DOCOL®
THE AUTOMOTIVE STEEL

Docol 1700M

General Product Description

A martensitic steel for automotive applications, Docol 1700M allows for increased crashworthiness, lightweight design and cost-efficient production methods for the automotive industry. Docol 1700M is one of the strongest cold rolled advanced high-strength steels on the market and has become the material of choice for automotive applications such as bumper systems and structural components.

Dimension Range

Cold rolled / UC : thickness 1.00-2.10 mm, width up to 1250 mm.

Slit strip and cut to length sheets are available upon request.

Mechanical Properties

Steel grade	Standard	Coating	Test direction	Yield strength $R_{p0,2}$ (MPa)	Tensile strength R_m (MPa)	Elongation A_{80} (min %)	BH_2 (min MPa)	Min. inner bending radius for 90°
Docol CR 1350Y1700T-MS	VDA 239-100:2016	UC	L	1350 - 1700	1700 - 2000	3	30	4.0 x t

Chemical Composition (Ladle analysis)

Steel grade	C (max %)	Si (max %)	Mn (max %)	P (max %)	S (max %)	Al (min %)	Nb+Ti (max %)	Cr+Mo (max %)	B (max %)	Cu (max %)
Docol CR 1350Y 1700T-MS	0.35	1.00	3.00	0.020	0.010	0.010	0.15	1.00	0.010	0.20

Tolerances

Cold rolled (UC): Tolerances in accordance to EN10131.

Customized dimension tolerances available upon request.

Following improved flatness tolerances are available upon request:

Thickness (mm)	Max height [1] (mm)
1.00 - 1.39	8
1.40 - 1.59	7
1.60 - 1.79	6
1.80 - 2.10	5

[1] Distance from the top surface of the strip normal to a flat surface. Measured with a ruler on sheets of mother coil width and minimum length 1500 mm. Cross bow and coil set excluded.

Surface Treatments

Uncoated (UC): available as oiled

All surface treatments are in accordance with RoHS directive (2011/65/EU) and do not contain Chromium VI (Cr^{6+}). Surface treatments provide only temporary surface protection during transportation and storage. In order to avoid corrosion damages, care must be taken to keep the products dry during transportation and storage. If they become wet, they must be separated and situated so that they are dried quickly.

Fabrication and Other Recommendations

For information concerning 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 bending, welding, cutting, grinding or otherwise working on the product.

Contact Information

www.ssab.com/contact

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