

SUNALLOY 801

Electrode for welding austenitic manganese steel



DESCRIPTION

SUNALLOY 801 is easily weldable and gives good slag removal. Recovery is 160%. The weld metal is work-hardening, largely resistant to rust and corrosion and resists scaling up to 1560 °F (850 °C).

ALLOY BASIS

Cr, Ni, Mn

PROPERTIES

Specially formulated low-heat input austenitic stainless-steel electrode. Has excellent heat resistance upto 850°C, impact resistance to corrosion by atmosphere, sea, water, weak acids etc.

APPLICATIONS

SUNALLOY 801 suited for particularly tough, crack and wear-resistant joint and surfacing on steels of higher tensile strength like St. 60, St.70 and hard-manganese steel, as well as for joining high alloy steels with low-alloy and non-alloy materials. Such applications occur primarily on construction machinery and equipment. SUNALLOY 801 is strongly recommended for elastic inter-passes under hardfacing exposed to impact loads.

PROCEDURE

Adopt short arc and adjust low amperage, especially for high Manganese steel. Peen and de-slag each pass. Use water bath to contain heat buildup.

MECHANICAL PROPERTIES

Tensile strength	: up to 685 N/mm ² (99.00psi)
Yield strength	: up to 490 N/mm ² (71.00psi)
Elongation	: 40 - 45%
Impact strength	: 83 J

TECHNICAL DATA & WELDING PARAMETERS

Size (diameter)/length (mm)	: 2.50 x 350	3.15 x 350	4.00 x 350	5.00 x 350
Current (amps)	: 80 - 110	120 - 150	150 - 190	240 - 280
Current	: AC/DC (+)			