

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. 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.

Typical chemical composition of weld metal (wt%):

C	Mn	Si	P	S	Mo
0.05	1.50	0.30	0.015	0.007	0.18

Typical mechanical properties of weld metal:

YS (MPa)	TS (MPa)	EL %	CVN -30°C J
470	575	25	50

Sizes and recommended current range (DC<+>)

Parameters	1.6		2.4		3.0			
	9	12	12	19	19	25	38	50
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

* The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brother Company expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with AWS specification. Other tests and procedures may produce different results. No data is to be construed as recommendation for any welding condition or technique not controlled by Hobart Brother Company.

