

Applications

BISPLATE® 100 – a low alloy, high strength steel plate with very high yield strength (over three times that of carbon steel) and featuring low carbon, excellent notch toughness and good weldability and formability. Utilising the high strength properties of BISPLATE® 100 allows reduction in section thickness without loss of structural integrity. Here are some applications where the strength advantages has been realised:

- Transport Equipment (low loaders)
- High Rise Buildings (columns and beams)
- Road and Rail Bridges
- Lifting Equipment (mobile cranes/container handling equipment)
- Mining Equipment (dump truck trays/longwall roof supports)

Chemical Composition

Thickness (mm)		C	P	Mn	Si	S	Cr	Mo	B	B-Sol	CE (IIW)*	CET*
<16	Maximum	0.18	0.025	1.50	0.25	0.008	1.00	0.25	0.002	0.002	0.40	0.29

*Typical Average

Tensile Properties

Thickness Range (mm)	0.2% PS MPa Min.	UTS MPa	GL (mm)	EL % min
5	890	940-1100	50	13
6-<9.5	890	940-1100	50	13
9.5-<12	890	940-1100	50	13
12-<16	890	940-1100	50	13

Charpy Impact Properties

Thickness Range (mm)	Longitudinal		Transverse	
	Energy (J) (min)	Test Temp (°C)	Energy (J) (min)	Test Temp (°C)
5	By Agmt	-20	By Agmt	-40
6-<9.5	20	-20	9	-40
9.5-<12	30	-20	13	-40
12-<16	40	-20	17	-40

Hardness

Typical 320 HB

Testing

BISPLATE® 100 is manufactured in accordance with AS/NZS 3597 Grade 900. All testing is NATA approved.

Reference Specifications

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

Equivalent Specifications

BISPLATE® 100 is equivalent to:

- AS3597 Grade 900
- SSAB Weldox 900

Manufacturing Tolerances

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

Surface Finish

Shotblasted

Plate Colour Code

Purple/Violet

Fabrication

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