

General Description

BLU350® Blue painted circular hollow section (CHS) is manufactured to achieve the required mechanical strength, chemistry, and dimensional requirements of AS/NZS 1163-C350L0.

Available in a range of outer diameter (OD) sizes that are ideal for structural and load bearing applications in construction, engineering, and mining, BLU350® provides consistent quality and wall thickness combined with strength and ductility. These properties allow for reliable use in steel structures AS 4100, in screw piling applications when designed and installed to AS 2159, as well as more broadly steelwork for mechanical equipment as per AS 3990.

The blue SMARTCOTE® water-based acrylic paint coating identifies the CHS BLU350® range. The paint protects the steel, is oil-free; attracting less dust and grime providing ease in handling, is readily welded with minimal spatter, and is easily removed by solvent cleaners prior to hot-dip galvanizing. A great advantage over pipe with heavy lacquer coatings.

Made in Australia by Orrcon Steel and produced from quality hot rolled steel supplied by BlueScope Australia the steel chemistry and material properties are controlled by grade to consistently meet engineering design requirements – including yield and tensile strength, impact performance, sectional properties, weldability, and galvanizing performance.

Typical Applications

Orrcon Steel's BLU350® Pipe is suitable for general purpose mechanical applications, including;

- ▶ General structural
- ▶ Building and construction
- ▶ Engineering and Infrastructure
- ▶ Mechanical equipment
- ▶ Sheds
- ▶ Shade Structures
- ▶ Playgrounds
- ▶ Industrial
- ▶ Agriculture / Rural
- ▶ Home Improvements

Certification

The BLU350® product range is made by Orrcon Manufacturing, an ACRS structural steel certified and ISO9001 accredited business. Test certificates are available for each pack.

Mechanical Properties

Mechanical Properties	AS/NZS 1163 C350 Minimum	Typical
Yield Strength, MPa	350	370 - 470
Tensile Strength, MPa	430	460 - 520
Elongation, %	16	24 - 32

Product Chemical Properties

Chemical Properties	AS/NZS 1163 C350 (Max. %)	Typical (%)	Guaranteed Max%
Carbon (C)	0.20	0.15	0.12 - 0.18
Phosphorus (P)	0.03	0.015	0.025
Manganese (Mn)	1.70	0.75	0.50 - 0.90
Sulphur (S)	0.03	0.012	0.03
Silicon (Si)	0.45	0.01	0.03
Aluminium (Al)	0.10	0.030	0.10
Carbon Equivalent (CF1)	0.43	0.29	0.39
Zinc Reactivity (CF2)	refer note*	0.05	0.08
$CF1 = C + \frac{Mn}{6} + \frac{Cr + Mo + V}{5} + \frac{Ni + Cu}{15}$		CF2 = Si + 2.5P	

Tested by a NATA Accredited Laboratory.

- Batch mechanical & chemical properties are available on a test certificate.
- Weldability number - WTIA Group 3
- *Suitability for galvanizing guaranteed with CF2 less than 0.09%

Product Dimensional Properties

Attribute	Specification
Outside diameter (OD)	±1%, with a minimum of ±0.5mm
Thickness	± 10%
Out of roundness	2%
Straightness	0.20% of Total Length
Linear Mass	≥ 96% specified mass
Length	-0 / +10mm of specified

Available Product Range

Structural Pipe BLU350®							
OD (mm)	Nom.Thick (mm)	Length (mm)	PTD Blue	Nom. Linear Mass (Kg/m)	Nom. m/Tonne	6m Lengths/Pack	12m Lengths/Pack
60.3	5.5	6000 / 12000	✓	7.43	135	37	19
76.1	4	6000 / 12000	✓	7.11	141	37	19
76.1	5	6000 / 12000	✓	8.77	114	37	19
88.9	5.5	6000 / 12000	✓	11.3	89	19	10
88.9	6	6000 / 12000	✓	12.27	82	19	10
101.6	6	6000 / 12000	✓	14.1	71	19	10
114.3	4.8	6000 / 12000	✓	13	77	19	10
114.3	5.4	6000 / 12000	✓	14.5	69	19	10
114.3	6	6000 / 12000	✓	16.02	63	19	10
139.7	5.4	6000 / 12000	✓	17.9	56	13	13
165.1	3.2	6000 / 12000	✓	12.7	79	10	10
168.3	3.2	6000 / 12000	✓	12.79	78	10	10
168.3	4.8	6000 / 12000	✓	19.35	52	10	7
168.3	6.4	6000 / 12000	✓	25.55	39	10	7

MOQ's apply. Standard pack configurations. ETA at time of offer.



Surface Finish

Supply Conditions	
Surface Finish	Water based acrylic coating
Colour	Orrcon Steel Blue
Thickness	10 – 15 µm

Contact us for more about this product

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Welding and Galvanizing

BlueScope coil has excellent welding and galvanizing fabricating performance. The grade weldability satisfies group 3, as per AS/NZS 1554.1.

Care is warranted when welding to manage fume exposure and weld quality. Refer Weld Australia (formerly WTIA) Technical Notes: TN 07 Health and Safety in Welding.

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For BLU350® Pipe's availability please contact your Orrcon Steel Manufacturing sales representative.

Please note that not all products are available in all regions.

Please ensure you have the current data sheet for this product as displayed at orrconsteel.com.au/resources/technical-resources.