



MG 102

GTAW Filler Metal For welding of mild steel, 50kgf/mm² high tensile strength steel, killed steel, and one side-shielded welding of pipes, Pressure Vessels - **AWS A5.18/ASME SFA-A5.18: ER70S-2**

Key Benefits

- Industry, military applications
- Power generation, pipeline, ship/barge building

Typical Applications

- Power Generation plant include steam piping, Turbines and boilers
- Alloy also finds applications in chemical and petrochemical Industries

Base Material

TGC-50B is a triple deoxidized (Aluminum, Zirconium, Titanium)

Welding wire designed for welding over rust and mill scale. The less fluid weld puddle of TGC-50B makes it easy to control when used out of position

Shielding Gas

100% Ar

Flow rate: 8-16 CFH

Typical Wire Composition as per AWS A5.18/ASME SFA-A5.18 ER70S-2

Requirements - AWS ER70S-2 Typical Wire Composition	%C 0.044	%Mn 1.16	%Si 0.62	%S 0.002	%P 0.015
Requirements - AWS ER70S-2 Typical Wire Composition	%Cr 0.04	%Ni 0.03	%Mo 0.02	%Cu 0.14	%Other 0.5 max

Mechanical Properties as per AWS A5.18/ASME SFA-A5.18 ER70S-2

	Yield Strength MPa (ksi)	Tensile Strength MPa (ksi)	Elongation (%)	Impact Energy (J)
Typical Results (all weld metal) As Welded	550 MPa	620 MPa	30.7	-30°C → 269J

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Ordering Information

Product Code	Product/AWS Specification	Dimension mm/inches	Single Tube Weight kg/lb	Box Weight kg/lb
MW70S21605	MG 102 (ER70S-2)	1.6 mm x 1000 mm (1/16")	5.0 kg (11.0 lb)	5.0 kg (11.0 lb)
MW70S22405	MG 102 (ER70S-2)	2.4 mm x 1000 mm (3/32")	5.0 kg (11.0 lb)	5.0 kg (11.0 lb)
MW70S23205	MG 102 (ER70S-2)	3.2 mm x 1000 mm (1/8")	5.0 kg (11.0 lb)	5.0 kg (11.0 lb)
MW70S2405	MG 102 (ER70S-2)	4.0 mm x 1000 mm (5/32")	5.0 kg (11.0 lb)	5.0 kg (11.0 lb)

