



# NIPPON KAIJI KYOKAI

## Certificate

OF

### TYPE APPROVAL

Approval No. NKY-3609  
Certificate No. TA23411E

Article : Welding Consumables for High Tensile Steels for Hull  
Brand : MX-50HM / MG-50HM / RR-2 / RF-1  
[Wire / Wire / Metal Powder / Backing Flux]  
Applicant : Kobe Steel, Ltd., Fukuchiyama Plant  
3-36, Osadano-Cho, Fukuchiyama, Kyoto, Japan  
Manufacturer : Kobe Steel, Ltd., Fukuchiyama Plant  
3-36, Osadano-Cho, Fukuchiyama, Kyoto, Japan  
Grade : KAW52SPG(C)  
Welding Process : One-Side Automatic Welding (MAG Welding)  
Welding Positions and Max. Diameter of Wire : See Table 1  
Current : DCEP  
Shielding Gas : CO<sub>2</sub>

Table 1 Welding Positions and Max. Diameter of Wire

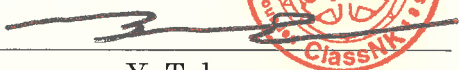
| Butt Weld          |                | Fillet Weld          |                |
|--------------------|----------------|----------------------|----------------|
| Flat:              | 1.4mm          | Flat:                | Not Applicable |
| Horizontal:        | Not Applicable | Horizontal Vertical: | Not Applicable |
| Overhead:          | Not Applicable | Horizontal:          | Not Applicable |
| Vertical Upward:   | Not Applicable | Horizontal Overhead: | Not Applicable |
| Vertical Downward: | Not Applicable | Overhead:            | Not Applicable |
|                    |                | Vertical Upward:     | 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.

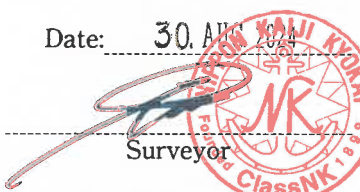
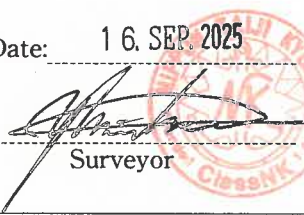
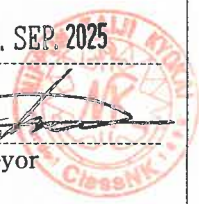
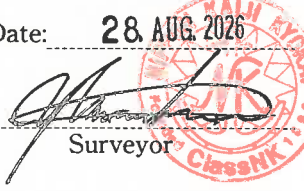
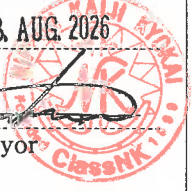
This Certificate will remain in force until 21 December 2023.

Issued at Tokyo on 22 December 2022.



  
Y. Takao  
General Manager  
Material and Equipment Department

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

|                                                                                                                                                                                                                                                                                                                         |                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <p>The validity of this certificate has been renewed<br/>until <u>21. DEC. 2024</u> .</p> <p>Date: <u>28. AUG. 2023</u></p> <p><br/>Surveyor</p>      | <p>The validity of this certificate has been renewed<br/>until _____ .</p> <p>Date: _____</p> <p>_____<br/>Surveyor</p> |
| <p>The validity of this certificate has been renewed<br/>until <u>21. DEC. 2025</u> .</p> <p>Date: <u>30. AUG. 2024</u></p> <p><br/>Surveyor</p>      | <p>The validity of this certificate has been renewed<br/>until _____ .</p> <p>Date: _____</p> <p>_____<br/>Surveyor</p> |
| <p>The validity of this certificate has been renewed<br/>until <u>21. DEC. 2026</u> .</p> <p>Date: <u>16. SEP. 2025</u></p> <p><br/>Surveyor</p>  | <p>The validity of this certificate has been renewed<br/>until _____ .</p> <p>Date: _____</p> <p>_____<br/>Surveyor</p> |
| <p>The validity of this certificate has been renewed<br/>until <u>21. DEC. 2027</u> .</p> <p>Date: <u>28. AUG. 2026</u></p> <p><br/>Surveyor</p>  | <p>The validity of this certificate has been renewed<br/>until _____ .</p> <p>Date: _____</p> <p>_____<br/>Surveyor</p> |
| <p>The validity of this certificate has been renewed<br/>until _____ .</p> <p>Date: _____</p> <p>_____<br/>Surveyor</p>                                                                                                                                                                                                 | <p>The validity of this certificate has been renewed<br/>until _____ .</p> <p>Date: _____</p> <p>_____<br/>Surveyor</p> |