



MODI - 8018 B2

LOW HYDROGEN ELECTRODE

CLASSIFICATION :

IS : 1395-82 : E 55B-B2 26 Fe
AWS/A 5.5 : E 8018 B2

APPROVALS :

CIB (UP) PDIL NTPC LANCO
EIL BHEL DNV DES

CHARACTERISTICS :

An outstanding welding electrode for higher strength steel with tensile strength more than 550N/mm². The coating is specially formulated to resist moisture pickup under conditions of high heat and humidity. As electrode offers resistance to moisture reabsorption, it helps in preventing hydrogen cracking and aids in eliminating starting porosities. Good slag detachability, smooth bead and high operator appeal are the specialities of the electrodes. The weld metal displays excellent strength and creep resistance at elevated temperature upto 550°C. Metal recovery is about 110%.

APPLICATIONS :

- * Welding of creep resisting ½Cr ½Mo, 1Cr ½Mo and 1¼Cr ½Mo steels. Particularly suitable for :
 - * Boilers
 - * Pipes
 - * Pressure Vessels
 - * Tubes

RECOMMENDATIONS :

Re-dry the electrodes at 350°C for one hour or at 250°C for two hours. Keep the re-dried electrodes in a holding oven having 50°C-60°C temperature. Use the electrodes directly from holding oven. The pre-heat and interpass temperature should be maintained at 160°C-190°C. The welded section has to be stress relieved at 690°C atleast for one hour.

CHEMICAL ANALYSIS

	C	Mn	Si	Cr	Mo	S	P
OF WELD-METAL(%) :	0.05-0.12	0.90	0.80	1.0-1.5	0.4-0.65	0.03	0.03
		max	max			max	max

**MECHANICAL PROP-
ERTIES OF ALL WELD-
METAL (AS PER
AWS/A 5.5) :**

Yield Strength	Ultimate Tensile Strength	Elongation EL (%)
N/mm ² 500-560	N/mm ² 560-660	20 min

CURRENT CONDITIONS : USE DC (+) OR AC (70V)

Size (mm)	2.5x350	3.15x450	4.0x450	5.0x450	6.3x450
Amps	70-100	100-140	140-180	180-220	240-280

**MODI ARC ELECTRODES CO.**

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Web Site : www.modielectrodes.com



MODI-8018 B2L

LOW HYDROGEN ELECTRODE

CLASSIFICATION :

IS : 1395-82 : E 55B-B2L 26Fe
AWS/A 5.5 : E 7018 B2L

CHARACTERISTICS :

An outstanding welding electrode for higher strength steels with tensile strength more than 520N/mm². The coating is specially formulated to resist moisture pickup under conditions of high heat and humidity. As electrode offers resistance to moisture reabsorption, it helps in preventing hydrogen cracking and aids in eliminating starting porosities. Good slag detachability, smooth bead and high operator appeal are the specialities of the electrodes. The weld metal displays excellent strength and creep resistance at elevated temperature upto 550°C. Due to extra low carbon, it has improved microstructure, stability during high temperature services. Metal recovery is above 110%.

APPLICATIONS :

- * Welding of creep resisting ½Cr ½Mo, 1Cr½Mo and 1¼Cr ½Mo steels. Particularly suitable for :
 - * Boilers
 - * Pipes
 - * Pressure Vessels
 - * Tubes

RECOMMENDATIONS :

Re-dry the electrodes at 350°C for one hour. Keep the redried electrodes in a holding oven having 50°C-60°C temperature. Use the electrodes directly from holding oven. The pre-heat and interpass temperature should be maintained at 160°C-190°C. The welded section has to be stress relieved at 690°C for at least one hour.

CHEMICAL ANALYSIS

	C	Mn	Si	Cr	Mo	P	S
OF WELD-METAL(%) :	0.05max	0.90max	0.80max	1.0-1.5	0.4-0.65	0.03max	0.04max

**MECHANICAL PROP-
ERTIES OF ALL WELD-
METAL (AS PER
AWS/A 5.5) AFTER
STRESS RELIEVING
AT 690°C:**

Yield Strength	Ultimate Tensile Strength	Elongation (GL=4d) (%)
N/mm ² 500-560	N/mm ² 560-660	20-24

CURRENT CONDITIONS : USE AC OR DC (+) ONLY

Size (mm)	2.5x350	3.15x450	4.0x450	5.0x450	6.3x450
Amps	70-100	100-140	140-180	180-220	240-280

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