

## General Product Description

The high-strength structural steel at 700 MPa

Strenx® 700 CR is a cold-rolled structural steel with a minimum yield strength of 700 MPa used to produce stronger and lighter structures.

Strenx® 700 CR comes in cut-to-length sheets. Typical applications include a wide range of components and parts, for example load-bearing structures.

## Dimension Range

Strenx® 700 CR is available as cut to length sheets in thicknesses of 0.70-2.10 mm, widths up to 1500 mm and in lengths up to 8.5 meters.

## Mechanical Properties

Yield strength $R_{p0.2}$ (min MPa)	Tensile strength $R_m$ (MPa)	Elongation $A_{80}$ (min %)	Min. inner bending radius for a 90° bend <sup>1)</sup>
700	1000 - 1200	7	2.0 x t

The mechanical properties are tested in the longitudinal direction.

The mechanical properties are guaranteed in coil condition.

<sup>1)</sup> For both longitudinal and transverse direction.

## Chemical Composition (ladle analysis)

C (max %)	Si (max %)	Mn (max %)	P (max %)	S (max %)	Al (min %)	Nb+Ti (max %)
0.16	0.40	1.80	0.020	0.010	0.015	0.10

## Carbon equivalent CET(CEV)

Thickness	0.7 - 2.1
Typical CET(CEV)	0.29 (0.40)

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

$$CEV = C + \frac{Mn}{6} + \frac{Cr + Mo + V}{5} + \frac{Cu + Ni}{15}$$

## Tolerances

More details are given in SSAB's brochures Strenx® Guarantees or on [www.ssab.com](http://www.ssab.com).

## Thickness

Tolerances according to Strenx® Thickness Guarantees. Strenx® Thickness guarantees meet the normal thickness tolerance requirements of EN 10131.

## Length and Width

Tolerances according to EN 10131. Narrower tolerances according to the SSAB standard are available on request. Length tolerances only apply for cut to length sheets.

## Flatness

Tolerances according to Strenx® Flatness Guarantees Class B. Strenx® Flatness Guarantees offer narrower tolerances compared to EN 10131. Flatness guarantees only apply for cut to length sheets.

## Delivery Conditions

Cold rolled. Strenx® 700 CR is available with mill or cut edge.

Delivery requirements can be found in SSAB's brochure Strenx® Guarantees or on [www.ssab.com](http://www.ssab.com).

## Fabrication and Other Recommendations

### Welding, bending and machining

Strenx® 700 CR has good cold forming, welding and cutting performance.

For information concerning fabrication, see SSAB's brochures on [www.ssab.com](http://www.ssab.com) or consult Tech Support, [techsupport@ssab.com](mailto:techsupport@ssab.com).

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

## Contact Information

[www.ssab.com/contact](http://www.ssab.com/contact)