

# SUNALLOY 125

Ni-Cr-Fe basic coated stick electrode for heat resistance



## DESCRIPTION

A nickel base electrode for welding of nickel alloy and nickel alloyed steel for low temperature work. Also for welding of austenitic stainless steel to low alloy. SUNALLOY 125 yield a very crack proof weld metal. It is relatively tolerant to dilution. The weld metal has good impact strength down to 200° C and good impact strength upto 800° C. also the corrosion resistant is good.

## ALLOY BASIS

Ni, Cr, Mn, Fe, Nb  
AWS / A 5.11 Ni Cr Fe-3

## PROPERTIES

The electrode gives soft stable arc on low currents. Deposits are cold tough and have excellent resistance to scaling at high temperatures and corrosion resistance at both normal and elevated temperatures. Also possesses good thermal shock resistance. Any amount of buildup is possible. The deposit is tough and free from porosity.

## APPLICATIONS

This is a versatile electrode for all-position welding of nickel, inconel, monel, nickel-chromium-iron alloys, HK alloys, stainless and heat resisting steels. Also for welding dissimilar metals such as carbon steels, stainless steels, nickel and nickel alloys to each other. For use on equipment and components made of pure nickel, for fabrication of corrosion resistant tanks and containers, heat exchangers, furnace components, boilers, fittings, etc.

## PROCEDURE

Clean the work piece thoroughly for a crack and pores free deposit. Use a short arc and ensure minimum heat input, using lowest possible amperage and using stringer bead technique. Slight weaving not exceeding 2-3 times the core wire diameter should be employed while weaving. Dry electrode for 2 hours at 250 - 300°C. To avoid crate cracks fill the crater properly.

## TECHNICAL DATA

UTS of joint (all weld deposit) : 50 - 60 kgf/mm<sup>2</sup>  
Elongation : 30 - 35%

## WELDING PARAMETERS

Size (diameter)/length (mm)	: 2.50 x 350	3.15 x 350	4.00 x 350	5.00 x 350
Current (amps)	: 50 - 70	70 - 100	100 - 135	130 - 160
Current	: DC (+)			