

Applications

BISPLATE® 60 – a low carbon, low alloy, high strength structural steel exhibiting excellent cold formability and low temperature fracture toughness. BISPLATE® 60's mechanical properties and ease of fabrication offer excellent economical advantages in many structural applications including:

- Storage Tanks (water/oil/gas)
- High Rise Buildings (columns/transfer beams)
- Lifting Equipment (mobile/overhead cranes)

Chemical Composition

Thickness (mm)		C	P	Mn	Si	S	Cr	Mo	B	CE(IIW)*	CET*
5<16	Maximum	0.18	0.025	1.5	0.25	0.008	0.25	0.25	0.002	0.40	0.29
≥16-80	Maximum	0.20	0.025	1.5	0.25	0.008	0.30	0.25	0.002	0.50	0.35
>80-100	Maximum	0.18	0.025	1.5	0.25	0.008	1.20	0.25	0.002	0.58	0.34

*Typical Average

Tensile Properties

	0.2% Proof Stress	Tensile Strength	Elongation in 50mm G.L.
Specification	500 MPa (min)*	590 – 730 MPa*	20% (min)*
Typical	580 MPa	640 MPa	30%

*Dependant on Plate Thickness

Charpy Impact Properties (Longitudinal)

Plate Thickness (mm)	Energy (J) (min)	Test Temp (°C)	Plate Thickness* (mm)	Energy (J) (min)	Test Temp (°C)
5	By Agmt	-20			
6-9.5	45	-20			
9.5-<12	60	-20	5-100	50	-40
12-100	80	-20			

*10 x 10mm sample

Hardness

Typical 210 HB

Testing

BISPLATE 60® is manufactured in accordance with AS/NZS 3597 Grade 500. All testing is NATA approved.

Reference Specifications

Welding according to AS/NZS 1554 parts 4 and 5, WTIA Technical Note 15

Equivalent Specifications

BISPLATE 60® is equivalent to:

- ASTM A537 Class 2
- ASTM A572 Grades 60 & 65
- JIS G3106 SM570, ISO 4950-3 E460
- BS 4360 Grade 55F
- ISO 9328-4 P460 & P500 grade

Manufacturing Tolerances

In accordance with AS/NZS 1365.
 Tighter tolerances may be available on negotiation.

Surface Finish

Shotblasted

Plate Colour Code

White

Fabrication

For advice on fabrication refer to relevant Bisalloy technical brochures. Contact Bisalloy direct or visit www.bisalloy.com.au.

PLEASE NOTE: Every care has been taken to ensure the accuracy of information contained in this manual which supersedes earlier publications, however Bisalloy Steels shall not be liable for any loss or damage whatsoever caused from the application of such information. Typical values are provided for reference information only and no guarantee is given that a specific plate will provide these properties. Information is subject to change without notice.

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