Agglomerated ES-Flux BF 46 for strip cladding

BF 46

Flux type: **F**luoride-**B**asic

Classification: ISO 14174 – **ES A FB 2B 5644 DC**
(EN 760 – **SA FB 2 DC**)

Characteristics:
High basic, agglomerated neutral flux (without alloy-compensation) designed for overlay welding and joint cladding together with the typical NiCr(Mo)-strip electrodes of the Alloy 600®, Alloy 625® and other NiCrMo–alloy types. Applicable for the different ElectroSlag (ES)-processes, with or without magnetic steering, as well as for cladding processes which produces higher deposition rates by ES-high speed welding or by the use of the ESO® (Extended Stick Out)-cladding system with the I^2R-effect benefit.
BF 46 gives excellent slag removal without slag residuals – in the 1st layer on preheated substrates as well as in subsequent layers or when joint cladding. Smooth weld bead finish and notch-free transitions are further features when appropriate process parameters are applied. Low and constant dilution rates are observed.
The flux has low hydrogen potential which makes it most suitable for overlay welding of heat resistant substrate materials such as A387-types.
BF 46 shows constant chemical reactions as typical for a non-alloyed flux.

Application:
BF 46 can be used for joint cladding and surfacing of chemical plant components and equipments in the nuclear/ offshore fields to obtain high NiCr(Mo)-overlays such as Alloy 600®, Alloy 625® and similar Alloys (Alloy 59®,C276®). Dependent on the particular specifications and in combination with appropriate strip electrodes according to ASME II C SFA-5.14 or EN ISO 18274 constant weld overlays with low dilution rates are achieved in single- or multilayers. Strip-dimensions from 20x0.5 to 60x0.5 mm can be applied.

Characteristic chemical Constituents:

$SiO_2 + Al_2O_3 + TiO_2$	CaO + MgO	CaF_2
20 %	5 %	70 %
Basicity according to Boniszewski: ~4.6		

Flux density: 1.1 kg/dm³ (l)

Grain size acc. to ISO 14174: 2 – 16 (Tyler 10 x 65)

Current-carrying capacity: up to 1,500 A DC using one strip electrode 60 x 0.5 mm

Packaging: 25 kg PE-coated Aluminium bags

Storage and redrying:
Unopened originally packed flux bags can be stored up to 1 year in dry storage rooms after date of delivery ex factory.
Redrying conditions specific to the flux: 300 – 350 °C effective flux temperature.

Further information on request

Strip cladding: BF 46 / BA-Strip 625 / Size: 60 x 0.5 mm (picture 1) and 30 x 0.5 mm (picture 2)