

BISALLOY® WEAR 500XT STEEL

Introduction

BISALLOY® WEAR 500 XT is a new 500 HB grade product with improved impact toughness developed recently at Bisalloy. It has excellent abrasion-resistance with guaranteed impact toughness, very good weldability and formability.

Product Description

Being through hardened with a nominal hardness of 500 HB, BISALLOY® WEAR 500 XT has been developed for highly demanding applications and can offer an increased life expectancy in sliding and gouging abrasion situations. BISALLOY® WEAR 500 XT is best suited to applications such as:

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- Dump Truck Wear Liners /Bodies
- Mining Buckets
- Cutting Edges
- Chutes
- Earthmoving Equipment
- Underground Miners

Mechanical Properties

Properties		Specification	Typical*
Yield Strength		-	1300 MPa
Tensile Strength		-	1550 MPa
Charpy Impact (Transverse)**	8 - 25 mm	27 J @ -20°C	~
Hardness (8 - 25 mm)		470 - 520 HB	500 HB
Bend radii - Bend to 90 degrees		<16mm	4.0t (L), 5.0t (T)
		16 - 25 mm	4.5 (L), 5.5t (T)

* Typical values are provided for reference information only and no guarantee is given that a specific plate will provide these properties.

** (10mm x 10mm)

Chemical composition

Thickness (mm)	Weight %	C	P	Mn	Si	S	Ni	Cr	Mo	B	CE(IIW)*
8 - 25	Maximum	0.30	0.020	0.60	0.60	0.008	0.8	1.0	0.35	0.005	0.54

* Typical Average

Fabrication & Other Recommendations

- Dimensional and flatness tolerance refer to Manufacturing Tolerances on Bisalloy Website.
- Preheating for welding: Not required for thickness <12mm. 75°C for thickness >12 - 25 mm.
- Machining, including drilling, milling and tapping refer to Wear 500 in Technical & Fabrication on Bisalloy resource centre.

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