



XUN-101(G) Agglomerated Flux for S.A. Welding

Specification	EN760	AWS A5.17/A5.23
Classifications	SA FB 1 67 AC H5	F6A4-EL8
		F7A4-EM12K
		F7A4-EH14
		F7A6-EG
		F8A4-EG-G

Characteristics XUN-101 is an agglomerated fluoride-basic type flux

Metallurgical behavior: Silght silicon pick-up. The behavior of manganese is neutral.

Grain size: 10 to 60 mesh.

Basicity: 1.8 (BIIW).

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Weld metal is very purity. The diffusible hydrogen content in deposited metal is less than 5ml/100g, so has very good toughness at the low temperature, therefore, crack resistance is extremely high.

XUN-101 assures excellent weldability, bead appearance is beautiful, slag is extremely easy to remove.

The flux has low moisture pick-up and granular stability. Flux shall be capable of meeting the applied requirements. As the bulk density is low, so is the consumption rate.

Damp flux should be redried at 300-350℃ for 2 hours

Main Constituents (%)

SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂
20	30	25	20

Mechanical properties of deposited metal

Wire	PWHT	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Charpy V notch impact strength (J)		
					-20℃	-40℃	-50℃
GLES-20	AW	≥330	415-550	≥22	≥50	≥34	-
GLES-31	AW	≥400	500-600	≥22	≥50	≥34	-
GLES-44	AW	≥400	500-650	≥22	≥80	≥60	-
GLES-45	AW	≥430	550-650	≥22	≥100	≥70	≥34
GLES-30Mo	AW	≥460	550-690	≥22	≥50	≥50	-

Chemical composition of deposited metal (%)

Wire	C	Si	Mn	Mo	Others
GLES-20	0.05~0.1	0.20~0.3	0.55~0.8	-	-
GLES-31	0.05~0.1	0.25~0.35	0.9~1.1	-	-
GLES-44	0.05~0.1	0.20~0.30	1.4~1.6	-	-
GLES-45	0.05~0.1	0.25~0.35	1.5~1.8	-	0.2-0.3
GLES-30Mo	0.05~0.1	0.25~0.35	1.5~1.8	0.2-0.4	

Applications:

The flux can be used for welding ship, pressure vessels and boiler, tank, construction, longitudinal and spiral seam pipeline etc.

It is suitable for submerged-arc twin-wire, tandem and multi-wire welding as well as for welding with the two-run technique, such as in the production of large pipes.

It is also suited to welding fillets with a large throat thickness in steel constructions.

The flux can be welded on DC+ or AC

When impact properties at temperature down to -20℃ are required, heat input should be less than 30kJ/cm, or should be used wire containing Mo.

Material to be welded

General structural steels

Mild steels

490MPa high strength steels

590Mpa high strength steels

Ship plates

A B D E AH DH EH

Pipe steels

Mild steels

X52 X56 X60 X65 X70

Boiler steels

H I H II

17Mn4 19Mn5 15Mo3