



# MODI - 8018

## HIGH STRENGTH ELECTRODE

**CLASSIFICATION :**

IS : 1395-82 : E 55 B-G1 29 Fe  
AWS/A 5.5 : E 8018 - G

**CHARACTERISTICS :**

A low hydrogen iron powder electrode for welding of high strength low alloy steels. Weld metal has high ductility inspite of the high strength. Operates equally well on AC and DC(+). Radiographic quality welds. Easy slag detachability and finely rippled beads. Metal recovery is over 110%.

**APPLICATIONS :**

- \* Low alloy steels such as Si-Mn Steels.
- \* Steels containing Nickel upto 1.5%.
- \* High tensile steels subjected to dynamic loading.
- \* Heavy sections and highly restrained joints.

**RECOMMENDATIONS :**

Use stringer bead technique and lower currents to ensure proper alloy transfer. Re-dry the electrodes at 350°C for one hour or at 250°C for two hours. Maintain interpass temperature around 100°C.

**CHEMICAL ANALYSIS**

	C	Mn	Si	Ni	Mo	S	P
<b>OF ALL WELD-METAL(%) :</b>	0.10max	1.2-1.5	0.60	0.5-1.0	0.30	0.03	0.03
					max	max	max

**MECHANICAL PROP-  
ERTIES OF ALL WELD-  
METAL (AS PER AWS/  
A 5.5) AFTER STRESS  
RELIEVING AT 620°C  
FOR ONE HOUR :**

Yield Strength	Ultimate Tensile Strength	Elongation	CVN Impact Values (min) at -51°C
N/mm <sup>2</sup>	N/mm <sup>2</sup>	(%)	Joules
500-600	600-680	20 min	30 min

**CURRENT CONDITIONS : USE AC OR DC (+)**

Size (mm)	2.5x350	3.15x450	4.0x450	5.0x450	6.3x450
Amps	70-100	100-130	140-180	190-240	240-280

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