HARDOX® HIACE FIGHTS ACIDIC WEAR IN PULP, PAPER AND SAW MILLS
A newcomer in the Hardox® product range, Hardox® HiAce can stand up to corrosive wear in acidic and low pH environments in pulp, paper and saw mills.

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.

Pulp, paper and saw mills have a lot to gain by using Hardox® HiAce. Processing and transporting logs, bark, wood chips and sawdust create an acidic and low pH environment in the entire production process. This leads to accelerated wear of the equipment.

Hardox® HiAce offers 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 pH levels go down different wear mechanisms kick in. A harder steel won’t necessarily provide a longer equipment service life. Hardox® HiAce performs the same as a 450 HBW steel in a regular wear environment. However, at lower pH levels it can extend service life up to two times compared to a 400 HBW 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 4–25.4 mm (0.157–1”) according to the dimension program below.

Hardox® HiAce 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 wood and bark handling environment exposed to bark water, sand and clay

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### Hardox® HiAce

<table>
<thead>
<tr>
<th>Nominal hardness HBW</th>
<th>Impact toughness CVT guaranteed J at -20°C (ft-lb at -4°F)</th>
<th>Service life in acid environment subjected to wear (relative to 400 HBW steel)</th>
<th>CEV/CET typical for 20 mm (⅜”)</th>
<th>Thickness range mm (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>425–475</td>
<td>27 J (20 ft-lb)</td>
<td>up to 2 times</td>
<td>0.99/0.38</td>
<td>4.0–25.4 (⅜/₈–1”)</td>
</tr>
</tbody>
</table>

#### Thickness range

- 4.0–4.7
- 4.8–5.7
- 5.8–6.7
- 6.8–7.7
- 7.8–8.7
- 8.8–10.0
- 10.3–12.0
- 12.1–15.0

#### Outside the range of dimensions

- Some restrictions, contact your local sales representative for information.

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HARDOX® HiACE LASTS LONGER IN ACIDIC ENVIRONMENTS

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