

BISALLOY® WEAR 500 STEEL

Introduction

One of the original grades manufactured by Bisalloy Steels, BISALLOY® WEAR 500 steel has been continually manufactured in Australia for over 40 years and is a very high-hardness and abrasion-resistant steel plate that is still readily weldable and usable for a range of applications.

Applications

Being through hardened with a nominal hardness of 500 HBW, BISALLOY® WEAR 500 steel has been developed for highly demanding applications and can offer an increased life expectancy in sliding and gouging abrasion situations.

BISALLOY® WEAR 500 steel is best suited to applications such as:

- Dump Truck Wear Liner 'Dove Tails'
- Ground Engaging Tools
- Bucket Lips and Edges
- Cutting Edges
- Rock Buckets
- Wear Liners
- Chutes

Mechanical properties

Properties		Specification	Typical
0.2% Proof Stress		-	1400 MPa
Tensile Strength		-	1640 MPa
Elongation in 50 mm G.L.		-	10%
Charpy Impact (Longitudinal) -40°C (10 mm x 10 mm)		-	25 J
Hardness	8 - 40 mm	477 - 530 HB	500 HB
	>40 - 100 mm	450 - 530 HB	500 HB

Chemical composition

Thickness (mm)	Weight %	C	P	Mn	Si	S	Ni	Cr	Mo	B	CE(IIW)*	CET*
8 - 40	Max	0.32	0.025	0.40	0.35	0.008	0.35	1.20	0.30	0.002	0.62	0.40
>40 - 100	Max	0.30	0.025	1.20	0.35	0.008	0.50	1.50	0.50	0.002	0.72	0.47

*Typical average

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