



TENALLOY 90D3

LOW ALLOY STEEL (High Strength)



Welding Electrode Depositing Mn-Mo Type Low Alloy Steel Weld

CLASSIFICATION : AWS A/SFA 5.5

E9018-D3

KEY FEATURES :

- Basic coated electrode
- Mn-Mo type weld deposit
- Excellent welding characteristics
- High strength with excellent fracture toughness down to -50°C
- Suitable preheat, interpass and PWHT is required depending on base metal composition
- All position capability
- Radiographic quality weld

WELDING POSITION :



AC (70 OCV)/DCEP

TYPICAL APPLICATIONS :

- Welding of low alloy high tensile steels of typical UTS 650 MPa
- Welding of Q&T fine grained steels
- Penstocks, Earth moving equipments
- Suitable for low alloy structural steels

REDRYING CONDITION : 250-300°C for minimum 1 hr

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :

	C	Mn	Si	Ni	Mo	S	P
Specification	0.12 max	1.0-1.80	0.80 max	0.90 max	0.40-0.65	0.025 max	0.025 max

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -50°C, J
Specification	PWHT: 620°C for 1 hr.	620 min	530 min	17 min	27 min

Diffusible H2 Content: <5 ml/100 gm

PARAMETERS - PACKING DATA :

Ø x L, mm	Amperage, A	Approx. Pcs/Carton	Carton/Box	Approx. wt. of 1000 pcs, Kg.
3.15 x 450	100-140	109	4	46
4.0 x 450	140-180	78	4	64
5.0 x 450	190-250	49	4	102