MILL AND LOW-ALLOY STEEL

NON ALLOY AND FINE GRAIN STEELS WIRE AND FLUX FOR SAW

XUN-50 Agglomerated Flux for S.A. Welding

Specification EN760 AWS A5.17/A5.23

Classifications SA AB 1 67 AC H5 F7A2-EM12K

F7A4-EH14

F8A0-EA2-A2

Characteristics: XUN-50 is an agglomerated aluminate-basic type flux with multi purpose.

Metallurgical behavior: Low silicon pick-up is obtained. Slight manganese pick-up is typical for this flux.

Grain size: 10 to 60 meshes.

Basicity: 1.3 (BIIW).

It has excellent welding technology properties. Regularly shaped welds are deposited without reduction of area or interface notches. Surface of weld is smooth and fine ripple. Slag detachability is good.

Low silicon pick-up and slight manganese pick-up are typical for this flux and allow it to be used with GLES-31, GLES-40 and GLES-60 wire electrodes.

The diffusible hydrogen content in deposited metal is less than 5ml/100g and oxygen content is low, so weld metal shows excellent toughness at the low temperature,

The flux has low moisture pick-up and granular stability. Flux shall be capable of meeting the applied requirements.

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

Main Constituents（%）

SiO_2+TiO_2	CaO+MgO	Al_2O_3+MnO	CaF_2
20	20	35	15

Mechanical properties of deposited metal (AWS A5.17/5.23)

Wire	Yield strength（MPa）	Tensile strength（MPa）	Elongation（%）	Charpy V notch impact strength（J）		
				-20℃	-30℃	-40℃
GLES-31	≥400	500~600	≥22	-	≥80	-
GLES-40	≥440	550~650	≥22	-	-	≥40
GLES-6030Mo	≥480	560-690	≥22	≥34	-	-

Chemical composition of deposited metal（%）

Wire	C	Si	Mn	Mo
GLES-31	0.05~0.1	0.3~0.4	0.95~1.25	-
GLES-40	0.05~0.1	0.2~0.35	1.4~1.6	-
GLES-30Mo	0.05~0.1	0.2~0.35	1.0~1.3	0.2~0.4

Applications：

The flux can be used for welding shape of H and box structure, boiler and pressure vessel, pipeline, and shipbuilding.

It is suitable for submerged-arc single-wire, twin-wire, tandem and multi-wire welding, as well as when using the two-run technique.

The flux should be welded on DC + or AC

Material to be welded

General structural steels

Mild steels

490MPa high strength steels

590Mpa high strength steels

Ship plates

A B D E A32 A36 D32 D36

Pipe steels

X42 X46 X52 X56 X60 X65

Boiler steels

H Ⅰ H Ⅱ

17Mn4 19Mn5 15Mo3