SSAB Weathering 700

General Product Description

The high-strength steel for extra weather resistance and long life. With its anti-corrosive properties, SSAB Weathering 700 minimizes the need for maintenance and corrosion-prevention treatment, contributing significantly to low maintenance costs throughout the product lifecycle. In addition to low maintenance costs, the reduced need for corrosion prevention means less use of paint and solvents, making SSAB Weathering 700 an environmental friendly choice of steel. In manufacturing, the steel contributes to excellent productivity thanks to its good formability, toughness and weldability. The high-strength of the steel in combination with these properties makes it easier to build lighter, stronger products with increased payload and lower fuel consumption. Typical applications are containers, railway wagons and many others.

Dimension Range

SSAB Weathering 700 is available in thicknesses of 0.98-2.10 mm and widths up to 1500 mm as coils, slit coils and as cut to length inlengths up to 8.5 meters.

Mechanical Properties

Yield strength $R_{p0.2}$ (min MPa)	Tensile strength R_m (min MPa)	Elongation A_{80} (min %)	Min Bending Radius 90° Bend
700	800	5	2xt

The mechanical properties are tested transverse to the direction of rolling.

Chemical Composition

C (max %)	Si (max %)	Mn (max %)	P (max %)	S (max %)	Al (min %)	Nb+Ti (max %)
0.16	0.80	1.50	0.020	0.010	0.015	0.10

Micro alloying elements are added.

Tolerances

SSAB Weathering 700 is supplied with thickness and width tolerances in accordance to EN 10131. More narrow thickness tolerances according to the SSAB standard are available on request.

Delivery Conditions

Cold rolled.

Fabrication and Other Recommendations

The weldability of SSAB Weathering 700 is good. All the conventional fusion welding methods can be used. To obtain the same corrosion resistance in the weldment as in the base metal special filler metals should be used.

In order to ensure the uniform colour of the patina, all impurities must be cleaned from the steel surface. Organic impurities such as oil or protective greases must be removed by washing. The surface of clean weathering steel can be pre-patinated by allowing the surface to get wet and dry.

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

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

Contact Information

www.ssab.com/contact

SSAB