

## TIG RODS FOR HEAT-RESISTANT LOW-ALLOY STEEL

### DESCRIPTION & APPLICATIONS :

- STG-90B3 is a solid rod for 2.25%Cr-1%Mo heat-resistant low alloy steel with high tensile strength and excellent creep resistance.
- Suitable for pipelines of high temperature high pressure, steel of boiler exchanger, A387 Gr.11 and Gr.12.

### 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	Cr	Mo
0.08	0.58	0.48	0.018	0.009	2.37	1.02

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL: (Ar)

YIELD POINT N/mm <sup>2</sup> (Kgf/mm <sup>2</sup> )	TENSILE STRENGTH N/mm <sup>2</sup> (Kgf/mm <sup>2</sup> )	ELONGATION RATE %	HEAT TREATMENT
590(60.2)	660(67.3)	22	690°Cx1hr

### 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