

Classifications

EN ISO 14341-A	EN ISO 14341-B	AWS A5.18
G 38 2 C1 3Si1 G 42 3 M21 3Si1	G 43A 2 C1 S12 G 49A 2 M21 S12	ER70S-6

Characteristics and typical fields of application

GMAW solid wire electrode for welding unalloyed and low alloy steels with gas mixtures (M1 – M3) and CO₂. Low spatter transfer in the short and spray arc range. Used in boiler construction, shipbuilding, structural engineering and vehicle manufacturing.

Base materials

S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S420N, S275M-S355M, P235GH-P355GH, P275NL1-P355NL1, P215NL, P265NL, P355N, P285NH-P355NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L320NB, L245MB-L320MB, GE200-GE240, ship building steels: A, B, D, E, A 32-E 36
ASTM A 106 Gr. A, B, C; A 283 Gr. A, C; A 285 Gr. A, B, C; A 350 Gr. LF1; A 414 Gr. A, B, C, D, E; A 501 Gr. B; A 513 Gr. 1018; A 516 Gr. 55, 60; A 573 Gr. 58; A 588 Gr. A, B; A 633 Gr. C; A 662 Gr. B; A 711 Gr. 1013; A 841 Gr. A; API 5 L Gr. B, X42, X52,

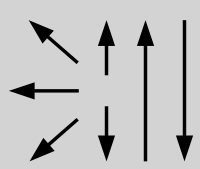
Typical analysis of solid wire (wt.-%)

	C	Si	Mn
wt.-%	0.08	0.80	1.40

Mechanical properties of all-weld metal

Heat-treatment	Shielding gas	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J		
		MPa	MPa	%	+20 °C	-20 °C	-30 °C
aw	M21	450	560	24	120		47
aw	CO ₂	430	510	25	105	47	

Operating data

	Polarity: DC (+)	Shielding gas: (EN ISO 14175) M1 – M3 und C1	ø (mm)	Spool:
			0.8	B300
			1.0	B300
			1.2	B300
			1.6	B300

Approvals

TÜV (03640), DB (42.132.15), GL, CE