

# TENALLOY 70C

AWS A/SFA 5.5 E8018-C3

LOW ALLOY STEEL (High Temperature)

**CLASSIFICATION:**

EN ISO 3580-A  
E 4641 Ni B32 H5

IS 1395  
E55B - C3

**KEY FEATURES:**

- Basic coated electrode
- Typical Ni-Mo type welds
- Excellent fracture toughness at -40°C
- Superior crack resistance
- Radiographic quality welds
- All position capability

**APPROVALS:** ABS/CE

**TYPICAL APPLICATIONS:**

- Welding of high tensile steel, 1% Ni steel and equivalent steels
- Storage tanks for low temperature
- Off shore platforms, bridge
- Application in refineries, power plants e.g. pressure vessels and heat exchangers, machinery

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

C	Mn	Si	Ni
0.06	0.6	0.3	1.15


**MECHANICAL PROPERTIES OF ALL WELD METAL:**

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -40°C, J
Typical	As Welded	600	530	26	82
Specification		550 min	460 min	19 min	47 min

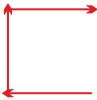
**Diffusible H2 Content:** <5 ml/100 gm

**Special Tests:** HIC & SSCC (NACE)

**PARAMETERS - PACKING DATA:**

Ø x L, mm	Amperage, A	
2.5 x 350	60-90	 AC (70 OCV)/DCEP <b>REDRYING CONDITION:</b> 250-300°C for minimum 1 hr.
3.15 x 350	100-140	
4.0 x 450	140-180	
5.0 x 450	190-250	

All Positions, except vertical Downwards



Available in Standard carton packing of 20 kg box containing 4 cartons each. Also available in vacuum packing

**EQUIVALENT:**

GMAW	GTAW	FCAW	SAW	
			Flux	Wire
Automig 80S-Ni1	Tigfil 80S-Ni1	Automig FC 81T-1Ni1	Automelt B71	Automelt ENi 1