Preliminary SSAB CR240LA Zero

Preliminary Product Sheet

Preliminary Product Sheets describe information for products that still are under development or in a trial delivery phase.

SSAB Zero™ steel is made using recycled steel and fossil-free energy.

The SSAB Zero™ EPDs and Certificate of Carbon Emissions is available on ssab.com. The availability of SSAB Zero™ products is subject to limitations and conditions of delivery have to be agreed upon separately.

General Product Description

Metal coated High Strength steels are designed for demanding structural applications that require galvanic corrosion protection and good formability in addition to high strength. Metal coated High Strength steels are designated according to their minimum guaranteed yield strength from 220 to 500 MPa. These steel grades comply with VDA 239-100 standard.

Dimension Range

SSAB CR240LA Zero is available in thicknesses of 0.50-1.30 mm and widths up to 1520 mm as coils.

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

Grade and coating specific restrictions on available dimensions may occur.

Mechanical Properties

	Standard	Coating	Test direction	Yield strength $R_{p0.2}$ (MPa)	Tensile strength R_m (MPa)	Elongation A_{80} [1] (min %)	$n_{10\text{-}20/Ag}$ (min)
SSAB CR240LA Zero	VDA 239-100	GI, GA*	L	240 - 320	320 - 430	27 [2]	0.14

[1] A_{80} value applies for thicknesses < 3.00 mm.

[2] For GA coatings the minimum elongation value is reduced by 2 units.

Chemical Composition (ladle analysis)

	Coating	C (max %)	Si (max %)	Mn (max %)	P (max %)	S (max %)	Al (%)	Ti (max %)	Nb (max %)	Cu (max %)
SSAB CR240LA Zero	GI	0.10	0.50	1.00	0.030	0.025	From 0.015	0.15	0.09	0.20

Tolerances

Hot-dip galvanized (GI, GA): Tolerances in accordance to EN 10143.

Customized dimensional and shape tolerances are available upon request.

Coatings

The metal coating options for SSAB Zero™ products include:

Hot-dip zinc coating (GI) consists almost entirely of zinc (>99%). It is lead free, resulting in a small zinc spangle size. The coating provides good corrosion protection.

Galvannealed coating (GA) is a zinc-iron alloy coating having an iron content of approximately 10%. Galvannealed is produced by post-heat treatment in continuous hot-dip coating process. Galvannealed provides excellent resistance weldability and corrosion protection of painted products.

Grade specific availability of metal coatings for SSAB Zero™ products is given in the Mechanical properties table (Coating).

Coating type	Coating class	Standard	Closest in EN 10346, informative	Coating mass per side, single spot test (g/m^2)	Thickness per side informative (µm)
GI	40/40	VDA 239-100	Z100	40 - 60	5.6 - 8.5
GI	50/50	VDA 239-100	–	50 - 70	7.0 - 9.9
GI	60/60	VDA 239-100	Z140	60 - 90	8.5 - 12.7
GI	70/70	VDA 239-100	–	70 - 100	9.9 - 14.1
GI	85/85	VDA 239-100	–	85 - 115	12.0 - 16.2
GI	115/115	VDA 239-100	Z275	115 - 155	16.2 - 21.8
GA	40/40	VDA 239-100	ZF100	40 - 60	5.6 - 8.5
GA	50/50	VDA 239-100	ZF120	50 - 80	7.0 - 11.3

SSAB Zero™ metal coated products are available with surface quality for unexposed applications.

In addition to these coating masses, OEM specific coatings are available upon request.

Surface Treatments

Hot-dip galvanized (GI, GA): available as oiled and/or chemically passivated.

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.

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

Contact Information

www.ssab.com/contact

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