

NIPPON KAIJI KYOKAI

Approval No. NKY-3566 Certificate No. TA22639E

Certificate

TYPE APPROVAL

Article:

Welding Consumables for High Strength Rolled Steels for Offshore

Structures

Brand:

DW-70E

Applicant:

Kobe Steel Ltd., Ibaraki Plant

2-19, Higashi-Unobe-Cho, Ibaraki, Osaka, Japan

Manufacturer:

Kobe Steel Ltd., Ibaraki Plant

2-19, Higashi-Unobe-Cho, Ibaraki, Osaka, Japan

Grade:

KSW3Y62G(C)H5, Manufacturer's Specification

Welding Process:

Semi-Automatic Welding (MAG Welding)

Welding Positions and Max. Diameter of Wire:

See Table 1

Current:

DCEP

Shielding Gas:

 CO_2

Remarks:

1) Guaranteed Mechanical Properties of Manufacturer's spec

Min. Mean Absorbed Energy at -40° C: $\geq 47J$ for Deposited Metal

≥47J for Butt Weld

2) Annual inspection

Tensile test and impact tests for deposited metal are to comply with the requirements of Table 2 (See the reverse side).

Table 1 Welding Positions and Max. Diameter of Wire

| Butt Weld | | Fillet Weld | |
|--------------------|----------------|----------------------|----------------|
| Flat: | 1.2mm | Flat: | 1.2mm |
| | | Horizontal Vertical: | 1.2mm |
| Horizontal: | 1.2mm | Horizontal: | 1.2mm |
| Overhead: | 1.2mm | Horizontal Overhead: | 1.2mm |
| | | Overhead: | 1.2mm |
| Vertical Upward: | 1.2mm | Vertical Upward: | 1.2mm |
| Vertical Downward: | Not Applicable | Vertical Downward: | Not Applicable |

THIS IS TO CERTIFY that the above mentioned welding consumable has been approved by the NIPPON KAIJI KYOKAI in accordance with the requirements of the Society's Rules.

This Certificate will remain in force until 21 July 2023.

Issued at Tokyo on 22 July 2022.

Y. Takao

General Manager

Material and Equipment Department

Note: (1) The validity of this certificate may be renewed by endorsement on the attached sheet upon completion of the annual inspections.

(2) This certificate was rewritten because of change of the applicant's address and the manufacturer's address.

| Certificate No. | TA22639E | |
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| | The validity of this certificate has been renewed | The validity of this certificate has been renewed |
|---|---|---|
| 1 | until 2 1. JUL. 2024 | until |
| | Date: 28. JIL. 7137 | Date: |
| | Surveyor | Surveyor |
| | The validity of this certificate has been renewed | The validity of this certificate has been renewed |
| | until | until |
| | Date: | Date: |
| | Surveyor | Surveyor |
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