

GTAW Solid Wire for High Tensile Strength Steel

TG-53

Classification

AWS	A5.18/A5.18M	ER70S-3/ER48S-3
JIS	Z3312	YGT50
EN	636-A	W422 W2Si
GB	T 8110	ER50-3

Shielding Gas: Ar

Applications and Features

- (1) TG-53 is suitable for welding mild steel and 490N/mm² grade steel.
- (2) It is specially designed for GTAW with Argon in root pass of pipe welding.
- (3) Ideal for welding vehicles and sheet metal.

Welding Instruction

Please refer to Appendix C.

Typical Chemical Composition of Weld Metal (wt. %)

C	Si	Mn	P	S
0.09	0.48	1.20	0.013	0.012

Typical Mechanical Properties of Weld Metal

Tensile Strength N/mm ² (kgf/mm ²)	Yield Strength N/mm ² (kgf/mm ²)	Elongation %	Charpy V-Notch	
			°C	J (kgf -m)
570(58.1)	480(48.9)	33	0	195(19.9)
			-20	176(18.0)

Size and Suggested Operating Range (DC+)

Diameter (mm)	1.2	1.4	1.6	2.0	2.4	2.6	3.2	4.0	4.8	5.0
Length (mm)	1000									