



# TENALLOY 70C

**CLASSIFICATIONS**

AWS A/SFA 5.5 E 8018-C3  
 IS 1395 E 55 BC 329 Fe

COATING TYPE: Basic DEPOSITION EFF., %: ~110  
 COATING FACTOR: Heavy IDENTIFICATION: Brand Printed

**CHARACTERISTICS**

A low-hydrogen, iron-powder electrode for welding of <1.0% Ni steels. It gives excellent arc stability, arc smoothness and very easy slag removal. Weld metal is of X-ray quality.

**TYPICAL APPLICATIONS**

Welding of ~1.0% Ni steels in refineries, power plants e.g. pressure vessels and heat exchangers.

**APPROVALS**

ABS E 8018-C3

**CURRENT CONDITIONS: AC, DC (+)**

6.3	5.0	4.0	3.2	2.5
260-	190 -	140-	100-	60-
310	250	180	140	90

**WELDING POSITIONS**

F, H, V-up, OH

**REDRYING CONDITIONS**

300°C for 1 Hr (Optionally also available in vacuum-packed condition, redrying not required in this packaging)

MECHANICAL PROPERTIES- ALL-WELD						
Condition	UTS	YS	% Elong. (L=4xd)	CVN Impacts,J		Hardness, BHN
	MPa	MPa		-40°C	-50°C	
AW	560-650	460-550	24-30	50-100	40-90	200 max.

AW : As-welded

WELD METAL CHEMISTRY, wt%		
C - 0.05-0.09	S - 0.030 max.	Diffusible H <sub>2</sub>
Mn - 0.80-1.25	P - 0.030 max.	Content ml/100gm
Mo - 0.20-0.35	Ni - 0.80-1.10	<5
Si - 0.20-0.45		

PACKING DATA				
Dia.,mm	5.0	4.0	3.2	3.2
Length,mm	450	450	450	350
Wt. per carton, kgs	5.25	5.25	5.25	5.25
Cartons/ box	4	4	4	4
Wt. per box, kgs	21	21	21	21

*Related Products:* Tigfil-Ni1, Tenalloy-Ni, Automig FC 410, Automelt FC 410 + B41 flux