

Mild steel solid wire

Classification

AWS A5.18/A5.18M-01 : ER70S-3
 EN 1668-94 : W 42 5 W2Si
 EN 440-94 : G 42 2 M G2Si

General description

Solid wire/rod for welding general construction in mild steel

High impact toughness

Stable arc and excellent feedability (LNM 25)

Shielding gases (acc. EN 439)

GTAW	I1	Inert gas Ar 100%
GMAW	M21	Mixed gas Ar+ >5-25% CO ₂
	C1	Active gas 100% CO ₂

Approvals

	ABS	BV	CTL	DNV	GL	LR	TÜV
GTAW			+				+
GMAW	3YSA	SA3,3YM	+	IIYMS	3Ys	3S,3YS	

Chemical composition (w%) typical wire / rod

C	Mn	Si
0.08	1.1	0.6

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°	-50°C
Typical values	GTAW	I1	AW	450	560	26	170	100
	GTAW	I1	SR 15h/620°C	410	525	26		80
	GMAW	M21	AW	500	575	25	95	-

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 DH36
Cast steel	EN10213-2	GP240R
Pipe material	EN 10208-1	L210, L240, L290, L360
	EN 10208-2	L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L451MB, 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

Packaging

Process	Unit	Sizes (mm)							
		0.8	1.0	1.2	1.6	2.0	2.4	3.0	
GTAW	2 and 5 kg tube					X	X	X	X
GMAW	15 kg spool B300	X	X	X					
	300 kg spool		X						

Other sizes and packaging on request