

ER70S-6

Carbon and Low-alloyed steel

WELDING CONSUMABLES

AWS A5.18: ER70S-6

EN 440: G3Si1

UNS: K11140

ER70S-6








ER70S-6 is mild steel type welding material designed for joining of most carbon and low alloyed steels. It contains high levels of manganese and silicon, which increase deoxidizing power and fluidity of the weld pool. ER70S-6 can be characterized by excellent arc ignition, extremely low overall spatter, stable arc with low feeding force, high current applicability, low fume emission. It is excellent where poor fit-ups or rusty and oily plates maybe used.

Typical applications include truck bodies, farm implements, steel castings and forgings, shaft build-ups and general shop fabrications, etc.

1. Shielding gases (acc. EN ISO 14175)

GTAW	I1	Inert gas Ar (100%)
GMAW	M21	Mixed gas Ar + 5÷25% CO ₂
	C1	Active gas 100% CO ₂

2. Welding positions

						
PA	PB	PC	PD	PE	PF	PG

3. Chemical composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	V
0.06-0.15	1.40-1.85	0.80-1.15	≤0.035	≤0.025	≤0.15	≤0.15	≤0.15	≤0.50	≤0.03

4. Mechanical properties, all weld metal

Heat treatment	Yield Strength, R _{p0.2} (MPa)	Tensile Strength, R _m (MPa)	Elongation, A (%)	Impact Energy ISO-V(J)	
				-20°C	-50°C
AW	≥400	≥480	≥22	≥47	-

5. Available size and packaging

Process	Diameter, mm	Box 5-10 kg	D100 1 kg	D200 5 kg	D300 15 kg	K300 15 kg	K415 20 kg	Drum 100-300 kg
GTAW	1.00 - 5.00	x						
GMAW	0.60 - 2.00		x	x	x	x	x	x

* Customer packing on request.

Note: All information enclosed in this datasheet is based on our best knowledge and is given as indicative. Other special requirements are subject to prior discussion and approval of Vojay. Please contact us for any additional information or request.