PRODUCT DESCRIPTION

Diamond Proweld E-7018 is a low hydrogen controlled electrode an addition of Iron powder in the coating increases the deposit rate that produces high quality X-Ray welds. It has excellent usability that enables it to have stable arc, low spatter, removal of slag is easy and performs all position welding. This electrode is recommended for welding medium grade carbon and mild steels where no pre heat is used and on cold rolled steels normally exhibiting excessive porosity when welded with conventional electrodes.

TYPICAL APPLICATIONS

Diamond Proweld E7018 has excellent weld ability in all positions except vertical down. Suitable for welding in steel construction, boiler, tank, container and vehicle construction, ship building, machine construction, heavy bridges and mechanical engineering, also suited for buffer layers on build ups and high carbon steels.

STORAGE & RE BAKING

It is recommended that the Diamond Proweld E7018 electrodes are stored in a dry heated store at a minimum temperature of 18°c and a maximum relative humidity of 60%. Not more than 6 cartons should be staked on top of one another to avoid damage to the coatings.

Note:

The electrode must be preheated at the temperature of 350°c for 1 hour. Before using the electrode it must be preheated. The impurities such as rust, oil stains and moisture must be cleared of the worked piece. Short arc is required to perform welding. Narrow weld path is preferred.





INDUSTRIAL GRADE LOW HYDROGEN WELDING ELECTRODE

Classification

AWS A5.1-91: E7018, EN-499:E42 3 B 32 H5 BS-EN-ISO 2560-A:E 42 3 B 32 H5

Chemical Composition of Weld metal analysis (%) (typical values)

| С | Mn | Si | s | Р |
|------|----------|-----------|-------|-------|
| 0.06 | 0.85>1.1 | 0.30>0.50 | <0.02 | <0.02 |

Mechanical properties of allweld metal

| Tensile strengt (N/mm: | th | Yield strength (N/mm2) | Elongation (L = 5 d) (%) | Impact strength Charpy – V (+ 20°C) (Joule) | |
|------------------------------|------|---------------------------|--------------------------------|---|------|
| 510-61 | 0 | 380 > 410 | >24 | > 150 | |
| Tempera (oC) | ture | 20 | 0 | -20 | -40 |
| Charpy (Joule | | > 150 | > 130 | >80 | > 60 |

Welding current (type & amperage)

| D.C. pole (+) | | | | | | | |
|---------------|-----------|------------|-----------|-----------|--|--|--|
| Ø 2.0/300 | Ø 2.5/350 | Ø 3.25/450 | Ø 4.0/450 | Ø 5.0/450 | | | |
| 40-60 | 75-90 | 90-130 | 120-180 | 160-220 | | | |

Welding Positions Horizontal, vertical-up, overhead.

Applications & characteristics

crack-resistant and tough joints, including Thomas grade and Basic type electrode with 115% recovery. Suitable for highlycarbon steels up to 0.4% C. Good all-positional welding characteristics; ready deslagging.

Storage and redrying:

Keep in a dry place and re-dry immediately before use at 350 oC for 90-120 minutes in a vented oven and thereafter use from a hot box set at 100-120 oC

Manufactured by;



Exclusively Manufactured for;

