



Submerged Arc Welding Flux



GJ-101

Fluoride Basic Flux

- GB/T 12470 F48A2-H08MnA F48A4-H10Mn2
- AWS A5.17 F7A2-EM12K F7A4-EH14

Product description

Basic Information

- BASICITY: 1.4
- GRAIN SIZE: 10-40 mesh, 12-60 mesh
- DENSITY: 1.2g/cm³
- PACKAGING: 25 kg plastic valve bags, 500/1000 kg large bags

Application

- Can be used for multi-layer, double-sided single-pass welding
- Suitable for welding of light and heavy steel structures when used with H08A, H08MnA, and H10Mn2.
- Good slag detachability at a 90-degree angle, with good transition of weld formation.
- Applicable to steel structures: light steel (H-type), heavy steel (H-type, box-type)
- Can be used for welding of L210-L415 grade large and small diameter spiral and straight seam pipes when used with H08A and 50-6.
- Has good anti-porosity ability at high current and a welding speed of 1.8 m/min; the slag is in a long strip shape and easy to detach. The weld has a good finish.
- Recommended applicable industries: spiral pipes and straight seam pipes below 40 kg grade.

Main constituents

SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂
20-30	20-30	35-45	5-15



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Wire electrodes used	Yield strength ≥MPa	Tensile strength ≥MPa	Elongation 8%≥%	Impact values ≥J (CVN)		
				+20℃	-20℃	-40℃
EM12K	415	510	32	≥130	≥100	50
EH14	430	530	31	≥80	≥70	70
H08Mn2MoA	575	480	25	85	≥70	

NOTE:

- Since it is a sintered flux, it is prone to absorbing moisture. It must be dried at a temperature of 300-350℃ for 1-2 hours before use to prevent pores from forming in the weld. Unused flux should be put back into the oven for heat preservation.
- Wire cleaning: The surface of the welding wire should be kept clean, free of oil, rust, and moisture.
- Groove cleaning: The workpiece groove and the 20mm range on both sides need to be cleaned thoroughly to remove impurities such as water, oil, rust, and paint.
- Parameter selection: Appropriate welding current, voltage, and speed should be selected according to the steel plate thickness, groove form, welding position, etc. It is recommended to refer to the parameter table provided by the flux manufacturer and conduct process evaluation. For high-speed welding up to 2.5 m/min, use optimized parameters such as 800-1200A current, 30-40V voltage, and multi-wire setups to maintain arc stability and bead quality.