

TRUSTARC™

KOBE-7018-1

Iron Powder, Low Hydrogen Type Electrode



Features

Workability

- ◆ Much iron powder contained in the coating gives high efficiency.
- ◆ **KOBE-7018-1** produces the weld metal of excellent toughness and crack resistibility because of the characteristic peculiar to the low hydrogen type electrode.
- ◆ Good weldability and bead appearance with both AC and DC.
- ◆ All position welding for 490MPa class high tensile steel is performed, in the field of shipbuilding, pressure vessel, machine and steel structural fabrications.

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Available sizes and recommended welding current (AC, DC-EP)

| Diameter (mm) | 2.6 | 3.2 | 4.0 | 5.0 | |
|-----------------------|--------------------|-----------------|------------------|--------------------|--------------|
| Length (mm) | 350 | 350 | 400 | 450 | |
| Welding current (Amp) | F, HF, H VU, OH | 70~100 65~95 | 90~130 80~120 | 130~180 110~170 | 180~240 - |

Typical mechanical properties of all weld-metal

| | Y.P (MPa) | T.S (MPa) | E.I (%) | Impact value (J) | | |
|-------------------|-----------|-----------|---------|-------------------------|-------------------------|-------------------------|
| | | | | -60°C | -46°C | -30°C |
| As welded | 493 | 563 | 34 | 115,163,123 Avg. 134 | 149,178,191 Avg. 172 | 177,194,189 Avg. 187 |
| PWHT (620°C×4 hr) | 433 | 530 | 39 | 152,177,185 Avg. 171 | 211,172,198 Avg. 194 | 254,267,278 Avg. 266 |
| Guaranty | ≥ 400 | ≥ 490 | ≥ 22 | - | ≥ 27 | - |

Typical chemical composition of all weld-metal (mass %)

| | C | Si | Mn | P | S | Ni | Cr | Mo | V | I* |
|----------------|--------|--------|--------|---------|---------|--------|--------|--------|--------|--------|
| Typical (DCEP) | 0.06 | 0.38 | 1.54 | 0.011 | 0.004 | 0.01 | 0.03 | <0.01 | 0.01 | 1.58 |
| Guaranty | ≥ 0.15 | ≥ 0.75 | ≥ 1.60 | ≥ 0.035 | ≥ 0.035 | ≥ 0.30 | ≥ 0.20 | ≥ 0.30 | ≥ 0.08 | ≥ 1.75 |

Note :*I = Mn+Ni+Cr+Mo+V

Diffusible Hydrogen Content

| Diffusible hydrogen content (ml/100g) | | | | |
|---------------------------------------|-----|-----|-----|---------|
| 2.2 | 2.7 | 2.5 | 3.1 | Avg 2.6 |

Shipping Approval

| Approvals List | | | |
|----------------|-----|--------|----|
| LR | ABS | DNV-GL | BV |

DISCLAIMER

- Information in this booklet such as chemical compositions and mechanical properties is typical or example for explaining the features and performance of our products, and it does not guarantee otherwise specified.
- Information contained herein is subject to change without notice. Please kindly contact KOBELCO for latest information

For Technical Consultation, please contact **Technical Service.**

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