

GRIDUCT 86 -B8



IDENTIFICATION : GRIDUCT 86 B8

CLASSIFICATION : AWS/SFA 5.5: E 8016-B8, IS 1395:E 55B- 226Fe, BS: 2493E1CrMoBH, DIN 8575-84 ECrMo1B20+

CHARACTERISTICS :

A heavy coated, low hydrogen, all-position, except vertical down, Synthetic electrode which deposits 1.25% Cr/ 0.5%Mo weld metal. It is intended for welding creep resisting steels of similar composition, used in power generating plant operating at temperatures upto 570°C.The welds are of X-ray quality.

TYPICAL USES :

ASTM A 335 grades P11 and P12 ASTM A 155 grades ½ C,1 Cr,1 ¼ Cr, A 182F11,DIN 13 CrMo44 ,GS-17CrMo55,BS 3604 grades 620 and 621.Ideal for welding Chromium-Molybdenum alloy steels (0.5Cr-0.5Mo, 1cr-0.5Mo, 1.25Cr-0.5Mo), boilers, pressure vessels, headers, high pressure piping, heat exchangers and condensers, power generation, oil refineries, petrochemical industries.

ASMEQUALIFICATION : QW -432 F.NO4, QW-442 A NO.4

RECOMMENDED REDRYING : 300°C/2 hrs,(Max. 5 times, total 10 hrs max.)

MOISTURE IN THE FLUX COATING : 0.3% by weight, maximum

DIFFUSIBLE HYDROGEN CONTENT IN THE WELD METAL : Max 5 ml/100g.of weld metal.

RECOMMENDED PREHEATING & INTERPASS TEMPRATURE : 163°C-191°C

MICROSTRUCTURE : After PWHT, the microstructure consists of tempered bainite.

WELD METAL ANALYSIS (RANGE) % :

C	Mn	Si	S	P	Cr	Mo
0.05-0.12	0.5-0.9	0.2-0.6	0.025 max	0.03 max	1.0-1.50	0.4-0.65

MECHANICAL PROPERTIES OF THE WELD METAL (AFTER PWHT AT 690°C + 14°C/1HR) :

Ultimate Tensile Strength MPa	0.2% Proof stress MPa	Elongation (%) (L=4D)	Charpy V-notch Impact value		Fillet Weld test
550-690	460-590	19-26	Temp	Joule	Satis-factory
			27°C	55-100	

RECOMMENDED CURRENT AND PACKING DATA :

SIZE (mm)	LENGTH (mm)	AMPS, AC(70V) /DC(+)	Pcs, per pkt /box	WEIGHT 1000 Pcs, KGS
2.5	350	60-80	160x4=640	19.5
3.15/3.20	450	90-130	110 X 4=440	43.00
4.00	450	140-190	70 X 4=280	66.00
5.00	450	190-250	45 X 4=180	99.00