CARBO Flux 85

Standards	EN 760	SA FB 1 65 AC

Flux Type Fluoride-Basic

Characteristics

A neutral, all purpose flux, semi–basic, agglomerated, flux for shape–and overlay welding with single or multiwire (TWIN–ARC) submerged-arc processes. It 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).

Flux with little pick–up of silicon and neutral manganese reactions.

Typical applications

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, specifically for build-up or shape-welding 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.

Recommendations when hardfacing

- **Cleaning:** remove rust, grease, oil and dirt before welding
- **Surface preparation:** remove cracked, deformed and hardened surfaces by grinding or machining
- **Deposit thickness:** avoid excessive build-up of hardfacing materials.Use buffering .layer materials before applying hardfacing deposits.
- **Thermal history:** select appropriate preheat / interpass / soaking / PWHT according to the requirements.
- **Welding procedure:** Use appropriate amperage (typical 130-140 A / each mm wire diameter) and voltage 27-30 V at travel speed about 40 ±5 cm / min and preheat / interpass temperature according to the substrate material requirement. Low but appropriate heat input keeps dilution rate low and improves hardfacing deposits

Main constituents

$SiO_2 + TiO_2$	$Al_2O_3 + MnO$	$CaO + MgO$	CaF_2
20 %	25 %	35%	15%

Basicity according to Boniscewski: ~ 2,0

Flux density 0,95 kg/ dm³ (lt)

Grain size according to DIN EN 760: 3 – 25 (0,3 – 2,5 mm Tyler 8 x 48

Current–carrying capacity: 1.000 A (DC or AC / 1 wire 4.0mm ∅)

Packaging: 25 kg PE- bags or 500-1250 kg Big-Bags

Storage and handling Flux can be stored up to 3 years in un–opened bag after delivery in dry storage. If, however, baking is necessary, flux should be baked at 200° ±50°C effective flux temperature.

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