

HARDOX IN ROUND BARS

Same properties, new shape



Toughness, bendability and good weldability.

Hardox round bars feature the same guaranteed properties as the wear plate, so the same properties in a new shape. They come in diameters between 40 and 100 mm, with development material available from 20 to 40 mm, and lengths up to 5000 mm. Delivered quenched or quenched and tempered to high tensile strength and hardness levels, and combined with excellent toughness, Hardox round bars represent entirely new possibilities for stronger and lighter product design.

Hardox round bars also help optimize workshop procedures such as machining, welding and bending. Another benefit with Hardox round bars is that they are ready to use directly. No additional quenching is needed because these bars are delivered heat treated.

DELIVERY CONDITIONS

Hardox round bars are delivered heat treated, in either rolled or turned conditions. The recommendation from SSAB is a rolled surface.

Dimensions

Steel grade	Hardness nominal HBW	Yield Strength typical MPa	Impact toughness guaranteed CVL at -40°C	Impact toughness typical CVL at -40°C	CEV/CET typical values ¹	Bar diameter	Development
Hardox 400	400	1000-1100	Min 27 J	45 J	0.58/0.37	40 – 100 mm	20-39.9 mm

1. CEV=C+Mn/6+(Cr+Mo+V)/5+(Cu+Ni)/15; CET=C+(Mn+Mo)/10+(Cr+Cu)/20+Ni/40.

Diameters

All diameter tolerances are plus, meaning -0/+ deviation. The tolerances are according to standard EN 10060 or SSAB's own standard.

Ovality

Tolerances for both rolling and turning are according to EN 10060, meaning the deviation of roundness shall not exceed 75% of the diameter tolerance range.

Straightness

Tolerances for both rolling and turning are according to EN 10060 (0,4% of length) but with a tighter max deviation of 0,2% of length, meaning 2 mm/m.

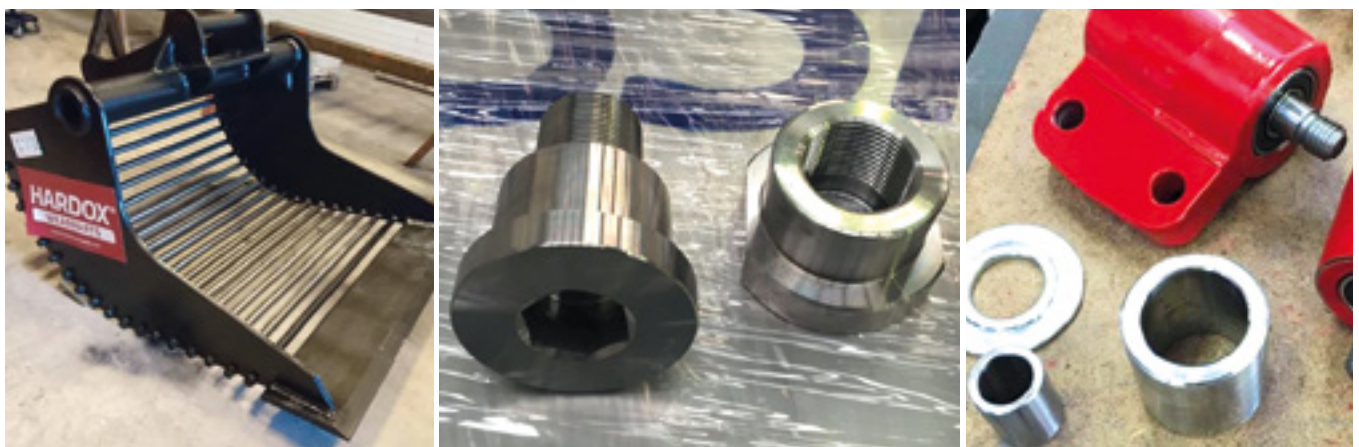
Surface

The tolerance for rolled surfaces according to EN 10221 Class C for diameters ≤75 mm. For diameters ≥80 mm, the maximum depth of surface discontinuities is 1 mm. The Ra value for turned surface is < 5 µm.

HARDNESS TESTING

Bar hardness is measured on a milled surface, with indents positioned as for impact testing according to EN 10 083.

Experience the full potential of Hardox in round bars!



CONTACT AND MORE INFORMATION

Contact your local sales representative to learn more, visit www.ssab.com/hardox or consult Tech Support at help@ssab.com