



TENALLOY 80

LOW ALLOY STEEL (High Strength)



Welding Electrode for high strength steel with subzero impact.

CLASSIFICATION : EN ISO 18275-A

AWS A/SFA 5.5

APPROVALS :

E 69 4 Z B 32 H5

E 11018-M

ABS

KEY FEATURES :

- Basic type coating
- Ni-Mn-Mo-Cr-V type electrode
- Excellent crack resistant
- Excellent toughness at subzero temperature
- Radiographic quality weld metal

WELDING POSITION :



AC (70 OCV)/DCEP

TYPICAL APPLICATIONS :

- Welding of high tensile steels like USS T-1, Fine grained steels like HY 80, HY 90, HY 100, NAXTRA 70
- Penstocks, Earthmoving equipments
- Heavy structures under restraint
- Suitable for ASTM SA 225/225M Gr.C/D, SA 533/533M Gr.B/C/D, SA 543/543M Gr.B/C

REDRYING CONDITION : 250-300°C for minimum 1 hr. (Also available in vacuum packed condition)

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :

	C	Mn	Si	Ni	Mo
Typical	0.08	1.6	0.5	1.9	0.4
Specification	0.10 max	1.30-1.80	0.6 max	1.25 - 2.50	0.25 - 0.50
	Cr	V	S	P	
Typical	0.3	0.02	0.02	0.02	
Specification	0.40 max	0.05 max	0.03 max	0.03 max	

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at - 50°C, J
Typical	As Welded	820	730	22	55
Specification		760 min	680 - 760	20 min	40 avg.

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.
2.5 x 350	60-90	215	4	23
3.15 x 450	100-140	114	4	44
4.0 x 450	140-180	78	4	63
5.0 x 450	190-250	51	4	96
6.3 x 450	250-310	30	4	167