NZS 1665

Reference to International or European Standard

Australian or Australian/New Zealand Standard

EN

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|---------|--|--|
| 15609-1 | Specification and qualification of welding procedures for metallic materials—Welding procedure specification—Part 1: Arc welding (ISO 15609-1:2004) | AS/NZS 1554.1, AS/NZS 1554.4, AS/NZS 1554.5, AS/NZS 1665 |
| 15614-1 | Specification and qualification of welding procedures for metallic materials—Welding procedure test—Part 1: Arc and gas welding of steels and arc welding of nickel and nickel alloys (ISO 15614-1:2004) | |
| 15614-2 | Specification and qualification of welding procedures for metallic materials—Welding procedure test—Part 2: Arc welding of aluminium and its alloys (ISO 15614-2:2005) | AS/NZS 1665 |

ISO

- | | | |
|--------|---|---------------|
| 209-1 | Wrought aluminium and aluminium alloys—Chemical composition and forms of products—Part 1: Chemical composition | AS 2046.1 |
| 1161 | Series 1 freight containers—Corner fittings—Specification | AS/NZS 3711.3 |
| 1496-1 | Series 1 freight containers—Specification and testing—Part 1: General cargo containers for general purpose | AS/NZS 3711.4 |
| 1496-3 | Series 1 freight containers—Specification and testing—Part 3: Tank containers for liquids, gases and pressurized dry bulk | |
| 1496-4 | Series 1 freight containers—Specification and testing—Part 4: Non-pressurized containers for dry bulk | |

The titles of Standards listed above are as follows:

AS

- 1074 Steel tubes and tubulars for ordinary service
- 1163 Structural steel hollow sections
- 1171 Non-destructive testing—Magnetic particle testing of ferromagnetic products, components and structures
- 1391 Metallic materials—Tensile testing at ambient temperature

AS

- 1448 Carbon steel and carbon-manganese steels—Forgings (ruling section 300 mm maximum)
- 1548 Fine grained weldable steel plates for pressure equipment
- 2062 Non-destructive testing—Penetrant testing of products and components
- 2177 Non-destructive testing—Radiography of welded butt joints in metal
- 2193 Calibration and classification of force-measuring systems
- 2848 Aluminium and aluminium alloys—Compositions and designations
- 2848.1 Part 1: Wrought products
- 2980 Qualification of welders for fusion welding of steels
- 3678 Structural steel—Hot-rolled plates, floorplates and sheets
- 3679 Structural steel
- 3679.1 Part 1: Hot-rolled bars and sections
- 3998 Non-destructive testing—Qualification and certification of personnel

AS/NZS

- 1544 Methods for impact tests on metal
- 1544.2 Part 2: Charpy V-notch
- 1544.3 Part 3: Charpy U-notch and keyhole notch
- 1554 Structural steel welding
- 1554.1 Part 1: Welding of steel structures
- 1554.4 Part 4: Welding of high strength quenched and tempered steels
- 1554.5 Part 5: Welding of steel structures subject to high levels of fatigue loading
- 1665 Welding of aluminium structures
- 3711 Freight containers
- 3711.3 Part 3: Corner fitting
- 3711.4 Part 4: General purpose containers

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AUSTRALIAN STANDARD

Offshore containers and associated lifting sets**Part 1:****Offshore containers—Design, manufacture and marking
(EN 12079-1:2006, MOD)****1 Scope**

This part of EN 12079 specifies requirements for the design, manufacture and marking of offshore freight and service containers with maximum gross mass not exceeding 25000 kg, intended for repeated use to, from and between offshore installations and ships.

This part of EN 12079 specifies only transport related requirements.

Other parts of the standard are:

EN 12079-2, Offshore containers and associated lifting sets - Part 2: Lifting sets - Design, manufacture and marking

EN 12079-3, Offshore containers and associated lifting sets - Part 3: Periodic inspection, examination and testing

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 287-1, *Qualification test of welders — Fusion welding — Part 1: Steels*

EN 473, *Non destructive testing - Qualification and certification of NDT personnel - General principles*

EN 571-1, *Non destructive testing - Penetrant testing - Part 1: General principles*

EN 970, *Non-destructive examination of fusion welds — Visual examination*

EN 1289, *Non-destructive examination of welds - Penetrant testing of welds - Acceptance levels*

EN 1290, *Non-destructive examination of welds - Magnetic particle examination of welds*

EN 1291, *Non-destructive examination of welds - Magnetic particle testing of welds - Acceptance levels*

EN 1435, *Non-destructive examination of welds - Radiographic examination of welded joints*

EN 1714, *Non-destructive examination of welds - Ultrasonic examination of welded joints - Acceptance levels*

EN 1714, *Non-destructive examination of welds - Ultrasonic examination of welded joints*

EN 10002-1, *Metallic materials — Tensile testing — Part 1: Method of test at ambient temperature*

EN 10025-1, *Hot rolled products of structural steels - Part 1: General technical delivery conditions*

EN 10025-2, *Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10025-3, *Hot rolled products of structural steels - Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels*