NC-200

A CHEMICALLY BASIC FLUX COATED MMA ELECTRODE FOR WELDING ALL PURE AND COMMERCIAL GRADES OF NICKEL

DATA SHEET NO. 84

SPECIFICATION	AWS A5.11	BS EN ISO 14172	JIS Z 3224
CLASSIFICATION	ENi-1	E Ni 2061	DNi-1

PRODUCT DESCRIPTION

The chemically basic flux is balanced with a controlled rutile content to ensure a fluid slag with a moderate solidification plus pure titanium as a vigorous de-oxidant and de-nitrider.

The core wire is pure nickel and the weld metal a nominal 98% Ni - 2%Ti.

WELDING FEATURES OF THE ELECTRODE

The electrode is suitable for use on DC+ only.
The slag fluidity and solidification range ensures excellent positional welding while the use of titanium ensures weld metal refinement and freedom from porosity.

Metal recovery is some 100% with respect to the weight of the core wire.

APPLICATIONS AND MATERIALS TO BE WELDED

For welding nickel to itself.

Typical grades include : ASTM - ASME UNS N02200 and N02201.

Proprietary alloys include : Nickel 200 and 201 (special metals)
Nickel 99.6 and 99.2 (UDM)

The above are used for both site and workshop fabrication of chemical plant and pipework involved in alkali storage, chlorination, salt production, or caustic soda evaporation.

WELD METAL ANALYSIS COMPOSITION % BY Wt.

	C	Mn	Si	S	P	Cu	Al	Fe	Ti	Ni
MIN	-	-	-	-	-	-	-	-	1.0	92
MAX	0.1	0.75	1.25	0.02	0.03	0.25	1.0	0.75	4.0	-
TYPICAL	0.02	0.2	0.4	0.01	0.01	0.1	0.1	0.35	2.0	Bal.

WELD METAL PROPERTIES (ALL WELD METAL)

PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS
Tensile strength	N/mm^2	410	460	
0.2% Proof stress	N/mm^2	-	300	HV
Elongation on 4d	%	20	25	150 – 160
Reduction of Area (RA)	%	-	40	
Impact energy -30 °C	J	-	150	

WELDING AMPERE DC+

∅ (mm)	2.6	3.2	4.0
MIN	60	70	90
MAX	80	110	150

OTHER DATA

Electrodes that have become damp should be re-dried at 180 °C for 30 mins.

RELATED PRODUCTS

Please contact our Technical Department for detail.