

## Docol 1500M

### General Product Description

A martensitic steel for automotive applications, Docol 1500M allows for increased crashworthiness, lightweight design and cost-efficient production methods for the automotive industry. Docol 1500M 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 side impact beams, bumpers and structural components.

#### Dimension range

Docol CR1220Y1500T-MS / UC: thickness 0.50-2.10 mm, width up to 1527 mm.

Docol CR1220Y1500T-MS / EG: thickness 1.00-2.00 mm, width 1000-1200 mm. Other dimensions can be available on request.

Slitting to narrow coils and cutting to sheets are available upon request.

### Mechanical Properties

Steelgrade	Standards	Coating	Yield strength $R_{p0.2}$ (MPa)	Tensile strength $R_m$ (MPa)	Elongation $A_{80}$ (min %)	Min. inner bending radius for 90 °
Docol CR1220Y 1500T-MS	VDA 239-100 :2016	UC, EG <sup>1)</sup>	1220- 1500	1500- 1700	3	4.0xt

The mechanical properties are tested longitudinal to the rolling direction.

\* Grades according to OEM standards are available on request.

### Chemical Composition

Steel-grade	Coating	C (max %)	Si (max %)	Mn (max %)	P (max %)	S (max %)	Al (min %)	Nb+Ti (max %)	Cr+Mo (max %)	Cu (max %)	B (max %)
Docol CR 1220Y 1500T -MS	UC, EG	0.28	0.40	1.30	0.020	0.010	0.015	0.10	1.00	0.20	0.010

### Tolerances

Dimensional tolerances: In accordance to EN10131. <sup>2</sup>

Following improved flatness tolerances are available upon request: <sup>3</sup>

Thickness (mm)	Max Height <sup>1)</sup> (mm)
1.00- 1.39	7
1.40- 1.59	6
1.60- 1.79	5
1.80- 2.10	4

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.

2. Customized dimension tolerances available upon request.

3. Improved flatness tolerances are complimentary when ordering EG coated material

### Coatings and surface treatments

#### Coatings

**Electrogalvanized coating (EG)** is applied continuously by electro deposition. The coating consists of zinc (>99%). Electrogalvanized steel is characterized by its excellent surface quality and uniform coating thickness.

EG products are available with coatings in accordance to EN 10152, VDA 239-100. Grades according to OEM standards are available on request. Single side coatings are available if agreed upon at the time of order.

## Surface treatments

All surface treatments are in accordance with RoHS directive (2011/65/EU) and do not contain Chromium VI (Cr6+). 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.

Docol 1500M is available with the most common surface treatments.

## Fabrication and Other Recommendations

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)