

Strenx[®] 900 Plus

General Product Description

Dimension Range

Mechanical Properties

Thickness (mm)	Yield strength R _{eH} ¹⁾ (min MPa)	Tensile strength R _m (MPa)	Elongation A ₈₀ (min %)	Elongation A ₅ (min %)	Min. inner bending radius for a 90° bend
2.0 - 2.9	900	940 - 1100	7	—	3.0 x t
3.0 - 8.0	900	940 - 1100	—	11	3.0 x t

The mechanical properties are tested and guaranteed in both longitudinal and transverse direction.

¹⁾ If R_{eH} is not applicable then R_{p0.2} is used.

Impact Properties

Grade	Min. impact energy for longitudinal testing, Charpy V 10x10 mm test specimen	Min impact energy for transversal testing, Charpy V 10x10 mm test specimen
Strenx [®] 900 Plus ¹⁾	30 J / -40 °C	27 J / -40 °C

¹⁾ Impact testing according to EN ISO 148-1 is performed on thicknesses ≥ 6mm. For thicknesses between 6.0 - 8.0 mm, sub-size Charpy V-specimens are used. The specified min value is then proportional to the cross-sectional area of the specimen compared to a full-size specimen (10x10 mm).

Chemical Composition (ladle analysis)

C (max %)	Si (max %)	Mn (max %)	P (max %)	S (max %)
0.18	0.50	1.70	0.020	0.010

The steel is grain refined.

Carbon Equivalent CET(CEV)

Thickness (mm)	2.0 - 8.0
Typ CET(CEV)	0.34 (0.50)

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

Tolerances

More details are given in SSAB's brochure Strenx® Guarantees or on www.ssab.com.

Thickness

Length and Width

Shape

Tolerances according to EN 10051. Narrower tolerances according to the SSAB standard are available on request.

Flatness

Surface Properties

According to EN 10163-2 Class A, Subclass 3.

Delivery Conditions

Fabrication and Other Recommendations

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

Appropriate health and safety precautions must be taken when bending, welding, cutting, grinding or otherwise working on the products.

Contact Information

www.ssab.com/contact