

UP NI03

Flux for
Submerged Arc Welding



Classification

EN 760 : S A AF 2

ISO 14174: S A AF 2 64 AC H5

Characteristics

Submerged arc Welding Flux for specially developed for the welding of Ni-Alloys and 9%Ni welding steel. It is Alumino-Fluoride type basic flux. Produces sound welds with excellent slag removal and bead appearance. Exhibits superior resistance to moisture pickup. Designed for maximum toughness and ductility for nickel-based alloys metal. Homogeneous weld bead colour. Straight edges on butt welds applications. Excellent behaviour in AC current for 9% Nickel steel welding. Due to low Si-content in weld metal very good impact toughness at sub zero temperature.

Application

Extremely crack resistant weld metal used for the construction of Storage tank such as ethylene, LNG, CNG

Wire electrodes

AWSA 5.14	ISO EN 18274
ERNiCr-3	NiCr20Mn3Nb
ERNiCrMo-3	NiCr22Mo9Nb
ERNiCrMo4	NiCr15Mo16Fe6W4

Typical Flux Composition (%)

Si	Al	Ca	K	Basicity according to Boniszewski
6.5	21	23.4	1.7	~ 1.6

Mechanical properties of the pure weld metal (typical)

Density	Grain size Acc. to EN760	Current-carrying capacity
~ 1.2 kg / dm ³ :	2 – 20	DC(+,-), AC , using one wire