# FLUX CORED WIRE

# FabStar 721

AWS A5.26 EG72T-1

### **Characteristics and Applications:**

FabStar 721 is a self-shielded flux-cored wire used for single pass, vertical up, electrogas welding of shipbuilding, heavy equipment fabrication and structural welding and storage tank. It is suitable for welding of mild steel and high tensile steels with high deposition rate and with or without consumable guide.

### Notes on usage:

- 1. Use DC(+) polarity.
- 2. Composition of consumable guide tube should be as close as possible to parent steel and be aware to add an insulating ring to the tube made without insulating coating to prevent from a short circuit.
- 3. Mechanical properties depend on plate chemistry and joint geometry.
- 4. Pre-heat the workpiece and star-up zone.
- 5. Baffle plate should be tightened firmly to prevent a leak of deposited metal.
- 6. Control all parameters with cares during welding, such as shape of weld joint, tube material, cooling rate.
- 7. Keep the product dry, while it is stored or delivered.

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

	С	Mn	Si	Р	S	Мо
AWS	-	≦ 1.7	≦ 0.50	≦ 0.030	≦ 0.03	≤ 0.35
Typical value	0.05	1.50	0.35	0.015	0.007	0.18

## 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) -30°C(-20°F)
AWS	≥ 350(50)	480-650(70-95)	≧ 22	≥ 27(20)
Typical value	441(64)	540(78)	25	50(37)

# Welding position:



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

Diameter (mm) Parameters	1.6		2.4		3.0			
Thickness	9	12	12	19	19	25	38	50
Wire Feed Speed (cm/min)	280	300	350	400	510	580	750	890
Voltage(Volt)	30	32	36	38	35-38	38-40	42-44	42-44

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