

## GTAW Solid Wire for High Tensile Strength Steel

# TG-52

### Classification

AWS	A5.18	ER70S-2
JIS	Z3312	W 49 A 3
EN	636-A	W 42 3 W2Ti
GB	T 8110	ER50-2

Shielding Gas: Ar

### Applications and Features

- (1) TG-52 is suitable for welding mild steel and 490N/mm<sup>2</sup> grade steel.
- (2) It is specially designed for GTAW with Ar in root pass of pipe welding.
- (3) Used for butt or fillet welding of high pressure items in ships, petro-chemistry industries and nuclear power plants.

### Welding Instruction

Please refer to Appendix C.

### Typical Chemical Composition of Weld Metal (wt. %)

C	Si	Mn	P	S
0.050	0.46	1.53	0.009	0.011

### Typical Mechanical Properties of Weld Metal

Tensile Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	Yield Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	Elongation %	Charpy V-Notch	
			°C	J (kgf -m)
610(62.2)	520(53.0)	31	0	205(20.9)
			-30	196(20.0)

### 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									