



# TENALLOY 55

## CLASSIFICATIONS

AWS A/SFA 5.5 E 8018-G  
IS 1395 E 55BG 129 Fe

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

CURRENT CONDITIONS: AC, DC (+)				
6.3	5.0	4.0	3.2	2.5
260-	190-	140-	100-	60-
310	250	180	140	90

## CHARACTERISTICS

A low-hydrogen, iron-powder electrode. Weld metal exhibits excellent toughness upto minus 50°C. Weld metal contains 1.0% Ni and 0.5%Cu and has excellent atmospheric corrosion resistance. It gives excellent arc stability, arc smoothness and very easy slag removal. Weld metal is of X-ray quality.

## WELDING POSITIONS

F, H, V-up, OH

## REDRYING CONDITIONS

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

## TYPICAL APPLICATIONS

Welding of Storage tanks, pipes, pressure vessels, boilers, bridges and heavy structures subject to dynamic loading and mechanical restraint. Suitable for joining steels containing 1% Ni and ~0.5% Cu.

MECHANICAL PROPERTIES- ALL-WELD				
Condition	UTS MPa	YS MPa	% Elong. (L=4Xd)	CVN Impacts,J -50°C
AW	560-680	470-590	24 min.	50 min.

AW : As-welded

WELD METAL CHEMISTRY, wt%			
C - 0.095 max.	S - 0.030 max.	Ni - 0.70-1.25	Diffusible H <sub>2</sub>
Mn - 1.0 – 1.65	P - 0.030 max.	Content ml/ 100gm	
Si - 0.25 – 0.65	Cu - 0.40-0.75	<5	

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:

Tenalloy 60, Automelt B71+Gr. C Mo