

Mild steel solid wire

Classification

AWS A5.18/A5.18M : ER70S-6
ISO 14341-A : G 42 4 M G3Si1 / G 42 2 C G3Si1

General description

Solid 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. ISO 14175)

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

Approvals

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

Chemical composition (w%) typical wire

C	Mn	Si
0.07	1.45	0.85

Mechanical properties, typical, all weld metal

Typical values	Shielding gas	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J)		
						-20°C	-30°C	-40°C
	Required		min. 420	500-640	min. 20		min. 47	
	M21	AW	470	580	28		100	75
	C1		440	550	26	100		

Materials to be welded

Steel grades	Standard	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 10025 part 3	S275, S355, S420
	EN 10025 part 4	S275M, S275ML, S355M, S355ML, S420M, S420ML

Packaging and available sizes

Unit type	Diameter (mm)				
	0.8	1.0	1.2	1.4	1.6
15 kg metal basket - K300	X	X	X	X	X
15 kg spool B300 - D300	X	X	X	X	X
250 kg Accutrak® Drum	X	X	X		
380 kg Accutrak® Drum	X	X	X	X	X
500 kg Accutrak® Drum	X	X	X	X	X

Other sizes and packaging on request

UltraMag™: rev. EN 23

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