

Hardox® 500 Tuf



Higher load capacity



Lighter tipper bodies



(L) Extended service life



Reduced fuel consumption



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 plate with no real competition on the market.

It has the toughness necessary to perform as a structural material in heavy-duty tipper bodies, containers and buckets. It also works in freezing conditions as the impact energy values indicate.

Superior wear and dent resistance gives extended service life and the ability to endure heavy impact. Typical working conditions include loading and unloading of heavy and sharp rocks in quarries and mines, handling large and heavy steel scrap, and in demolition when pieces of concrete with rebar are loaded or dropped into tippers.

Hardox $^{\circ}$ 500 Tuf has a guaranteed impact energy of 27 J at -20 $^{\circ}$ C (20 ft-lb at -4 $^{\circ}$ F), and a typical value of 50 J at -40 $^{\circ}$ C (37 ft-lb at -40 $^{\circ}$ 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.*

* The calculations are 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									Max	ximum le	ngth 146	30 mm (576")								
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	12000
31.1-32.0	11800														14200	13700	13200	12800	12400	12000	11700
32.1-33.0	11400													14200	13700	13300	12900	12400	12000	11600	11300
33.1-34.0	11100						<u> </u>						14400	13800	13300	12900	12400	12000	11700	11300	11000
34.1-35.0	10700						<u> </u>						13900	13400	12900	12500	12100	11700	11300	10000	10700
35.1-36.0	10400											14100	13600	13100	12600	12200	11700	11400	11100	10700	10500
36.1-37.0	10200										14300	13700	13200	12700	12200	11800	11400	11100	10700	10400	10200
37.1-38.1	9900										13900	13400	12800	12400	11900	11500	11100	10800	10400	10100	10000

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			Max	imum ler	gth 1600	00 mm (6	29.8")					
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.hardox.com

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