



XLERPLATE[®] steel

AS 1548 – PT430T (L0)

General description

A fully killed, fine grained, carbon-manganese steel for boiler and pressure vessel applications, with a guaranteed minimum tensile strength of 430MPa. Produced by thermo-mechanical controlled rolling.

Features & benefits

- Guaranteed minimum strength levels
- Excellent weldability
- Excellent formability

Warnings

- This material should be used in conjunction with the appropriate pressure vessel design and welding standards

- Guidelines for cold bending, where fracture toughness is important are given in AS 4100:1998 and AS 1210:2010
- This grade has not been designed for re-certification to PT460T
- This grade is not recognised in the ASME material code and does not carry the 'SA' prefix
- This grade is not suitable for hot forming above 620°C

Australian standards

AS 1548:2008
AS/NZS 1365:1996
ISO 9001:2015 Quality System certified

Normal / optional supply conditions

	Normal	Optional
Thickness Range	5mm only	-
Availability	One standard size (2400mm x 5mm x 9m) only	-
Edge Condition	Trimmed	-
Tolerances	AS/NZS 1365:1996	-
Ultrasonic Inspection	-	AS 1710:2007
Surface Inspection	BlueScope	Third party
Certification	BlueScope	Third party endorsed

Chemical composition

Element	Guaranteed Maximum %
Carbon	0.20
Silicon	0.5
Manganese	1.60
Phosphorus	0.040
Sulfur	0.030
Chromium	0.25
Nickel	0.50
Copper	0.40
Molybdenum	0.10
Aluminium	0.10
Niobium**	0.010
Titanium	0.040
CEQ (IIW)	0.43

All values shown refer to the relevant Australian Standard unless otherwise stated

$$CEQ(IIW) = C + \frac{Mn}{6} + \frac{(Cr + Mo + V)}{5} + \frac{(Cu + Ni)}{15}$$

Mechanical properties

Tensile Properties (Transverse)		Thickness (mm)
		t = 5
Yield Strength (MPa)	Guaranteed Min	300
Tensile Strength (MPa)	Required	430 to 580
Elongation 5.65√S ₀ (%)	Guaranteed Min	22

Charpy Impact Properties	Longitudinal on 10 X 5 mm test piece	Test Temperature (°C)	Absorbed Energy (joules)	
			Avg. of 3	Individual
Guaranteed Min	430T	0	22	16
Guaranteed Min	430TLO	0	34	27

Formability	Thickness (mm)	Longitudinal	Transverse
Recommended min inside Radius	5	1.5t	1.0t

steel.com.au

Please ensure you have the correct data sheet for this product as displayed at www.steel.com.au

1800 024 402

steeldirect@bluescopesteel.com

For more information contact Steel Direct



The information contained in this datasheet is provided by way of general information about this product only, and has not been prepared with your specific needs in mind. We recommend that you seek BlueScope's advice as to the suitability of this product for the purpose(s) for which you propose to use it. To contact BlueScope for advice about your proposed use of this product, please contact Steel Direct. XLERPLATE®, BlueScope and the BlueScope brand mark are registered trade marks of BlueScope Steel Limited. © 2019 BlueScope Steel Limited ABN 16 000 011 058. All rights reserved.