

### LOW ALLOY STEEL (High Temperature)

#### CLASSIFICATION:

**EN ISO 3580-A**  
E Mo B 32 H5

**IS 1395**  
E49B-A1

#### KEY FEATURES:

- Basic coated electrode
- Good creep rupture strength at elevated temperature up to 550°C
- High recovery electrode
- Preheat and PWHT at 620°C is required
- Radiographic quality welds
- All position capability

**APPROVALS:** ABS/IBR/NPCIL/CE/BHEL/NTPC

#### TYPICAL APPLICATIONS:

- Welding 0.5 Mo and 1 Cr - 0.5 Mo steels and similar composition steels
- High temperature and high pressure boilers
- Chemical industries, Oil refining industries, Turbine casting
- Suitable for 15Mo3, 16Mo3, 14Mo6
- Joining ASTM SA 182/182M Gr.F1, SA 204/204M Gr.A, SA 209/209M Gr.T1/T1A/T1B, SA 217/217M Gr.WCI

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

C	Mn	Si	Mo
0.06	0.7	0.4	0.5

#### MECHANICAL PROPERTIES OF ALL WELD METAL:


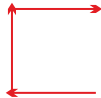
	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at 0°C, J
Typical	PWHT: 620°C for 1 hr.	550	460	27	80
Specification		490 min.	400 min	22 min	140-200

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

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

**SPECIAL TESTS :** Creep Rupture Test at 540°C - 50 MPa stress for min. 1000 hrs

#### PARAMETERS - PACKING DATA:

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

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

#### EQUIVALENT:

GMAW	GTAW	SAW	
		Flux	Wire
Automig 70S-A1	Tigfil 70S-A1	Automelt B71	Automelt EA2