

## Agglomerated Welding Flux BF 8.50

**Flux type:** Fluoride-Basic

**Classification:** ISO 14174 – S A FB 1 55 DC

**Characteristics:**

A semi-basic, agglomerated, flux for shape – and overlay welding with single or multiwire (TWIN-ARC) submerged-arc processes. BF 8.50 shows stable metallurgical reactions and constant operating characteristics over a wide current range, also when AC-power is applied. Low flux consumption, high resistance to porosity as well as low hydrogen potential and low sensitivity to arc-blow are typical for this flux.

The weld deposits exhibit smooth surface, good wetting and self-lifting slag detachability without “tiger-tracks”, even at high welding temperature (> 300°C). BF 8.50 is a non-alloyed, neutral flux with little pick-up of

silicon and neutral manganese reactions (see chemical composition of weld pads)

**Application:**

The flux can be welded DC (electrode positive or negative) or AC in combination with appropriate solid or, especially, metal-powder cored wires as commonly used for hardfacing.

BF 8.50 is formulated specifically for build-up or shape-welding (in combination with standard CMn-/CMo-/CCr- Mo-wires) to restore worn surface to proper dimensions, or to profile the shape of a section. This flux is not formulated for joining or groove welding. For these applications the basic fluxes BF 5.1, BF 10, BF 10 MW , BF 16 or WP 380 (> 5 % Cr-alloys) are recommended.

**Characteristic chemical Constituents:**

SiO <sub>2</sub> + TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub> + MnO	CaO + MgO	CaF <sub>2</sub>
20 %	20 %	35 %	20 %
Basicity according to Boniszewski: ~2.5			

**Flux density:** 0.95 kg/dm<sup>3</sup> (l)

**Grain size acc. to ISO 14174:** 2–20

**Current-carrying capacity:** up to 1,000 A (DC or AC) using one wire

**Packaging:** 25 kg PE-Bags or 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

