



TENSAL(SPL)

CODIFICATION: AWS : SFA 5.5 E10018-D2

CHARACTERISTICS AND APPLICATIONS :

A basic coated low hydrogen iron powder type electrode for welding high tensile steels. The weld metal is of radiographic quality. Ideally suited for welding high tensile steels, Q&T steels, castings, etc. with UTS range of 71 kgf/mm². The weld metal possesses high strength combined with excellent toughness at sub-zero temperatures.

TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Element	: C	Mn	Si	Mo	Ni	S	P
Percent	: 0.06	1.85	0.45	0.40	0.30	0.018	0.018

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL :

(PWHT : 620°C FOR 1HR)

UTS (MPa)	YS (MPa)	Elongation (L= 4d)%	CVN Impact Strength at minus 51 °C (Joules)
711	653	22	30

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

PRECAUTIONS:

1. Rebake the electrodes at 300°C for one hour and cool them in the same oven to about 100°C and then transfer them to a holding oven maintained at 50°C and draw for 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.