

Solid wire

Classifications

EN 14341 - A	AWS A5.18
G46 4 M G4Si1 / G46 4 C G4Si1	ER70S-6

Characteristics and typical fields of application

Solid wire for single or multipass welding with Ar-CO₂ or pure CO₂ shielding gas. By accurately choosing the rod wire and controlling the chemical composition it is possible to obtain excellent bead appearance also with high parameters. Due to the low contents of silicates that are easy to remove this wire is especially suitable for beads that will be sanded.

Base materials

EN 10025: S185 - S235 - S275 - S355
 EN 10028-2: P235GH - P265GH - P295GH - P355GH - P275N/NH - P355N/NH
 EN 10113-2: S275N/M - S355N/M
 EN 10207: P235 - P265

Typical analysis of all-weld metal (wt.-%)

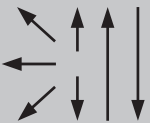
C	Mn	Si	P	S	GAS
0.08	1.75	0.85	< 0.025	< 0.025	M21
0.08	1.75	0.85	< 0.025	< 0.025	C1

Mechanical properties of all-weld metal – typical values (minimum values)

Gas	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J
	MPa	MPa	%	-40°C
M21	520	560 - 720	24	55
C1	460	530 - 660	22	55

Untreated, as welded – shielding gas Ar + 18% CO₂

Operating data

	Ø (mm)	Current A	Voltage V
	0.80	35 - 250	14 - 30
	1.00	45 - 270	15 - 32
	1.20	50 - 330	16 - 35
	1.40	60 - 370	20 - 49
	1.60	65 - 390	20 - 40

Approvals

ABS • GL • RINA • TÜV • DB