



TENSAL

CODIFICATION: AWS : SFA 5.5 E9018-G

CHARACTERISTICS AND APPLICATIONS:

A low hydrogen, iron powder type electrode for welding steels having tensile strength up to 70kgf/mm². Ideally suited for welding fine-grained steels, high tensile steels used in bridges, penstocks, tanks, etc. The weld metal possesses excellent toughness at sub-zero temperatures down to minus 50°C. Typical applications include welding of grain-refined steels, Q&T steels, HSLA steels, pressure vessels, structural fabrication, etc.

TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Element :	C	Mn	Si	Ni	Mo	S	P
Percent :	0.065	1.20	0.40	1.20	0.50	0.025	0.025

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL :

UTS (MPa)	YS (MPa)	Elongation (L = 4d)%	CVN Impact Strength at minus 51°C (Joules)
673	584	22	40

CURRENT AND PACKING DATA: DC(+)

Size (mm)	: 6.3x450	5x450	4x450	3.15x450	2.5x350
Dia x Length					
Current Range (Amps)	: 280-350	200-250	140-190	100-140	70-100
Qty.(Pcs./Carton)	: 25	35	55	75	125

APPROVAL: CIB-MP, PDIL

PRECAUTIONS:

1. Ensure the electrodes are dry. In case of moisture pick-up, redry the electrodes at 250-300°C for one hour before use.
2. When welding grain refined and Q&T steels, control the heat input by using: (a) Stringer bead. (b) Control over preheat and interpass temperature. (c) Short arc.