GWELD
SEAL OF TRUST

GRIDUCT 3

IDENTIFICATION
Griduct 3, E 8018-B2

CLASSIFICATION
AWS/SFA 5.5: E 8018B2, IS 1395:E 55B - 226Fe,
BS: 2493E1CrMoBH, DIN 8575-84 ECrMo1B20+

DESCRIPTION
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.

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 (RANGE)

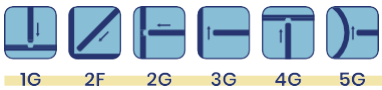
UTS (MPa)	PS (MPa)	EL (%) (L=4D)	CVN Impact Value		Fillet Weld test
550 - 690	460 - 590	19 - 26	**Temp**	**Joules**	Satisfactory
			27°C	55 - 100	

TYPICAL APPLICATIONS
- 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, Icr-0.5 Mo, 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, max
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.

WELDING POSITION :



PACKING PARAMETERS

Size (mm)	Length (mm)	Amps AC (70V) / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
2.5	350	60 - 80	5 x 4 = 20	160 x 4 = 640
3.15 / 3.20	450	90 -130	5 x 4 = 20	110 x 4 = 440
4	450	140 - 190	5 x 4 = 20	70 x 4 = 280
5	450	190 - 250	5 x 4 = 20	45 x 4 = 180