

## Welding Flux for Un-alloyed and Low-Alloyed Steels

### Classification

#### Flux / Wire Combination

AS FX-B110 / AS S2Si (AWS A5.17: EM12K, EN 756 : S2Si)

#### AWS A5.17

F7A4 -EM12K

### General Description

Fluoride and basic type agglomerated submerged arc welding flux. Used for welding of X52, X60 and X65 grade steel pipes and offshore, wind tower applications. It gives an excellent welding performance and bead appearance. The weld metal has good mechanical properties. Also ideal for welding of structural steels performed in horizontal and flat positions. 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	0.92	0.35	0.028	0.018

### Mechanical Properties – Typical, All Weld Metal

Wire Grade	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation (%)	Impact (ISO-V) -40 °C	
AS S2Si	After welding	430	550	29	55

### Materials to be Welded

	Standard	Material Type
<b>Ship Plates</b>		A-E AH(32), DH(36), EH(36)
<b>General Structural Steels</b>	EN 10025 EN 10149	S275 - S420,N,M S315-S420,MC S315-S420,NC
<b>Pipe Materials</b>	API 5LX	X52, X60, X65
<b>Boiler and Pressure Vessel Steels</b>	EN 10028	JR (G1 & G2), JO, J2 (G3 & G4) P235 - P420, GH N, NH, M, Q & QH P235 - P460, GH N, NH, M, Q & QH P500, GH, N, NH, M, Q & QH P235 S, P265 S A37 - A52, CP, AP

### Flux Characteristics

Current Type	: DC (+) / AC	Re-drying Temperature : 300 - 350 °C
Basicity (Boniszewski)	: 1.67	
Density	: 1.25 g/cm <sup>3</sup>	
Particulate 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.