

TIG WIRE FOR $\geq 550\text{N/mm}^2$ HIGH TENSILE STRENGTH STEEL

DESCRIPTION & APPLICATIONS :

- STG-60 is a solid tungsten rod for 550N/mm^2 grade steel. Suitable for deep penetration on root and filler layer of butt, and normally used for welding high tensile strength steel such as molybdenum steel and manganese molybdenum steel.

NOTE ON USAGE :

- Use Ar as shield gas, purity should be above 99.997%, and control the flow properly. The gas flow should be 7~12 l/min when the current is 100~200Amp; 12~15 l/min when the current is 200~300Amp.
- The proper Wire-stick-out should be 5mm, and arc should be 1~3mm.
- There should be proper win shielded facility in case of porosities.

WELDING POSITION :



TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) : (Ar)

C	Mn	Si	P	S	Mo
0.04	1.50	0.57	0.010	0.006	0.15

TYPICAL MECHANICAL PROPERTIES OF WELD METAL: (Ar)

YIELD POINT N/mm ² (Kgf/mm ²)	TENSILE STRENGTH N/mm ² (Kgf/mm ²)	ELONGATION RATE %	IMPACT VALUES -30 °C J(Kgf-m)
585(59.7)	650(66.3)	24	250(25.5)

SIZE AND RECOMMENDED CURRENT RANGE : DC(-)

Diameter (mm)	1.2	1.6	2.0	2.4	3.2	4.0
Current (Amp)	70-90	80-100	90-120	100-160	160-220	180-250