

# TENALLOY S PLUS

AWS A/SFA 5.1 E7018-1 H4 R

C-Mn STEEL (Low Hydrogen)

### CLASSIFICATION:

ISO 2560-A  
E 42 5 B 32 H5

IS 814  
E B5629H<sub>3</sub>JX

### 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

**APPROVALS:** ABS/DNV/LRA/IBR/CE

### 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

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

C	Mn	Si
0.06	1.5	0.3

### MECHANICAL PROPERTIES OF ALL WELD METAL:


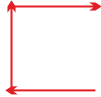
	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact
					-46°C, J
Typical	As Welded	550	470	28	100
Specification		490 min	400 min	22 min	80 min

**Hardness (3 Layer):** 200 BHN max

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

**Special Test:** HIC and SSCC (NACE), CTOD at -10°C  
Hot tensile at 200°C

### PARAMETERS - PACKING DATA:

Ø x L, mm	Amperage, A		
2.5 x 350	60-90	 AC (70 OCV)/ DCEP	All Positions, Except Vertical Down: 
3.15 x 450	90-140		
4.0 x 450	140-180		
5.0 x 450	180-240		

**REDRYING CONDITION:**  
250-300°C for minimum 1 hr.

Available in Standard carton packing of 20 kg box containing 4 cartons of 5 kgs each. Also available in vacuum packing

### EQUIVALENT:

GMAW	GTAW	FCAW	SAW	
			Flux	Wire
Automig 70S-3	Tigfil 70S-2 SPL	Automig FC 71T-5	Automelt B20 Plus	Automelt EH12K
Automig 70S-3	Tigfil 70S-3		Automelt B41	Automelt EH10K
	Tigfil 70S-6		Automelt B41	Automelt EH14