STRONG FLUX – 78X

Ultra High Basicity SAW Flux for High Tensile Applications



CLASSIFICATION: AWS SFA 5.23 F10A2 WITH HIGH TENSILE WIRES

CHARACTERISTICS

STRONG FLUX 78X is a specialized fluoride-basic SAW flux designed for high tensile strength and superior weld integrity. Key features include:

- Extremely low oxygen and hydrogen levels in weld metal.
- Minimal transfer of manganese (Mn) and silicon (Si) from the flux.
- Final weld chemistry primarily influenced by wire composition.

APPLICATIONS

Suitable for Pressure vessels, Low-temperature service vessels, Offshore structures, Bridge fabrication, Heavy crane girders, Mining and earthmoving equipment, Wind tower fabrication, Shipbuilding and heavy engineering, Critical structural fabrication.

FLUX TYPE - Fluoride Basic

BASICITY INDEX - 2.8 (Boniszewski)

COMPOSITION OF THE FLUX (%)

$SiO_2 + Al_2O_3 + TiO_2$	CaO + MgO + MnO	CaF_2	S	P
25-40	35-50	25-30	0.035 MAX	0.040 MAX

TYPICAL ALL WELD MECHANICAL PROPERTIES

SAW WIRE	Y.S. MPa	U.T.S. MPa	ELONGATION (L=4D) %	CVN IMPACT -20°C	TYPICAL STRENGTH CLASS
EM2	540	660	26	85	Medium-High
EM3	580	700	24	75	High
EM4	630	760	22	75	Higher Strength
EF1	560	680	22	75	High Strength
EF2	660	780	20	70	High Tensile
EF3	680	800	18	60	High Tensile
EF4	700	830	17	48	Wear/Strength
EF5	725	855	16	55	Very High Strength
EF6	680	800	17	75	High Toughness
EG	825	940	15	48	Ultra High Strength

WELDING PARAMETERS - Current up-to 800 amps, Voltage: 24-34 V, Speed: Up-to 0.60 mts/min.

PACKAGING SPECIFICATION - 25 kg Paper Bag / Vacuum Bag with Plastic liner.

RE-DRYING CONDITION - Recommended at 300°- 350°C for 2 hours.

STRONGWIRE Industries

www.strongwire.in