HARDOX®
WEAR PLATE

Hardox 600

General Product Description

Hardox 600 is an abrasion resistant steel with a nominal hardness of 600 HBW. Typical applications are components with abrasions resistance . For more information on applications see www.ssab.com

Available dimensions

Hardox 600 is available in thicknesses of 8 – 51 mm. Hardox 600 is available in widths up to 2000 mm and lengths up to 14630 mm. Preferred dimensions are 2000 x 4000 mm, other dimensons on request. More detailed information on dimensions is provided in the dimension program at www.ssab.com.

Mechanical Properties

Thickness mm	Hardness HBW min - max [1)]
8 - 51	570 - 640

[1)] Brinell hardness, HBW, according to EN ISO 6506-1, on a milled surface 0.5 – 3 mm below surface. At least one test specimen per heat and 40 tons. The nominal material thickness will not deviate more than ±15 mm from that of the test specimen.

The plates are through-hardened to a minimum of 90 % of the guaranteed minimum surface hardness

Chemical Composition (heat analysis)

C *) Max %	Si *) Max %	Mn *) Max %	P Max %	S Max %	Cr *) Max %	Ni *) Max %	Mo *) Max %	B *) Max %
0.47	0.70	1.00	0.015	0.010	1.20	2.50	0.70	0.005

The steel is grain refined. *) Intentional alloying elements.

Maximum carbon equivalent CET (CEV)

Thickness mm	8 - (25)	25 - 51
CET (CEV)	0.58 (0.76)	0.61 (0.87)

$$CET = C + \frac{Mn + Mo}{10} + \frac{Cr + Cu}{20} + \frac{Ni}{40} \qquad CEV = C + \frac{Mn}{6} + \frac{Cr + Mo + V}{5} + \frac{Cu + Ni}{15}$$

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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 AccuRollTech.
AccuRollTech meets the requirements of EN 10 029 Class A, but offers narrower tolerances.

Length and width
According to SSAB's dimension program. Tolerances conforms to EN 10 029 or to SSAB's standard after agreement.

Shape
Tolerances according to EN 10 029.

Flatness
Hardox 600 is supplied with a flatness tolerance for thicknesses ≤ 15 mm of 15 mm/m and for thicknesses between 15 and 51 mm of 10 mm/m.

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

Delivery Condition

The delivery condition is 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 Recommendations

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

Hardox 600 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 cannot be retained after exposure to temperatures in excess of 250°C .

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

Contact and Information

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

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