

# Product Data Sheet



**BRAND NAME** VJ 10018M

**AWS/ASME Class** E10018-M

**SPECIFICATION** SFA A5.5

## Features and Applications :

VJ 10018 M is a heavy-coated, low-hydrogen controlled electrode with iron powder. Its designed for military applications. It features moisture-resistant (controlled) type electrodes, ensuring reliable performance even in challenging environments. The weld metal produced with this electrode is of radiographic quality, offering excellent mechanical properties such as high tensile strength and good notch toughness at low temperatures. To achieve these superior mechanical properties and soundness, a small amount of nickel (Ni) alloy is added to the composition. This electrode is suitable for welding high-strength, low-alloy, or microalloyed steels, as well as lower-strength steels such as carbon steels. It is commonly used in the welding of earth-moving equipment, boiler components, pressure vessels, oil field equipment, and military equipment.

## CHEMICAL COMPOSITION :

All Weld Metal (%)			
TYPICAL	Max	TYPICAL	Max
C	0.10	Cr	0.35
Mn	0.75-1.70	Ni	1.40-2.10
Si	0.60	Mo	0.25-0.50
S	0.030	V	0.050
P	0.030		

## MECHANICAL PROPERTIES OF WELD METAL

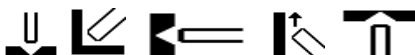
All Weld Metal - As Welded	
Properties	Typical
YS (MPa)	610-690
UTS (MPa)	690-830
EI (%)	20
Charpy V at -50°C (J)	30

## DIMENSIONS & CURRENT DATA

Dimension (mm)	Current (A)		Packing (Pcs)
Dia x Length	Min	Max	Qty / Pkt
2.50 x 350	70	100	150
3.15 x 450	90	140	100
4.00 x 450	140	190	70
5.00 x 450	190	250	45

## CURRENT : AC/DC (+)

## WELDING POSITION:



## OTHER DATA:

**Redrying:** The electrodes should be redried at 250°C for 2 hour.