



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

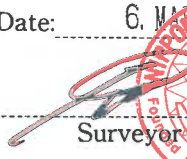
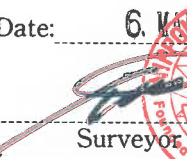
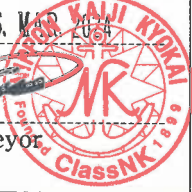
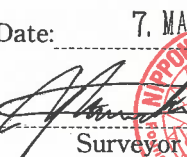
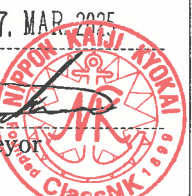
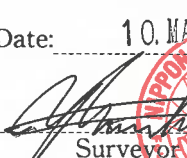
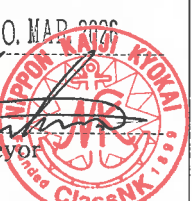
Material and Equipment Department

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

Certificate No. TA22229E

The validity of this certificate has been renewed until <u>3. MAR. 2024</u> . Date: <u>6. MAR. 2024</u>  Surveyor 	The validity of this certificate has been renewed until _____ . Date: _____ _____ Surveyor
The validity of this certificate has been renewed until <u>3. MAR. 2025</u> . Date: <u>6. MAR. 2024</u>  Surveyor 	The validity of this certificate has been renewed until _____ . Date: _____ _____ Surveyor
The validity of this certificate has been renewed until <u>3. MAR. 2026</u> . Date: <u>7. MAR. 2025</u>  Surveyor 	The validity of this certificate has been renewed until _____ . Date: _____ _____ Surveyor
The validity of this certificate has been renewed until <u>3. MAR. 2027</u> . Date: <u>10. MAR. 2026</u>  Surveyor 	The validity of this certificate has been renewed until _____ . Date: _____ _____ Surveyor
The validity of this certificate has been renewed until _____ . Date: _____ _____ Surveyor	The validity of this certificate has been renewed until _____ . Date: _____ _____ Surveyor