

TIG RODS FOR 490N/mm² HIGH TENSILE STEEL

DESCRIPTION & APPLICATIONS :

- STG-52 is a tig rod for 490N/mm² grade steel.
- Adding on the slight aluminum(Al), titanium(Ti) and zirconium(Zr) metallic elements, it exhibits excellent deoxidation effects and mechanical properties.

NOTE ON USAGE :

- Use 99.997% Ar as shielding gas and control the gas flow properly, 100~200Amp with 7~12 l/min; 200~300Amp; 12~15 l/min.
- Recommended E.S.O. 5mm and arc length is 1~3mm for better bead appearance.
- Proper wind protection measures are required during welding to prevent porosity caused by wind interference.

WELDING POSITION :



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

C	Mn	Si	P	S	Al	Ti	Zr
0.038	1.18	0.49	0.013	0.008	0.07	0.09	0.05

TYPICAL MECHANICAL PROPERTIES OF WELD METAL : (Shielding Gas : Ar)

YP N/mm ² (Kgf/mm ²)	TS N/mm ² (Kgf/mm ²)	EL %	IV -30 °C J(Kgf-m)
480(49.0)	561(56.1)	29	120(12.2)

SIZE AND RECOMMENDED CURRENT RANGE : DC(-)

Diameter(mm)	1.2	1.6	2.0	2.4	3.2	4.0
Current (Amp)	60-80	70-90	90-120	100-140	160-250	180-280