



# TENALLOY 70CL

**LOW ALLOY STEEL (Low Temperature)**



Basic Coated Low Alloy Welding Electrode for 1% Ni Steel

**CLASSIFICATION : EN ISO 2560-A                      AWS A/SFA 5.5**

E 38 5 1Ni B 32 H5                      E 7018-C3L

**KEY FEATURES :**

- Basic coated low carbon electrode
- Typical Ni-Mo type welds
- Excellent fracture toughness at -50°C
- Superior crack resistance
- Radiographic quality welds
- All position capability

**WELDING POSITION :**



AC (70 OCV)/DCEP

**TYPICAL APPLICATIONS :**

- Welding of high tensile steels and fine grained steels like HY 80, HY 90, HY 100
- Storage tanks for low temperature
- Off shore platforms, bridge
- Application in refineries, power plants e.g. pressure vessels and heat exchangers, machinery

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

**CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :**

	<b>C</b>	<b>Mn</b>	<b>Si</b>	<b>Ni</b>	<b>Mo</b>	<b>S</b>	<b>P</b>
Typical	0.05	1.0	0.3	1.0	0.3	0.01	0.02
Specification	0.08 max	0.70-1.30	0.20-0.50	0.80-1.10	0.35 max	0.03 max	0.03 max

**MECHANICAL PROPERTIES OF ALL WELD METAL :**

	<b>Condition</b>	<b>UTS, MPa</b>	<b>YS at 0.2% offset, MPa</b>	<b>EL%</b>	<b>CVN Impact at -50°C, J</b>
Typical	As Welded	530	440	26	50
Specification		500-580	400-480	24-30	40-90

**Hardness, 3 Layer:** 200 BHN max

Diffusible H2 Content: <5 ml/100 gm

**PARAMETERS - PACKING DATA :**

<b>Ø x L, mm</b>	<b>Amperage, A</b>	<b>Approx. Pcs/ Carton</b>	<b>Carton/Box</b>	<b>Approx. wt. of 1000 pcs, Kg.</b>
2.5 x 350	60-90	227	4	22
3.15 x 450	100-140	116	4	43
4.0 x 450	140-180	77	4	64
5.0 x 450	190-250	49	4	102

