

Classifications

EN ISO 14341-A	AWS A5.18
G 38 3 M21 2Si	ER70S-3
G 35 2 C 2Si	

Characteristics and typical fields of application

Solid wire electrode of type G2Si / ER70S-3 with optimised properties for reliable welding performance within a wide parameter range. Well suited for welding before cinq and aluminium plating and for welding of cinque or aluminium plated material. The non coppered welding wires with the ECOspark® surface are characterised by very good feeding properties at high wire feeding rates, a very stable arc performance and significant low oxide / silicate forming on the weld surface. This makes them especially suited for fully mechanised processes with wire from BASEdrum, MEGAdrum or the sustainable ECOdram bulk package.

Base materials

Steels with a yield strength ≤ 355 MPa.

S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S355N, P235GH-P355GH, P275NL1-P420NL1, P215NL, P265NL, P355N, P285NH-P355NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH

ship building steels: A, B, D

ASTM A 106 Gr. A, B, C; A 181 Gr. 60; A 283 Gr. A, C; A 285 Gr. A, B; A 350 Gr. LF1

Typical analysis

	C	Si	Mn
wt.-%	0.07	0.7	1.10

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R_e	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J	
	MPa	MPa	%	-20°C	-30°C
u	420 (≥ 355)	530 ($\geq 440 - 570$)	23 (≥ 20)	80 (≥ 47)	(≥ 47)

u untreated, as welded M21

Operating data

	Polarity	DC+	Dimension mm
	Shielding gas (EN ISO 14175)	C1 M21	0.8
			1.0
			1.2
			1.6

Approvals

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