GWELD
SEAL OF TRUST

# GRIDUCT B6

**IDENTIFICATION**
Griduct B6, E 8018-B6

**CLASSIFICATION**
AWS A 5.5 E8018-B6 (E502-15),
DIN 8575-84 ECrMo5B20+, BS 2493-85 E5CroB

**DESCRIPTION**
A heavy coated basic type low hydrogen all position electrode depositing a low carbon 5 % Cr / 0.5 % Mo weld metal. It is intended for welding creep-resisting steel of matching composition used widely in chemical and petrochemical plants because of excellent resistance to hydrogen attack and corrosion by high sulphur crude oils at service temperature upto 650°C. The weld deposit meets X-ray / Radiographic quality code requirements.

**WELD METAL ANALYSIS (RANGE) %**

| C | Mn | Si | S | P | Cr | Mo | Ni |
|---|---|---|---|---|---|---|---|
| 0.05 - 0.10 | 0.5 - 1.0 | 0.2 - 0.6 | 0.025 max | 0.03 max | 4.0 - 6.0 | 0.45 - 0.65 | 0.40 max |

**MECHANICAL PROPERTIES (RANGE) PWHT (750oC/ 1 hr.)**

| UTS (MPa) | YS (MPa) | EL (%) (L=4D) | CVN Impact Value | |
|---|---|---|---|---|
| | | | **Temp** | **Joules** |
| 580 - 690 | 460 - 590 | 19 - 24 | 20°C | 50 - 100 |

**TYPICAL APPLICATIONS**
- Boilers, Super heaters, Heat-exchangers, piping and pressure vessels in oil refineries.
- ASTM A387 Grade 5
- ASTM A155 Grade 5Cr
- A335 Grade P5 and P5b
- ASTM A199 Grade T5, A213 Grade T5 and T5b

**MICROSTRUCTURE :** In PWHT Condition : Tempered bainite
**RECOMMENDED REDRYING :** 300°C / 2 hrs
**ASME IX QUALIFICATION :** QW–432-F-NO 4,QW-442A-NO 4
**DIFFUSIBLE HYDROGEN CONTENT IN THE WELD METAL** : 4.0 ml / 100g maximum
**PREHEAT TEMPERATURE :** 250°C
**INTERPASS TEMPERATURE :** 250° - 300°C

**WELDING POSITION :**


**PACKING PARAMETERS**

| Size (mm) | Length (mm) | Amps AC 70 OCV / DC(+) | Packing / Box (kg) | Packing / Box (Pcs) |
|---|---|---|---|---|
| 2.5 | 350 | 70 - 100 | 5 x 4 = 20 | 160 x 4 = 640 |
| 3.15 / 3.20 | 450 | 80 - 140 | 5 x 4 = 20 | 110 x 4 = 440 |
| 4 | 450 | 120 - 180 | 5 x 4 = 20 | 70 x 4 = 280 |
| 5 | 450 | 150 - 220 | 5 x 4 = 20 | 45 x 4 = 180 |