

Agglomerated ES-Flux BF 44 for strip cladding

Flux type: Fluoride-Basic

Classification: ISO 14174 – ES A FB 2B 5644 DC

Characteristics:

High basic, agglomerated and neutral flux (without alloy-compensation) designed for overlay welding and joint cladding together with stainless strip electrodes of the Cr-, CrNi(Mo)-steel types. Applicable for ES-process as well as, especially, for use with the ESO® (Extended Stick Out)-cladding system which enables highest possible deposit rates as a result of the Joule heat (I²R-effect). BF 44 gives excellent slag removal without slag residuals, especially in combination with Nb-alloyed strips, in the first layer on preheated substrates as well as in subsequent layers. The flux has low hydrogen potential, which makes it most suitable for overlay welding of heat resistant steels such as A387-types. Smooth weld bead appearance and notch-free transitions are features

achievable with all cladding processes. Low but constant dilution rates can be gained when using process-characteristic welding parameters. BF 44 shows constant chemical reactions as typical for a non-alloyed flux.

Application:

BF 44 can be used for joint cladding and surfacing of chemical plant components and equipments in the nuclear/ off- shore fields to yield corrosion resistant deposits in one or more layers. In combination with appropriate strip electrodes of the EQ300/EQ400 series according to A5.9 or according to EN ISO 14343 (EN 12072) constant weld overlays with low dilution rates are achievable.

Further information on request.

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: 1.0–1.1 kg/dm³ (l)

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

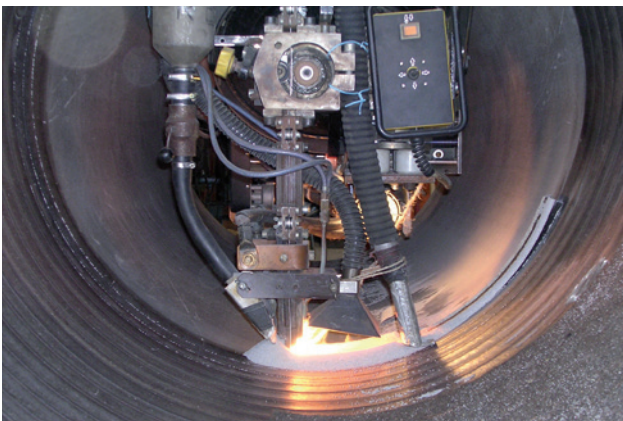
Current-carrying capacity: up to 1,500 A DC using one strip electrode 60 x 0.5 mm

Packaging: 25 kg Alpha Dry Alu-Bag

Storage and redrying: Unopened originally packed flux bags can be stored up to one year in dry storage rooms after date of delivery ex factory.

Redrying conditions specific to the flux:

300–350 °C effective flux temperature



Strip cladding: BF 44 / BA-Strip 309LN / Size: 60 x 0.5 mm