Product Data Sheet

BRAND NAME VJ NiCrMo-4

AWS/ASME Class ENiCrMo-4

SPECIFICATION SFA 5.11

Features and Applications :

VJ NiCrMo-4 is a basic-coated high-nickel alloy electrode that produces a weld metal with a nominal composition of 57% Ni, 16% Mo, 15.5% Cr, 5.5% Fe, and 4% W, with low carbon content, ensuring radiographic-quality welds. It excels in cryogenic to high-temperature service, offering high strength and notch toughness. Ideal for welding Ni-Cr-Mo alloys to themselves, dissimilar steels, and for surfacing on steels, it significantly improves resistance to abrasion, oxidation, and corrosion.

Suitable for valve components, impellers, pressure vessels, heat exchangers, storage tanks, petrochemical equipment, offshore/onshore equipment, chemical industries, and seawater applications.

CHEMICAL COMPOSITION :

All Weld Metal (%)			
TYPICAL	**Max**	**TYPICAL**	**Max**
C	0.02	Ni	Bal.
Mn	1.00	Cr	14.5-16.5
Fe	4.0-7.0	W	3.0-4.5
S	0.040	Mo	15.0-17.0
P	0.040	Co	2.50
Si	0.20	V	0.35
Cu	0.50		

MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal - As Welded	
Properties	**Typical**
UTS (MPa)	690 Min
El (%)	25 Min

DIMENSIONS & CURRENT DATA

Dimension (mm)	Current (A)		Packing (Kgs)
Dia x Length	**Min**	**Max**	**Qty / Pkt**
2.50 x 350	60	100	3.50
3.15 x 350	100	140	3.50
4.00 x 350	140	180	3.50
5.00 x 350	190	250	3.50

CURRENT :DC (+)

WELDING POSITION:

OTHER DATA:

Redrying: The electrodes should be redried at 300°C for 1 hour.

Welding Technique Use a short arc and a stringer bead, applying the minimum required current to reduce heat input.