

Welding Flux for Un-alloyed and Low-Alloyed Steels

Classification

Flux / Wire Combination

AS FX-N330 / AS S2Si (AWS A5.17: EM12K, EN 756: S2Si)

AWS A5.17

F7A2-EM12K

General Description

Aluminate-basic and neutral type agglomerated submerged arc welding flux. Used for welding of X42 and X46 grade pipe steels, pressure vessels and LPG cylinders. Suitable for various welding applications. Also ideal for welding of general structural steels performed in horizontal and flat positions. The fast-freezing slag characteristic minimizes slag flow, which is particularly well suited for small diameter, circumferential joint welding. It gives an excellent welding performance and bead appearance. It is easy to remove the slag and should be re-dried at 300-350°C for 2 hours before use.

Chemical Composition (w%) - Typical, All Weld Metal

| Wire Grade | C | Mn | Si | P | S |
|------------|------|------|------|-------|-------|
| AS S2Si | 0.04 | 1.07 | 0.38 | 0.012 | 0.010 |

Mechanical Properties – Typical, All Weld Metal

| Wire Grade | Yield Strength (N/mm ²) | Tensile Strength (N/mm ²) | Elongation (%) | Impact (ISO-V) -30 °C | |
|------------|-------------------------------------|---------------------------------------|----------------|-----------------------|----|
| AS S2Si | After welding | 425 | 535 | 33 | 60 |

Materials to be Welded

| | Standard | Material Type |
|--|------------------------|--|
| Ship Plates | | A-E |
| General Structural Steels | EN 10125 | S185, S235, S275, S355 |
| Cast Steels | EN 10213-2 | GP240R |
| Pipe Materials | EN 10208-2 API 5LX | L210, L240, L290, L360 X42, X46 |
| Boiler and Pressure Vessel Steels | EN 10216-1/ 10217-1 | P235, P275, P355 |
| Fine Grained Steels | EN 10218-1 EN 10025 | P235GH, P265GH, P295GH, P355GH S275, S355 |

Flux Characteristics

| | | |
|------------------------|--------------------------|--------------------------------------|
| Current Type | : DC (+) / AC | Re-drying Temperature : 300 - 350 °C |
| Basicity (Boniszewski) | : 1.2 | |
| Density | : 1.23 g/cm ³ | |
| Particule Size | : 10 - 60 Mesh | |

Packaging Detail

| Packaging Type | Net weight (kg) |
|----------------|-----------------|
| Bag | 25 |

Caution : All product information given in this catalogue is prepared in line with the latest information available and may be revised and modified by Kaynak Tekniği Sanayi ve Ticaret A.Ş. without prior notice. The catalogue information serves as a product selection guide for welders. Refer to the classification of the relevant product to obtain mechanical values expected from the weld seam and filler metal.