

SF 124

Submerged Arc Welding Flux - Unalloyed & Low Alloyed Steels

Standards

EN ISO 14174	S A AB 1
TS EN ISO 14174	S A AB 1

Properties and Applications

Alumina-basic type, agglomerated submerged arc welding flux, which is developed for single- and multi-wire (tandem) welding of butt and fillet joints in shipbuilding, steel constructions, storage tank and machine production. Suitable to use in single and multi pass welding in thick and thin sections. Due to its metallurgically neutral characteristics, there is low Si and Mn pick-up from flux, it can be safely used in multi-pass applications in thick sections. Has a high current carrying capacity and possible to use both in alternative and direct currents. Provides bright and very clean weld surface appearance with easy slag removal in fillet joints and narrow V-groves.

Typical Chemical Values of Weld Metal

Welding Wire	Type of Analysis	C	Si	Mn	Mo
SW 702	Weld Deposit	0.05	0.20	1.10	
SW 702 Mo	Weld Deposit	0.07	0.25	1.25	0.40
SW 702Si	Weld Deposit	0.05	0.30	1.20	
SW 703Si	Weld Deposit	0.06	0.45	1.75	

Typical Mechanical Values of Weld Metal

Test Condition	Welding Wire	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Charpy V-Notch Properties (J)	
As welded	SW 702	430	490	30	-20°C → 70	-40°C → 40
As welded	SW 702 Mo	520	610	26	0°C → 70	-20°C → 55
As welded	SW 702Si	435	500	27	-20°C → 90	-30°C → 70
As welded	SW 703Si	440	550	30	-30°C → 90	-40°C → 70

Wire-Flux Combinations Standards

Welding Wire	EN Designation of Wire	EN ISO/TS EN ISO 14171 - A	AWS Designation of Wire	AWS/ASME SFA 5.17/SFA 5.23
SW 702	S2	S 42 2 AB S2	EM12	F7A4-EM12
SW 702 Mo	S2Mo	S 46 2 AB S2Mo	EA2	F8A2-EA2
SW 702Si	S2Si	S 42 3 AB S2Si	EM12K	F7A4-EM12K

Application Information

Welding Positions

PA PB PC

Welding Parameters & Efficiency

Polarity:

Packaging Information

Product Code	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
401030AGM2	25 kg	25.60	1	25.60	Craft Bag

Storage & Re-Drying Information

Generally not required. If required, redry for 1 hour at 110°C.
During transportation and storage, it should be ensured that the packaging is not damaged or torn.
It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.
It has to be dried at 350°C for 2 hours.