

**HARDOX®**  
WEAR PLATE

# THE NEW GENERATION HARDOX® WEAR PLATE



LIGHTER DUMP  
BODIES AND LINERS



LIGHTER MINING  
BUCKETS AND SHOVELS



HIGHER  
LOAD CAPACITY



EXTENDED  
SERVICE LIFE



REDUCED FUEL  
CONSUMPTION



[hardox.com](http://hardox.com)

**SSAB**

# THE BEAST HAS DONE IT AGAIN

**Hardox® 500 Tuf is the latest upgrade in the Hardox® range. It delivers high strength, extreme hardness and guaranteed toughness in a single wear plate.**

Hardox® 500 Tuf combines the best properties from the Hardox® 450 and Hardox® 500 grades. The result is a wear steel with no real competition on the market.

Thanks to the superior resistance to dents and wear, equipment can withstand heavy impact and gain a longer service life in the most challenging environments. Since mining operations are regularly performed in freezing conditions, Hardox® 500 Tuf has the toughness necessary to cope, as the impact energy values indicate.

The toughness also allows Hardox® 500 Tuf to double as a structural material in heavy-duty mining dump bodies and

trays, mining buckets of any size and other mining-related equipment, which need to be both strong and wear resistant.

Hardox® 500 Tuf has a guaranteed impact energy of 27 J at -20°C (20 ft-lb at -4°F), and a typical value of 45 J at -40°C (33 ft-lb at -40°F). It has an unusually narrow Brinell hardness window of 475–505 HBW.

The estimated relative service life for Hardox® 500 Tuf is 85–100% longer than for Hardox® 400 according to WearCalc, based on sliding wear with granite.

## WORKSHOP-FRIENDLY

Hardox® 500 Tuf can be processed by the same kind of machinery used for other Hardox® grades. Bendability recommendations are similar to those for Hardox® 450.

Hardox® 500 Tuf																					
Product		Hardness nominal HBW		Impact toughness CVT guaranteed J at -20 °C (ft-lb at -4 °F)		Impact toughness CVL typical J at -40 °C (ft-lb at -40 °F)		Relative service life interval (relative to Hardox® 400)		CEV/CET		Thickness range mm (inches)									
Hardox® 500 Tuf wear plate		490		27 J (20 ft-lb) for 20 mm (0.787")		45 J (33 ft-lb) for 20 mm (0.787")		1.3-2.1		0.53/0.37 for 20 mm (0.787")		4-25.4 mm (0.157-1")									
Hardox® 500 Tuf wear sheet		490				45 J (33 ft-lb)		1.3-2.1		0.40/0.30		3-6.5 mm (0.118-0.256")									
Hardox® 500 Tuf wear plate																					
Width	1000-	1351-	1500-	1601-	1701-	1801-	1901-	2001-	2101-	2201-	2301-	2401-	2501-	2601-	2701-	2801-	2901-	3001-	3101-	3201-	3301-
Thickness	1350	1499	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3350
3.0-3.7																					
3.8-4.7																					
4.8-5.7																					
5.8-6.7																					
6.8-7.7																					
7.8-8.7																					
8.8-10.0																					
10.1-24.0																					
24.1-25.4																					
25.5-26																					

Hardox® 500 Tuf wear sheet												
Width	950–	1001–	1201–	1251–	1301–	1501–	1526–	1551–	1576–	1601–	1626–	
Thickness	1000	1200	1250	1300	1500	1525	1550	1575	1600	1625	1650	
2.50–2.99												
3.00–3.09												
3.10–3.19												
3.20–3.99												
4.00–4.49												
4.50–4.79												
4.80–4.99												
5.00–5.99												
6.00–6.40												
6.41–6.50												

Some restrictions, contact your local sales representative for information

Outside the range of dimensions

The data in these tables may be subject to change without notice. Please download the latest version of the respective Hardox® wear plate product data sheet at [www.ssab.com](http://www.ssab.com).