



MILL AND LOW-ALLOY STEEL  
NON ALLOY AND FINE GRAIN STEELS WIRE AND FLUX FOR SAW

XUN-80 Agglomerated Flux for S.A. Welding

**Specification :** EN760 AWS A5.17/A5.23  
**Classifications** SA FB 1 57 AC H5 F8A4-EG-G  
**Characteristics:** XUN-80 is special agglomerated flux for longitudinal and spiral welded pipelines. It is an agglomerated fluoride-basic type flux.  
Metallurgical behavior: The behavior of silicon is neutral and low manganese pick-up is obtained.  
Grain size: 10 to 60 meshes.  
Basicity: 2.0(BIIW).  
Weldability and mechanical properties are excellent also in high speed welding with multi-wire system, slag is extremely easy to remove, and bead appearance is beautiful. It is recommended for single pass, square butt-welding such as longitudinal and spiral seams on pipe. XUN-80 produces welds with minimal buildup and good penetration. It is capable of high speed welding with multi-wire. Welds metal shows high impact toughness in high speed welding.  
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 <sub>2</sub> +TiO <sub>2</sub> | CaO+MgO | Al <sub>2</sub> O <sub>3</sub> +MnO | CaF <sub>2</sub> |
|------------------------------------|---------|-------------------------------------|------------------|
| 15                                 | 35      | 25                                  | 20               |

Mechanical properties, typical pipe API X80 seam weld

| Wire    | Yield strength (Mpa) | Tensile strength (Mpa) | Elongation (%) | Charpy V notch impact strength (J) |      |
|---------|----------------------|------------------------|----------------|------------------------------------|------|
|         |                      |                        |                | -20℃                               | -40℃ |
| GLES-58 | 605                  | 690                    | 26             | 155                                | 100  |

The plate thickness is 22mm

Typical chemical composition of metal (%)

| Wire    | C    | Si   | Mn   | Mo   | Ti    | B     | Cr   |
|---------|------|------|------|------|-------|-------|------|
| GLES-58 | 0.07 | 0.30 | 1.70 | 0.20 | 0.015 | 0.002 | 0.23 |

Applications:

The flux can be used for multi-wire welding at high speed for longitudinal and spiral seam pipe  
Suitable for single wire or multi-wire welding with two run technology  
The flux should be welded on DC + or AC

Material to be welded

Pipe steels

X70 X80