



TENALLOY 65 SPL

LOW ALLOY STEEL (High Strength)



Ni-Mn-Mo type Electrode for welding high tensile steels.

CLASSIFICATION : EN ISO 18275-A

AWS A/SFA 5.5

APPROVALS :

E 55 4 Z B 32 H5

E 9018-G

IBR

KEY FEATURES :

- Basic type electrode
- Low hydrogen Ni-Mn-Mo type weld
- Good impact toughness at -40°C
- Medium penetration with base metal
- All position capability
- Radiographic quality weld
- Suitable for high strength steels with
- UTS of 620-730 MPa

WELDING POSITION :



AC (90 OCV)/DCEP

TYPICAL APPLICATIONS :

- Welding of high tensile steels
- Oil refineries, Penstocks, Submarines
- Boilers, Power house construction
- Earth moving equipments and other similar heavy fabrications
- Root pass in HY-100 steel

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

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :

	C	Mn	Si	Ni	Mo	S	P
Typical	0.05	1.3	0.3	1.3	0.4	0.01	0.01
Specification	0.06 max	1.20-1.40	0.40 max	1.0-1.40	0.30-0.50	0.015 max	0.015 max

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -40°C, J
Typical	PWHT: 620°C for 2 hrs.	665	600	23	58
Specification		620 min	530 min	17 min	27 min

Hardness, 3 Layer: 200 BHN max

Diffusible H2 Content: <5 ml/100 gm

SPECIAL TESTS : Hot Tensile Test at 370°C – 610 MPa

PARAMETERS - PACKING DATA :

Ø x L, mm	Amperage, A	Approx. Pcs/Carton	Carton/Box	Approx. wt. of 1000 pcs, Kg.
3.15 x 450	90-140	114	4	44
4.0 x 450	140-180	74	4	68
5.0 x 450	180-250	48	4	104