

HARDOX®
WEAR PLATE

THE NEW GENERATION HARDOX® WEAR PLATE



LIGHTER DUMP
BODIES & LINERS



LIGHTER MINING
BUCKETS & SHOVELS



HIGHER
LOAD CAPACITY



EXTENDED
SERVICE LIFE



REDUCED FUEL
CONSUMPTION



HARDOX®
500 TUF

hardox.com

SSAB

HARDOX® 500 TUF 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 50 J at -40°C (37 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 Hardox® 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 (ft-lb)	Impact toughness CVL typical J at -40 °C (ft-lb at -40 °F)	Relative service life interval (relative to Hardox® 400)	CEV/CET typical	Thickness range mm (inches)
Hardox® 500 Tuf wear plate	490	27 (20) at -20 °C (-4 °F) for 20 mm (0.787")	50 (37) for 20 mm (0.787")	1.3-2.1	0.53/0.37 for 20 mm (0.787")	4-38.1 (0.157-1.5)
Hardox® 500 Tuf wear sheet	490	27 (20) at -40 °C (-40 °F)	50 (37)	1.3-2.1	0.52/0.35	3-6.5 (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				
4.0-4.7																									
4.8-5.7																									
5.8-6.7																									
6.8-7.7																									
7.8-8.7																									
8.8-10.0																									
10.1-24.0																									
24.1-25.0																									
25.1-26.0																									
26.1-27.0	14000																				14200	14400			
27.1-28.0	13400																				14200	13700	13800		
28.1-29.0	13000																				14100	13700	13300	12900	
29.1-30.0	12500																				14100	13600	13200	12800	12400
30.1-31.0	12100																				14100	13600	13200	12800	12400
31.1-32.0	11800																				14200	13700	13300	12900	12500
32.1-33.0	11400																				14200	13700	13300	12900	12500
33.1-34.0	11100																				14400	13800	13300	12900	12500
34.1-35.0	10700																				13900	13400	12900	12500	12100
35.1-36.0	10400																				14100	13600	13100	12600	12200
36.1-37.0	10200																				14300	13700	13200	12700	12200
37.1-38.1	9900																				13900	13400	12800	12400	11900

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	
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												

- Outside the range of dimensions
- Some restrictions, contact your local sales representative for information

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.

Hardox® is a trademark of the SSAB group of companies. The information contained in this brochure is provided only as general information. SSAB AB accepts no responsibility for the suitability or appropriateness of any application. It is the user's responsibility to independently determine suitability of all products, and or applications, and to test and verify the same. The information provided by SSAB AB hereunder is provided "as is, where is" and with all faults, and the entire risk associated with such information is with the user. Copyright © 2024 SSAB AB. All rights reserved.