

# **WEAR PLATE**

# **PMP 500**

PMP 500 is a wear-resistant steel with good comprehensive properties, such as high strength, high hardness, good wear resistance and weldability.

### **Chemical Composition (ladle analysis)**

Thickness mm	C max	Si max	Mn max	P max	S max	Cr max	Ni max	Mo max	B max	CEV typv.	CET typv.
	%	%	%	%	%	%	%	%	%		
4 - (20)	0.30	0.70	1.60	0.020	0.010	1.00	0.50	0.80	0.0040	0.65	0.43
20 - (40)	0.32	0.70	1.60	0.020	0.010	0.70	0.70	1.00	0.0040	0.66	0.45
40 - 60	0.34	0.70	1.60	0.020	0.010	1.00	1.00	1.20	0.0040	0.68	0.46
(60) - 110	0.36	0.70	1.60	0.020	0.010	1.50	1.50	1.20	0.0040	0.74	0.48

 $<sup>^{</sup>st}$  Up to 100 mm available upon request.

CEV = C + Mn / 6 + (Cr + Mo + V) / 5 + (Cu + Ni) / 15

CET = C + (Mn + Mo) / 10 + (Cr + Cu) / 20 + Ni / 40

#### **Mechanical Properties**

Hardness	Yield Strength	Tensile Strength	Elongation	
HBW, Guaranteed	Mpa, Typical	Mpa, Typical	A50, %, Typical	
455 - 530	1250	1600		

Brinell hardness on a milled surface 1 - 2.5 mm below surface; average of three test points.

At least one test specimen per batch and 35 tons, on the same grade, the same Heat No., the same thickness, and the same delivery condition.

Tensile testing is performed between 4 - 60 mm.

### **Mechanical Properties**

Impact Properties Longitudinal Test, Typical	Test Temperature °C	Impact Energy J
Charpy-V 10x10 mm	-20	30
Test Specimen	-40	15

Average of three tests. Single value: minimum 70% of specified average. Impact testing is performed between 6 - 60 mm. For thicknesses less than 6 - 11.9 mm, subsize Charpy-V specimens are used.



# **WEAR PLATE**

## **PMP 500**

## **Delivery Condition**

- Q (Quenched) or Q.T. (Quenched and Tempered).
- Sizing, folding, perforating, and beveling according to requirements.
- Customizable as per requirements.

#### **Wear Plate Dimensions**

Length (mm)	6000	12000				
Width (mm)	2000	2440				
Thickness (mm)	18	20	25	32	38	50

<sup>\*</sup>For direct imports, the dimensions of the plate can be customized.

### **Tolerance**

#### Shape, length, with tolerances

According to EN 10029.

#### **Thickness Tolerance**

 According to EN 10029 Class B, and offer more narrow tolerances upon request.

#### **Flatness Tolerance**

• According to EN10029 Class-N type-H.

## **Surface Properties**

 According to EN10163-2:2004 Class A, Subclass 1.

## **Ultrasonic Testing**

• According to EN10160:2004 Class S1E1.

### Recomendations

The properties of the delivery condition cannot be retained after exposure to service or preheating temperatures in excess of  $250^{\circ}$ C.