

D&H 1217 (NS)

CODIFICATION: AWS : SFA 5.11 ENiCrFe-7

CHARACTERISTICS AND APPLICATIONS:

Non- synthetic electrode depositing Ni-Cr-Fe weld metal, which is very good resistance to SCC and IGC due to low carbon content and absence of sigma phase. Control boron and zirconium are helpful in reducing the tendency for ductility dip cracking. It has scaling temperature up to 1100°C in air. It is ideally suited for welding the Ni-Cr-Fe alloy of the UNS number N06690. It is also use for the welding of Ni-Cr-Fe alloys to steels and stainless steels, and for corrosion resistant overlays on steels. Typical specifications for Ni-Cr-Fe base metals are ASTM B166, B167 and B168. Ideal for stringent requirements in the construction of nuclear reactors

TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Elements	C	Mn	Si	P	S	Ni	Cr	Nb+Ta	Mo	Fe
Percent	0.04	3.0	0.50	0.018	0.014	55.0	29.0	1.5	0.15	9.5

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS (MPa)	Elongation (L = 4d)%	CVN Impact (Joules)	Strength at RT	Lateral Expansion at RT (mm)
590	35.0	120		1.0

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/Carton (kgs)	:	2.5	2.5	2.5	2.5

PRECAUTIONS:

- 1 Re-dry the electrode 300-325°C for one hour before use
- 2 Maintain a short arc, stringer bead and minimize the heat input.
- 3 For dissimilar metal welding, control the dilution by:
 - a. Operating at lower currents
 - b. Using stringer beads and faster welding speeds.