

# SUNALLOY 991

Extremely crack resistant nickel iron alloy electrode for welding cast iron



## DESCRIPTION

Electrode with special core wire for particularly ductile and crack resistant repair welding on grey and spheroidal cast iron. XL - C 30 is highly suitable for joining on all malleable types of cast iron. The electrode has excellent welding properties and produces smooth seams without transverse under cuts. The special bimetallic core wire increases the current-carrying capacity as well as deposit efficiency. In spite of the high elongation the weld deposit is crack resistant. Weldment is also having excellent machining properties.

## ALLOY BASIS

Ni, Fe, C

## PROPERTIES

Electrode with excellent welding characteristics. The deposit is machinable and crackproof. Good bonding on difficult to weld cast iron.

## APPLICATIONS

Hot and cold welding of cast iron parts, of grey cast iron, nodular graphite iron, malleable iron subject to heavy wear. Joining of cast materials with steel. The electrode is most suitable for the surfacing of the above materials. Casting, machinery parts, bearing blocks, frames, foundry castings, etc.

## PROCEDURE

Sufficient amount of the casting skin should be removed. Depending on the job thickness a U weld or a double U weld should be made. Use shortest possible arc length. The pass width should not be more than twice the diameter of the core wire. Deslag every weld bead and peen the weld metal carefully. Restrike the arc on the weld metal and never on the parent metal.

## TECHNICAL DATA

UTS of joint (all weld deposit) : 35 - 45 kgf/mm<sup>2</sup>  
Hardness : 150 - 190 Brinell  
Elongation : 24%

## WELDING PARAMETERS

Size (diameter)/length (mm)	: 2.50 x 350	3.15 x 350	4.00 x 350	5.00 x 350
Current (amps)	: 40 - 90	60 - 110	80 - 120	100 - 180
Current	: AC/DC (+)			