

Unalloyed Welding Wire



General Description

Gas metal arc (MIG/MAG) welding wire used for welding general structural steels, pipe steels and cast steels. Depending on the thickness of the base metal, CO₂ (carbon dioxide) or mixed gases can be used as shielding gas. It is generally used in steel structure and shipbuilding, machinery, tank, boiler manufacturing, metal goods manufacturing and automotive industry. It is recommended to preheat according to the thickness of the material to be welded and its carbon equivalent. Thin and homogeneous copper coating increases the electrical conductivity and the resistance of the wire against corrosion.

Standards		Typical Chemical Properties of Welding Wire			Typical Mechanical Properties of Weld Metal	
AWS A5.18	ER70S-6		C	Si	Mn	Yield Strength (Mpa) : 440 N/mm ²
EN ISO 14341-A	G 42 4 M21 3S1	TS/EN/ISO	0,06-0,14	0,70-1,00	1,30-1,60	Tensile Strength (Mpa) : 540 N/mm ²
EN ISO 14341-A	G 42 4 C1 3S1	DUW1/2	0.06	0.85	1.45	Elongation A5 (%) : 30
TS EN ISO 14341-A	G 42 4 M21 3S1					Notch Impact Resistance ISO-V (J) : 60 J (-30°C)
TS EN ISO 14341-A	G 42 4 C1 3S1					



1G/PA



2F/PB



2G/PC



4G/PE



3G/PE



3G/PG



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Weldable Steels	DIN	EN
General Structural Steels	St 33, St 34, St 37, St 44, St 44-2, St 44-3, St 52, St 52-3 St 37-4, St 44-4, St 52-4 St 50-2, St 60-2 C 10- C35; Ck 10 - Ck 35	S185, S235, S275, S355 P235TR2-P355T2 E295-E335 C10-C35
Fine Grain Steels	StE 255 - StE 420 WStE 255 - WStE 355	S255N - S420N P255NH - P355NH
Pipe Steels	StE 210-7 - StE 360-7 StE 290-7 TM - StE 360-7 TM X42,X46,X52X60(API 5LX)	L210-L360NB L290MB -L3620MB —
Boiler and Pressure Vessel Steels	17 Mn 4, 19 Mn 6 H1, H11	P295GH, P355GH P235GH, P265GH
High Temperature Steels	St 35-8, St 45-8	P235G1TH - P255G1TH
Ship Sheets	A, B, C, D, E AH32 - EH36	— —
Cast Steels	GS-38, GS-45, GS-52	GE200, GE240, GE260

Shielding Gases

M21 Ar + %5-25 CO₂ C1 %100 CO₂

Welding Parameters			Packaging and Diameter Information									
Wire Thickness (mm)	AMPERE	VOLTAGE	Diameter				Barrel Weight	Barrel Type	Spool Weight		Spool Type	
0.8	50-200 A	14-26 V	0.8	1.0	1.2	1.6	250 kg	Fiber Canister	15 kg	5 kg	Plastic	Wire
1.00	80-230 A	15-27 V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1.20	120-340 A	17-30 V										
1.60	180-400 A	19-36 V										

