# FabStar 82G

### **Characteristics and Applications:**

FabStar 82G is a self-shielded flux-cored wire used for single pass, vertical up, electrogas welding (EGW) of storage tank, shipbuilding, heavy equipment fabrication and structural welding. It provides good low-temperature impact toughness at -46°C. It is suitable for welding 590N/mm<sup>2</sup> high tensile steels with high deposition rate and without consumable guide.

### Notes on Usage:

- 1. Use DC(+) polarity.
- 2. Mechanical properties are dependent on plate chemistry and joint geometry.
- 3. Baffle plate should be tightened firmly to prevent a leak of deposited metal.
- 4. Control all parameters with cares during welding, such as shape of weld joint, cooling rate.

### Typical chemical composition of weld metal (wt%)

	С	Mn	Si	Р	S	Ni	Мо
AWS	-	-	-	-	-	-	-
Typical value	0.04	1.37	0.34	0.013	0.008	1.3	0.14

#### Typical mechanical properties of weld metal on A36 base metal

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -46°C(-50°F)
AWS	<u>≧</u> 410(60)	550-700(80-100)	≧20	≧27(20)
Typical value	530(77)	625(91)	26	50(37)

## Welding position:



## Sizes and recommended parameter range ( DC <+>)

Diameter (mm) Parameters	1.6	
Plate thickness (mm)	9-16	~
Current (Amps)	250-300	
Voltage(Volt)	28-32	

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