

Hardox Extreme

Abrasion resistant plate

General Product Description

Hardox Extreme is an abrasion resistant steel with a hardness of nominal hardness of 60 HRC, intended for applications with extreme high demands on abrasions resistance. Typical applications is liner plates, etc.

Available dimensions

Hardox Extreme is supplied in plate thickness of 8 – 19 mm, up to 2000 mm in width and up to 14630 mm in length, preferred widths are 2000 x 4000 mm, other width on request.

More detailed information on dimensions is provide in the dimension program at www.ssab.com.

Mechanical Properties

Thickness mm	Typical hardness HRC
8 - 19	57 - 63

Chemical Compositon (ladle analysis)

C Max %	Si Max %	Mn Max %	P Max PPM	S Max %	Cr Max %	Ni Max %	Mo Max %	B Max %
0.47	0.50	1.0	0.015	20	1.20	2.50	0.80	0.005

The steel is grain refined.

Typical welding equivalent CET

Thichness mm	10	20
CET	0.59	0.59

$$CET = C + \frac{Mn + Mo}{10} + \frac{Cr + Cu}{20} + \frac{Ni}{40}$$

CET = C + + +

Tolerances

More details are given in SSAB's brochure 41-General product information Weldox, Hardox, Armox and Toolox-UK or on www.ssab.com.

Thickness

Tolerances according to SSAB's thickness precision guarantee AccRollTech. AccuRollTech meets the requirements of EN 10 029 Class A, but offers more narrow tolerances.

Length and width

According to SSAB's dimensions program. Tolerances conforms to EN 10 029 or to SSAB's standard after agreement.

Shape

Tolerance according to EN 10 029.

Flatness

Tolerance according to EN 10 029.

Surface Properties

According to EN 10 163-2, Class A Subclass 1.

Delivery Condition

The delivery condition is Q (Quenched). The plates are delivered with sheared or thermally cut edges. Untrimmed edges after agreement. Delivery requirements can be found in SSAB's brochure 41-General product information Weldox, Hardox, Armox and Toolox-UK or www.ssab.com.

Fabrication and Other Recommendation

Welding, bending and machining

Recommendations can be found in SSAB's brochures on www.hardox.com or consult Tech Support, help@ssab.com.

Hardox Extreme is not intended for further heat treatment. It has obtained its mechanical properties by quenching and when necessary by means of subsequent tempering. The properties of the delivery condition can not be retained after exposure to temperatures in excess of 150°C.

Appropriate health and safety precautions must be taken when welding, cutting, grinding or otherwise working on the product. Grinding, especially of primer coated plates, may produce dust with high particle concentration.

Contact and Information

For information, see SSAB's brochures on www.ssab.com or consult Tech Support, help@ssab.com.