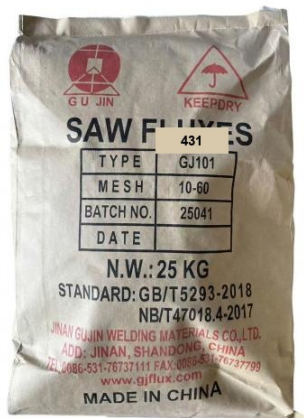




GJ-431

High manganese, high silicon, low fluorine fused flux

GB/T 5293-2018 F6A2-EL12 / F7A3-EM12K

NB/T 47018.4-2017

AWS A5.17 F6A2-EL12

Product description

Basic Information

BASICITY:	0.5 (acid)
GRAIN SIZE:	10-40 mesh, 12-60 mesh
DENSITY:	1.1 g/cm ³
PACKAGING:	25 kg plastic valve bags, 500/1000 kg large bags

Application

- > The most widely used fused flux for submerged arc welding of low carbon steel and low alloy steel structures.
- > Can be used for single-pass, multi-layer, and double-sided single-pass welding. Excellent slag detachability with smooth weld bead appearance.
- > Suitable for welding boilers, pressure vessels, shipbuilding, heavy steel structures, H-type steel, and bridge structures when paired with H08A, H08MnA, H10Mn2 wires.
- > Highly resistant to rust, oil, and moisture on the base metal, minimizing porosity risk. Can be used with both AC and DC power sources.

Main constituents

SiO ₂	Al ₂ O ₃ +MnO	CaO+MgO	CaF ₂	FeO	S	P
40-44	35-44	8-13	3-8	≤1.8	≤0.06	≤0.08

Mechanical Properties of Deposited Metal

Wire	Yield ≥MPa	Tensile ≥MPa	Elongation ≥%	Impact -20C ≥J
H08A (EL8)	400	500	22	34
H08MnA (EM12K)	360	480	26	47

Note:

Since it is a fused flux, it has low moisture absorption and generally does not require drying before use. If damp, dry at 250C for 1-2 hours.

Wire cleaning: Keep wire surface clean, free of oil, rust, and moisture.

Groove cleaning: Clean workpiece groove and 20mm range on both sides to remove water, oil, rust, and paint.

Parameter selection: Select appropriate current, voltage, and speed according to plate thickness, groove form, and welding position. Refer to manufacturer parameter table and conduct process evaluation.