



TENALLOY S PLUS

C-Mn STEEL (Low Hydrogen)



Welding Electrode for fabrication works with Superior Low Temperature Impact Properties

CLASSIFICATION : AWS A/SFA 5.1	IS 814	EN ISO 2560-A	APPROVALS :
E 7018-1	E B5629H ₃ JX	E 42 5 B 32 H5	ABS/BV/DNV/LRA/IBR

KEY FEATURES :

- Basic coated iron powder type
- Excellent toughness down to -60°C
- Radiographic weld deposit
- Suitable for pipe welding in 5G and 6G positions

WELDING POSITION :



AC (70 OCV)/ DCEP

TYPICAL APPLICATIONS :

- Storage tanks, pipes, boilers
- Bridges & heavy structures subject to dynamic loading
- Joining ASTM SA 414/414M Gr.C/D, SA 516/516M Gr.55/60/65/70, IS 2002, IS 2062 steels

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

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :

	C	Mn	Si	S	P
Typical	0.06	1.3	0.3	0.01	0.01
Specification	0.04-0.09	0.80-1.60	0.20-0.45	0.015 max	0.015 max

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact , J	
					-46°C	-60°C
Typical	As Welded	550	470	28	56	34
Specification		520-640	450-540	24 min.	45-65	25-45

Hardness, 3 Layers: 200 BHN max.

Diffusible H₂ Content: <5 ml/100 gm

SPECIAL TEST : HIC and SSCC (NACE), CTOD at -10°C, Hot tensile at 200 deg.C

PARAMETERS - PACKING DATA :

Ø x L, mm	Amperage, A	Approx. Pcs/Carton	Carton/Box	Approx. wt. of 1000 pcs, Kg.
2.5 x 350	60-90	239	4	21
3.15 x 450	90-140	113	4	44
4.0 x 450	140-180	75	4	66
5.0 x 450	180-240	51	4	96

