

Docol 355 W

The weather resistant high strength steel

Product

Docol 355W is a high strength weather resistant steel. The strength is achieved by cold rolling and heat treatment in a continuous annealing line. This steel is a weather resistant steel i.e. during outdoor usage within a couple of years a smooth oxide layer is formed that inhibits further corrosion. In addition to its weather resistant properties Docol 355W is characterised by good formability and weldability.

Applications

Docol 355W is designed for use in container panels. By using this high strength steel for containers, gains can be made by reducing the tare weight.

This steel can also be used for other applications, where corrosion resistant properties is needed together with high strength.

Dimension range

Docol 355W is available in thickness 0.5-2.00 mm and width up to 1500 mm. Limitations may occur depending on thickness. Docol 355W is supplied to the tolerances in accordance with EN 10131.

Chemical composition

(typical values)

| C (%) | Si (%) | Mn (%) | P (%) | Cu (%) | Cr (%) | Micro alloying elements |
|-------|--------|--------|-------|--------|--------|-------------------------|
| 0,050 | 0,30 | 0,35 | 0,08 | 0,30 | 0,60 | added |

Mechanical properties

| Yield Strength $R_{p0.2}$ (N/mm ²) | Tensile Strength R_m (N/mm ²) | Elongation A_{80} (%) | Min. radius for 90° bend |
|--|---|-------------------------------|-----------------------------|
| 355 - 500 | 510 - 680 | min 14 | 0,5x thickness |

Welding

The weldability of Docol 355 W 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. The producers of fillers have given the following recommendations for welding weather resistant steels.

| Producer | MMA (Manual metall arc) | MAG (Gas metal arc) |
|----------|----------------------------|------------------------|
| ESAB | OK 73.08 OK 50.10 | OK Autrod 13.26 |
| Filarc | Filarc 35Z Filarc 85CP | Filarc PZ 6112 |
| Oerlikon | Tenn cord Kb | Spoolcord TD-COR |

Technical service and information

Knowledge Service Center will be pleased to assist with additional information concerning this product from SSAB Tunnpått.

The particulars in this data sheet are correct at the time of going to print and are intended to give general guidance for the use of the product. Subject to changes arising from continual product development. The information and data must not be regarded as guaranteed values, unless specially confirmed in writing.



SSAB Tunnpått AB
781 84 Borlänge
Tel +46 243 700 00
Fax +46 243 720 00
www.ssab.com
strip@ssab.com

Denmark
SSAB Svensk Stål A/S
Tel +45 4320 5000
ssab.dk

Finland
OY SSAB Svenskt Stål AB
Tel +358 9 686 6030
ssab.fi

Czech Republic
SSAB Swedish Steel s.r.o.
Tel +420 545 210 550

France
SSAB Swedish Steel SA
Tel +33 1 55 61 91 00
ssab.fr

Germany
SSAB Swedish Steel GmbH
Tel +49 211 9125 0
Tel +49 711 68784 0
ssab.com

Great Britain
SSAB Swedish Steel Ltd
Tel +44 1905 795794
swedishsteel.co.uk

Italy
SSAB Swedish Steel S.p.A
Tel +39 030 905 881 1
ssab.it

The Netherlands
SSAB Swedish Steel BV
Tel +31 24 679 05 50
ssab.nl

Norway
SSAB Svensk Stål A/S
Tel +47 23 11 85 80
ssab.no

Poland
SSAB Swedish Steel Sp.
z o.o.
Tel +48 22 723 03 80
Tel +48 22 723 00 49

Portugal
SSAB Swedish Steel
Tel +351 256 371 610
ssab.pt

Spain
SSAB Swedish Steel S.L.
Tel +34 91 300 54 22
ssab.es

USA
SSAB Swedish Steel Inc
Tel +1 412-269 21 20
swedishsteel.us

Brazil
SSAB Swedish Steel Ltda.
Tel + 55 41 3014 9070
ssab.com.br

South Africa
SSAB Swedish Steel Pty Ltd
Tel +27 11 822 2570
swedishsteel.co.za

China
SSAB Swedish Steel
Tel +86 10 6440 3550
swedishsteel.cn

Korea
SSAB Swedish Steel Ltd
Tel +82 2 369 7272

Australia
SSAB Swedish Steel Pty.Ltd
Tel +61 3 9548 8455

Russia
SSAB Swedish Steel
Tel + 7 495 781 39 33

Turkey
SSAB Swedish Steel
Tel + 90 216 372 63 70