

## BISALLOY® WEAR 450 PLUS

### Introduction

BISALLOY® WEAR 450 PLUS is a new product with improved impact toughness and through hardness developed recently at Bisalloy. It has excellent abrasion-resistance with guaranteed impact toughness, good weldability and formability.

### Applications

Being through hardened with a nominal hardness of 450 HBW, BISALLOY® Wear 450 PLUS has been developed for highly demanding applications and can offer an increased life expectancy in sliding and gouging abrasion situations.

BISALLOY® Wear 450 PLUS is best suited to applications such as:

- Dump Truck Liners/Bodies
- Mining Buckets
- Cutting Edges
- Wear Liners
- Chutes
- Earthmoving Equipment
- Underground miners
- Long Wall

### Mechanical properties

Properties		Specification	Typical
Yield Strength		-	1050 MPa
Tensile Strength		-	1400 MPa
Charpy Impact (Transverse) (10 mm x 10 mm)	8 - 40 mm	27 J @ -40°C	-
	> 40 - 100 mm	27 J @ -20°C	
Hardness 8 - 40 mm		425 - 475 HB	450 HB
> 40 - 75 mm*		420 - 475 HB	450 HB
80 - 100 mm*		410 - 475 HB	450 HB

\*Minimum core hardness is 90% of the guaranteed minimum surface hardness

### Chemical composition

Thickness (mm)	Weight %	C	P	Mn	Si	S	Ni	Cr	Mo	B	CE(IIW) MAX
8 - 20	Max	0.22	0.025	0.80	0.6	0.008	1.0	1.0	0.30	0.005	0.52
25 - 40	Max	0.22	0.025	1.00	0.6	0.008	1.50	1.3	0.40	0.005	0.64
40 - 100	Max	0.23	0.025	1.30	0.6	0.008	1.50	1.5	0.50	0.005	0.74

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