

Hot Rolled Structural HA300/1 steel

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Revision 5, November 2003
This literature supersedes all previous issues

GENERAL DESCRIPTION

HA300/1 - Hot-rolled Structural steel with a guaranteed minimum yield strength of 300 MPa, a guaranteed minimum tensile strength of 430 MPa, with good ductility. Suitable for the manufacture of thin walled pressure vessels.

TYPICAL USES

Small air receivers and LPG vessels.

AUSTRALIAN STANDARDS

AS/NZS 1594/2002
AS/NZS 1365/1996

GUARANTEED PROPERTIES OF STEEL BASE



MECHANICAL PROPERTIES		GUARANTEED	CHEMICAL PROPERTIES		GUARANTEED MAXIMUM %	TYPICAL %
Longitudinal tensile			Carbon (C)		0.20	0.14 - 0.17
Yield strength, MPa		300 min	Silicon (Si)		0.35	0.005 - 0.010
Tensile strength, MPa		430 min	Manganese (Mn)		1.60	0.70 - 0.80
Elong on 80 mm, %			Phosphorus (P)		0.04	0.01 - 0.02
≤ 3.0 mm		18 min	Sulphur (S)		0.03	0.01 - 0.02
> 3.0 mm		22 min	Aluminium (Al)		0.10	0.02 - 0.05
180° transverse bend (L axis)			Nitrogen (N)		-	0.001 - 0.005
≤ 3.0 mm		1t	Titanium (Ti)		0.04	-
> 3.0 mm		2t	Niobium (Nb)		0.01	-
			Niobium + Vanadium (Nb) (V)		0.03	-

DIMENSIONAL CAPABILITIES

Preferred Thickness, mm	Width Range, mm									
	900	1000	1100	1200	1300	1400	1500	1600	1700	1800
13										
10										
8										
6										
5										
4.5										
4										
3.5										
3										
2.5										
2										
1.6										
1.5										

Note: Widths in the range 50 to 865mm are available by negotiation only.

These dimensions are a reflection of technical capability to produce. Supply conditions may be subject to dimensional restrictions and is subject to BlueScope Steel Sales and Marketing confirmation.

Key	 available black only	 available pickled
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NORMAL/OPTIONAL SUPPLY CONDITIONS

	Normal	Optional [#]
Surface finish	As-rolled	Pickled & Oiled
Tolerance class		
Thickness	AT	-
Width	AW	ME
Length	-	-
Flatness	AF	-
Oiling	Not oiled	Oiled
Branding	Not branded	-

[#] Optional supply conditions may be subject to dimensional restrictions.

FABRICATING PERFORMANCE

Method	Rating
Bending	3
Drawing	2*
Pressing	2*
Roll-forming	3
Welding	5
Painting (Pretreatment)	5
Galvanizing	5

* Surface scale adversely affects die performance of this product, pickled recommended.

where **1** = limited to **5** = excellent, or **NR** = not recommended

Note: It is recommended that customers use product promptly to avoid the possibility of rusting during storage. Oiling improves corrosion resistance but oiled product should be used within three months.

BlueScope is a trade mark of BlueScope Steel Limited.

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

BlueScope Steel Limited

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