

D & H 1212 (NS)

CODIFICATION: **AWS :** SFA 5.11 ENiCrFe-3

CHARACTERISTICS AND APPLICATIONS:

A non-synthetic electrode depositing homogeneous Ni-Cr-Fe alloy composition. 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. 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	P	S	Cr	Ni	Fe	Nb
Percent :	0.03	6.0	0.25	0.010	0.009	15.0	Bal.	6.0	2.2

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS	% El	CVN Impact Strength	Lateral expansion
(MPa)	(L=4d)	at minus 196°C (J)	at minus 196°C (mm)
590	40	85	0.85

CURRENT AND PACKING DATA: DC(+)

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

APPROVAL: CIB-MP, NPCL

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.
4. For dissimilar metal welding, control the dilution by:
 - a. Operating at lower currents
 - b. Using stringer beads and faster welding speeds.