



NIPPON KAIJI KYOKAI

Certificate

OF

TYPE APPROVAL

Approval No. NKY-2514
Certificate No. TA22229E

Article: Welding Consumables
 Brand: NI-C1S
 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: KMWL92
 KMWL92-YP420M-TS690M
 Welding Process: Manual Welding
 Welding Positions and Max. Diameter of Electrode: See Table 1
 Current: AC
 Shielding Gas: Not Applicable
 Applicable Parent Material: Steels for Low Temperature Service
 Remarks: For annual inspection, mechanical properties are to comply with the requirements specified in Table 2.

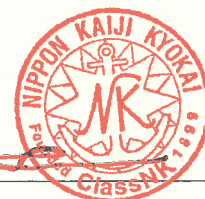
Table 1 Welding Positions and Max. Diameter of Electrode

| Butt Weld | | Fillet Weld | |
|--------------------|----------------|----------------------|----------------|
| Flat: | 5.0mm | Flat: | 5.0mm |
| Horizontal: | 5.0mm | Horizontal Vertical: | 5.0mm |
| Overhead: | 4.0mm | Horizontal: | 5.0mm |
| Vertical Upward: | 4.0mm | Horizontal Overhead: | 5.0mm |
| Vertical Downward: | Not Applicable | Overhead: | 4.0mm |
| | | Vertical Upward: | 4.0mm |
| | | 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 3 March 2023.

Issued at Tokyo on 16 March 2022.

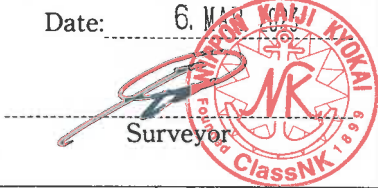
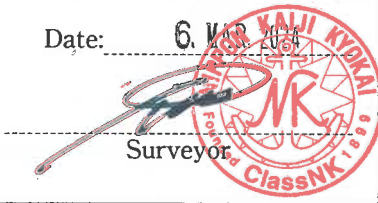


Y. Takao
General Manager
Material and Equipment Department

Notes : (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 addition of welding position.

Table 2 Mechanical Properties

| Deposited Metal Test | | | | |
|--|--------------------------------------|-------------------|-----------------------------|-------------------------------------|
| Tensile Test | | | Impact Test | |
| Tensile strength (N/mm ²) | Proof stress (N/mm ²) | Elongation (%) | Testing temperature (°C) | Minimum mean absorbed energy (J) |
| 690 min. | 420 min. | 25 min. | -196 | 27 |

| | |
|---|---|
| <p>The validity of this certificate has been renewed until <u>3. MAR. 2024</u> .</p> <p>Date: <u>6. MAR. 2024</u></p> <p> Surveyor</p> | <p>The validity of this certificate has been renewed until _____ .</p> <p>Date: _____</p> <p>_____ Surveyor</p> |
| <p>The validity of this certificate has been renewed until <u>3. MAR. 2025</u> .</p> <p>Date: <u>6. MAR. 2024</u></p> <p> Surveyor</p> | <p>The validity of this certificate has been renewed until _____ .</p> <p>Date: _____</p> <p>_____ Surveyor</p> |
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