

NIPPON KAIJI KYOKAI

Approval No. NKY-2198-A Certificate No. TA211253E

Certificate OF

TYPE APPROVAL

Article:

Welding Consumables for High Tensile Steels for Hull

Brand:

DW-Z100

Applicant:

Kobe Steel, Ltd., Ibaraki Plant

2-19, Higashiunobe-cho, Ibaraki, Osaka, Japan

Manufacturer:

Kobe Steel, Ltd., Ibaraki Plant

2-19, Higashiunobe-cho, Ibaraki, Osaka, Japan

Grade:

KSW52Y40G(C)

KSW52G(C)H10

Welding Process:

Semi-Automatic Welding (MAG Welding)

Welding Positions and Max. Diameter of Wire:

See Table 1

Current:

DCEP

Shielding Gas:

 CO_2

Remarks:

For annual inspection, mechanical properties are to comply

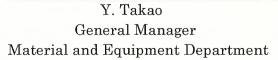
with the requirements specified in Table 2.

Table 1 Welding Positions and Max. Diameter of Wire for Both Grades

| Butt Weld | | Fillet Weld |
|-------------------|---------|----------------------------|
| Flat: | 1.6mm | Flat: 1.6mm |
| | | Horizontal Vertical: 1.6mm |
| Horizontal: | 1.6mm | Horizontal: 1.6mm |
| Overhead: | 1.6mm | Horizontal Overhead: 1.6mm |
| | | Overhead: 1.6mm |
| Vertical Upward: | 1.6mm | Vertical Upward: 1.6mm |
| Vertical Downward | : 1.6mm | Vertical Downward: 1.6mm |

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 25 June 2022. Issued at Tokyo on 18 November 2021.



Note:

(2) This certificate was rewritten because of addition of grade of welding consumable.

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

| The validity of this certificate has been renewed | The validity of this certificate has been renewed |
|---------------------------------------------------|---------------------------------------------------|
| until 25. JUN. 2023 . | until |
| Date: 27. July 1000 | Date:Surveyor |
| The validity of this certificate has been renewed | The validity of this certificate has been renewed |
| until 25. JUN. 2024 • | until |
| Date: 10. J | Date: |
| Surveyor | Surveyor |
| The validity of this certificate has been renewed | The validity of this certificate has been renewed |
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