

HARDOX®
WEAR PLATE

HARDOX® HiACE FIGHTS CORROSIVE WEAR IN TIPPER BODIES



Explore the world of Hardox® wear plate



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SSAB

HARDOX® HiACE LASTS LONGER IN ACIDIC ENVIRONMENTS

Abrasive loads that are acidic or have low pH levels can cause exceptional damage to steel. Even loads that are usually not aggressive can become corrosive in the presence of water.

SSAB has researched the field of corrosive wear for several years and developed a new grade of steel more suitable for these environments: Hardox® HiAce. This steel has the benefit of resisting corrosive wear in tipper and trailer bodies.

Loads such as minerals and wood chips can create an acidic environment, particularly when exposed to rain or humidity. This will accelerate the wear rate relative to a traditional AR steel.

The higher wear resistance of Hardox® HiAce allows for the use of thinner steel that reduces weight and still gives a longer service life. Lighter bodies are more cost-efficient for the truck fleet operator and give a lower environmental impact.

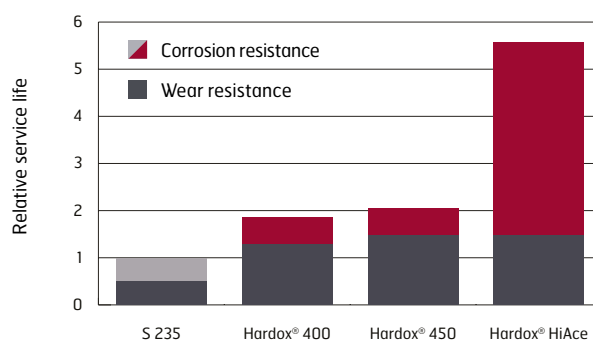
Hardox® HiAce has the same excellent mechanical properties as Hardox® 450, such as hardness, yield strength and toughness. The difference is how Hardox® HiAce deals with corrosive wear.

When the pH level goes down different wear mechanisms kick in. Harder steels won't necessarily provide a longer equipment service life. Hardox® HiAce performs similar to a 450 HBW steel in a regular wear environment. At lower pH levels, it can extend service life up to 3 times compared to an AR400 steel.

In tests, we compared Hardox® HiAce to stainless steel using different acids and abrasives. The results indicate that Hardox® HiAce can outperform ordinary stainless steel, such as SS304, by almost 20 %.

Hardox® HiAce can also perform as a structural steel. It has a guaranteed impact energy of 27 J at -20 °C (20 ft-lb at -4 °F). It is available in thicknesses of 3-100 mm (0.118-3.937") according to the dimension program below. It can be processed by the same kind of machinery used for other Hardox® grades. The bendability is the same as for Hardox® 450.

Relative service life in a corrosive environment



Product	Nominal hardness HBW	Impact toughness CVT guaranteed J at -20°C (ft-lb at -4°F)	Service life in acid environment subjected to wear (relative to 400 HBW steel)	CEV/CET typical	Thickness range mm (inches)
Hardox® HiAce wear plate	450	27 J (20 ft-lb)	up to 3 times	1.01/0.39 for 20 mm (0.787")	4-100 (0.157-3.937)
Hardox® HiAce wear sheet	450	27 J (20 ft-lb)	up to 3 times	0.99/0.38	3-4 (0.118-0.157)

Hardox® HiAce wear plate

Width	1000-	1351-	1500-	1601-	1701-	1801-	1901-	2001-	2101-	2201-	2301-	2401-	2501-	2601-	2701-	2751-	2801-	2901-	3001-	3101-	3201-	3301-
Thickness	1350	1499	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2750	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																						
24.1-60.0																						
60.1-65.0																						
65.1-70.0																						
70.1-75.0																						
75.1-80.0																						
80.1-85.0																						
85.1-90.0																						
90.1-95.0																						
95.1-100.0																						

Hardox® HiAce wear sheet

Width	880-	1001-	1201-	1251-	1301-	1471-	1511-	1531-
Thickness	1000	1200	1250	1300	1470	1510	1530	1600
3.00-3.24								
3.25-3.74								
3.75-3.99								
4.00								

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