

Mild steel solid wire

Classification

AWS A5.18/A5.18M : ER70S-6
EN 440 : G 42 4 M G3Si1 / G 42 2 C G3Si1

General description

Solid MIG/MAG wire for semi-automatic and automatic welding applications

Good feedability, consistent welding performance

Very good weldability, stable arc, and low spatter

High productivity

Shielding gases (acc. EN 439)

GMAW M21 Mixed gas Ar+ >15-25% CO₂
C1 Active gas 100% CO₂

Approvals

	ABS	BV	DB	DNV	GL	LR	RINA	TÜV	UDT	RS
GMAW	+	+	+	+	+	+	+	+	+	+

Chemical composition (w%). typical. wire

C	Mn	Si
0.07	1.45	0.85

Mechanical properties, typical, all weld metal

	Process	Shielding gas	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J)		
							-20°C	-30°C	-40°C
Typical values	GMAW	M21	AW	471	580	25		102	73
		C1		439	547	28	102		
		Required		min.420	490-660	min. 22		min. 47	

Materials to be welded

Steel	Code	Type
General structural steel	EN 10025	S185, S235, S275, S355
Ship plates	ASTM A131	Grade A, B, D, AH32 to DH 36.
Cast steel	EN 10213-2	GP240R
Pipe material	EN 10208-1	L210, L240, L290, L360
	EN 10208-2	L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB, L415NB
	API 5LX	X42, X46, X52, X60
	EN 10216-1/	P235T1, P235T2, P275T1
	EN 10217-1	P275T2, P355N
Boiler & pressure vessel steel	EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine grained steel	EN 10113-2	S275, S275, S355, S420
	EN 10113-3	S275M, S275ML, S355M, S355ML, S420M, S420ML, S460

Packaging and available sizes

Process	Unit	Diameter (mm)	0.8	1.0	1.2
GMAW	15 kg metal basket - K300		X	X	X
GMAW	15 kg spool B300 - D300		X	X	X
GMAW	250 kg Accutrak® Drum		X	X	X
GMAW	380 kg Accutrak® Drum		X	X	X
GMAW	500 kg Accutrak® Drum		X	X	X

Other sizes and packaging on request

UltraMag™ SG2: rev. EN 21

Liability: All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request