

Mild steel solid wire

Classification

AWS A5.18/A5.18M-01 : ER70S-6
 EN 1668-94 : W 42 5 W3Si1
 EN 440-94 : G 46 4 M G3Si1

General description

Solid wire/rod for welding of general constructions in mild steel

Smooth bead appearance

Stable arc and excellent feedability (LNM 26)

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	DB	DNV	GL	LR	RINA	TÜV	RMRS
GTAW			+					+	
GMAW	3SA,3YSA	SA3YM	+	IIYMS	3YS	3S,3YS	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°	-30°C	-40°C
Typical values	GTAW	I1	AW	460	580	26	170	170	120
	GMAW	M21	AW	520	600	25	110	70	

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
Boiler & pressure vessel steel	API 5LX	X42, X46, X52, X60
	EN 10216-1/	P235T1, P235T2, P275T1
	EN 10217-1	P275T2, P355N
	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)							
		0.6	0.8	1.0	1.2	1.6	2.0	2.4	
GTAW	5 kg tube + 2 kg						X	X	
GMAW	5 kg spool S200	X	X	X					
GMAW	15 kg spool B300		X	X	X	X			
GMAW	15 kg spool S300	X							
GMAW	250 kg AccuTrack®		X	X	X				
GMAW	300 kg metal coil					X			

Other sizes and packaging on request

LNT/LNM 26: rev. EN 15