



D&H 1232 (NS)

CODIFICATION:

AWS : SFA 5.11 ENiCrMo-12

CHARACTERISTICS AND APPLICATIONS:

Non-synthetic basic coated electrode depositing Ni-Cr-Mo-Nb weld metal. Highly crack resistant weld also possesses good corrosion resistance characteristics. It has scaling temperature up to 1100°C in air. It is ideally suited for welding Cr-Ni-Mo austenitic stainless steels to themselves, to duplex stainless steels, to Ni-Cr-Mo alloys, and to steel or for just overlays. Typical specifications for the Cr-Ni-Mo stainless steel base metal are A240, A167, A182, A249, A276, A312, A358, A373, and A479, most particularly the grade UNS S31254/254 SMO / 6% Mo SS type. In a chloride containing environment, the fully austenitic weld-metal exhibits high resistance to Pitting, Crevice Corrosion & Stress Corrosion Cracking. It is ideal for Sulphuric and Phosphoric acid media that has been contaminated by chlorides. It can also be used for welding of 625 and 825 grade Ni-based alloys.

TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Elements	C	Mn	Si	P	S	Ni	Cr	Nb+Ta	Mo	Fe
Percent	0.025	1.00	0.40	0.015	0.010	62.0	21.5	2.4	9.5	3.0

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS (MPa)	Elongation (L = 4d)%	CVN Impact Strength at Minus 196°C (Joules)	Lateral Expansion at Minus 196°C (mm)
700	38	75J	0.70

CURRENT & 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. Ensure the electrodes are dry. Re-dry the electrodes at 300-325°C for one hour.
2. Maintain a short arc, stringer bead and minimize the heat input with an IPT of 100°C maximum is of vital importance.
3. For dissimilar metal welding, control the dilution by:
 - a. Operating at lower currents
 - b. Using stringer beads and faster welding speeds.