

Solid wire

### Classifications

EN ISO 14341-A	AWS A5.18
G42 4 M21 G3Si1	ER70S-6

### Characteristics and typical fields of application

Solid wire for single or multipass welding of carbon, carbon-manganese and similar steels, including fine grain ones, with Ar-CO<sub>2</sub> or pure CO<sub>2</sub> shielding gas. Features include: high yield, good weldability also in upward vertical position, excellent bead appearance, less spatter for the whole range of welding parameters, less silicates. This wire can be used for automated and robotized applications.

### 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: P235S - P265S

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

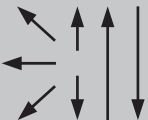
C	Mn	Si	P	S	GAS
0.08	1.45	0.85	< 0.025	< 0.025	M21
0.08	1.45	0.85	< 0.025	< 0.025	C1

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

Condition	Yield strength	Tensile strength	Elongation	Impact work	
	R <sub>p0.2</sub>	R <sub>m</sub>	A (L <sub>0</sub> =5d <sub>0</sub> )	ISO-V KV J	
	MPa	MPa	%	-20°C	-30°C
u	440	540-570	24	60	47

u: untreated, as welded – shielding gas Ar + 18% CO<sub>2</sub>

### 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 • DNV • GL • RINA • TÜV • DB-CE