



D&H 1212 (MOD)

CODIFICATION: AWS: SFA 5.11 ENiCrFe-3 (Approx.)
EN ISO 14172:ENi6082 (NiCr20Mn3Nb)

CHARACTERISTICS AND APPLICATIONS:

Electrode is depositing 65Ni-20Cr-2Nb-1.5Mo weld metal. Radiographic quality weld metal of superior properties. It is ideally suited for welding alloys of similar compositions to themselves, for surfacing steel with Nickel-Chromium-Iron alloy when high Manganese contents are not detrimental, for welding clad side of Nickel Chromium-Iron clad steel and dissimilar metal combinations. Suitable for overlay of forge plates. Specially recommended for welding 9% Ni Steels for cryogenic service. Also used for welding of Nickel-Chromium alloys used for high temperature applications like furnace heating elements and reformer tubes.

TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Element	C	Mn	Si	Cr	Ni	Mo	Fe	Nb	Cu	Ti
Percent	0.04	4.0	0.50	20.0	Bal.	1.5	3.0	2.0	0.30	0.30

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS (MPa)	YS (MPa)	%El (L=5d)	CVN Impact Strength at minus 196°C(J)	Lateral Expansion at minus 196°C (mm)	Creep Strength at 600°C for 1000 hrs.
620	500	30	75	0.85	160 MPa

CURRENT AND PACKING DATA: DC (+)

Size (mm)	:	5x350	4x350	3.15x350	2.5x350
Dia x Length					
Current Range (Amps)	:	150-180	120-150	80-110	60-70
Weight/Cartron (kgs)	:	2.5	2.5	2.5	2.5

APPROVALS: BHEL

PRECAUTIONS:

1. Redry the electrode 300-325°C for one hour before use.
2. Maintain a short arc, stringer bead and minimize the heat input.
3. Allow the weld to cool down to below 50°C before depositing, the next layer.