



NIPPON KAIJI KYOKAI

Approval No. NKY-3754
Certificate No. TA26237E

Certificate OF *TYPE APPROVAL*

Article: Welding Consumables for Steels for High Tensile Steels for Hull
Brand: DW-K50EA
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: KSW54G(C)H5-48T
Welding Process: Semi-Automatic Welding (MAG Welding)
Welding Positions and Max. Diameter of Wire: See Table 1
Current: DCEP
Shielding Gas: CO₂
Remark: For annual inspection, mechanical properties are to comply with Table 2.

Table 1 Welding Positions and Max. Diameter of Wire

Butt Weld		Fillet Weld	
Flat:	1.2mm	Flat:	1.2mm
Horizontal:	1.2mm	Horizontal Vertical:	1.2mm
Overhead:	1.2mm	Horizontal:	1.2mm
Vertical Upward:	1.2mm	Horizontal Overhead:	1.2mm
Vertical Downward:	Not Applicable	Overhead:	1.2mm
		Vertical Upward:	1.2mm
		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 12 February 2027.
Issued at Tokyo on 13 February 2026.



M. IRISAWA

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.

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Table 2 Mechanical Properties

Deposited Metal Test				
Tensile Test			Impact Test	
Tensile strength (N/mm ²)	Yield point (N/mm ²)	Elongation (%)	Testing temperature (°C)	Minimum mean absorbed energy (J)
490~660	375 min.	22 min.	-48 °C	47



<p>The validity of this certificate has been renewed until Date: Surveyor</p>	<p>The validity of this certificate has been renewed until Date: Surveyor</p>
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