



Company Reg # 2017/260076/07

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**DSE Agglomerated Submerged Flux (A.W.S. F7A2-EM12K)**

**Basicity Index: 3.0**

**Description**

DSE Submerged Flux is an agglomerated submerged arc welding flux. It is a fluoride-basic flux which was developed specifically for use with 400 series flux-cored wires and in particular for use with 414 nitrogen bearing wires in the cladding of concast rollers in the steelmaking industry. This flux has particularly good slag release properties, even under very high heat conditions. It can also be used with solid 300 series stainless steel wires as well as with low and medium carbon steels when good mechanical properties can be achieved.

**Typical Chemical Analysis of the Weld Metal (With Submerged S2 Wire)**

Carbon	0,11
Manganese	1.00
Silicon	0.48
Sulphur and Phosphorous	< 0.03

**Typical Mechanical Properties of the Weld Metal (With Submerged S2 Wire)**

Yield Stress (MPa)	401
Ultimate Tensile Strength (MPa)	511
Elongation (%)	22
Charpy V Notch (-18°C)	73

**Packaging and Control**

DSE Submerged Flux is manufactured in the grain size of 12 x 50 mesh and is packed in 25kg bags which are 200 micron thick. All agglomerated fluxes should be stored in conditions of less than 70% relative humidity. Welding with damp flux can cause porosity. Re-drying of flux suspected of being moist should be done for approx. 2 hours at about 300°C at a flux depth of about 25mm.

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