Selectarc WELDING

ES Clad NiB

Flux for
Electroslag strip Cladding

Classification

EN 760 : SA FB 2 DC

Characteristics

Neutral agglomerated highly basic flux for Electro Slag (ESW) strip cladding in combination with Nickel base strips (Ni-Cr and Ni-Cr-Mo alloys).
This flux gives an excellent slag removal combined with a smooth and even bead finish. Due to its special characteristics the hydrogen level is low to assure its suitability for overlays on heat resistant Cr/Mo-steels.

Strips, with their typical chemical composition (%):

Type	AWS	C	Si	Mn	Cr	Ni	Mo	Fe	Nb
Strip Ni82	EQ NiCr-3	0.02	0.10	3.20	20.5	Base	0.01	0.70	2.80
Strip Ni625	EQ NiCrMo-3	0.02	0.10	0.10	22.5	Base	9.00	1.00	3.40

Typical Chemical Composition (%)

$SiO_2 + Al_2O_3$	CaO + MgO	CaF_2	Basicity according to Boniszewski
25%	5%	70%	~ 4.60

Other Properties

Density kg/dm^3	Grain size Acc. to EN 760	Current - carrying capacity	Flux consumption
~ 1.0	2 - 16	1500 A, strip 60x0.5 mm	0.6 kg / kg strip electrode

Parameters

Dimension	Current	Voltage (V)	Speed (A)	Interpass temp.	Stick - out
0.5x60mm	1140 A	24 V	19 cm/min	<150^{0}C	44mm

Typical Chemical Weld Metal Composition (%)

Strip	Height	C	Si	Mn	Cr	Ni	Mo	Nb	Fe
Strip Ni 625		0.01	0.04	0.03	21.9	65.2	8.90	3.50	0.30
1st layer	4 mm	0.03	0.44	0.13	20.1	58.00	8.20	2.80	12.50
2nd layer	8 mm	0.015	0.45	0.06	21.4	64.00	8.50	3.10	2.80

a) FX ES-Clad NiB can also be used with high speed (28-32 cm/min; 1100-1450A for 0.5x60mm strips).

Packaging & Storage

25 kg bag or others. The flux can be stored and used upto 5 years after delivery, subject to maintain the recommended storage conditions. Flux that has picked up moisture has to be rebaked at ~ 350 °C for ~ 4hrs before use.