

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



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		0.52/0.35		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.