ENERGOMAG 3-CF

Solid wire, copper free

Classifications	DIN 8559	EN ISO 14341-A	AWS A 5.18
	SG3	G 46 5 M21 4Si1/ G 42 4 C1 4Si1	ER 70S-6

Description

Copper free solid wire used for MIG/MAG welding with mixed-gases as well as with CO2. Higher content of silicon and manganese allows to increase the weld metal strength. This also promotes a low sensitivity to surface impurities and contributes to smooth welding. Provides stable arc and low spatter, low fume emission. Reduced contact tip wear is observed as well as improved protection against corrosion. Used in general construction, shipbuilding and automotive components. Especially dedicated to mechanised welding processes.

Base materials

Steels up to a yield strength 460 MPa for M21/ 420MPa for C1
S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH-P355GH, P275NL1-P460NL1, P215NL, P265NL, P355N, P285NH-P460NH, P195TR1- P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE240,
ship building steels: A, B, D, E, A 32-E 36

Typical composition of solid wire (%)

C	Si	Mn	S	P	Cu
0,06-0,14	0,80-1,2	1,6-1,9	≤0,025	≤0,025	≤0,35

Mechanical properties of all-weld metal (acc to EN 15792-1, min. values, shielding gas M21)

	Yield strength 0,2% N/mm²	Tensile strength N/mm²	Elongation ($L_0 = 5d_0$) %	Impact values in J CVN -40 °C
	≥ 460	530-680	≥ 20	≥ 47

Welding positions

Polarity =+
Shielding gases: (EN ISO 14175: M2, M3, C)

Dimensions (mm) 0,8-1,6

Certificates CE, TÜV, DB