



NIPPON KAIJI KYOKAI

Certificate

OF

TYPE APPROVAL

Approval No. NKY-1052
Certificate No. TA18854E

Article : Welding Consumables
Brand : LB-M52
Applicant : Kobe Steel, Ltd., Ibaraki Plant
: Ibaraki, Osaka, Japan
Manufacturer : Kobe Steel, Ltd., Ibaraki Plant
: Ibaraki, Osaka, Japan
Grade : KMW53H10
Welding Process : Manual Welding
Welding Positions and Max. Diameter of Electrode: See Table 1
Current : AC and DCEP
Shielding Gas : Not Applicable
Applicable Parent Material: High Tensile Steels for Hull

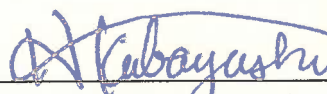
Table 1 Welding Positions and Max. Diameter of Electrode

Butt Weld		Fillet Weld	
Flat:	6.0mm	Flat:	6.0mm
Horizontal:	5.0mm	Horizontal Vertical:	6.0mm
Overhead:	5.0mm	Horizontal:	5.0mm
Vertical Upward:	5.0mm	Horizontal Overhead:	5.0mm
Vertical Downward:	Not Applicable	Overhead:	5.0mm
		Vertical Upward:	5.0mm
		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 2019.

Issued at Tokyo on 8 March 2018.


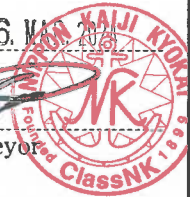
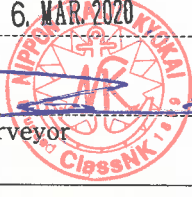
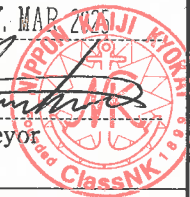


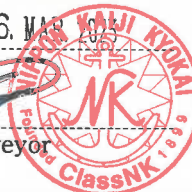

H. Kobayashi

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 until 3. MAR. 2020.</p> <p>Date: 8. MAR. 2019</p> <p>Surveyor </p>	<p>The validity of this certificate has been renewed until 3. MAR. 2025.</p> <p>Date: 6. MAR. 2024</p> <p>Surveyor </p>
<p>The validity of this certificate has been renewed until 3. MAR. 2021.</p> <p>Date: 6. MAR. 2020</p> <p>Surveyor </p>	<p>The validity of this certificate has been renewed until 3. MAR. 2026.</p> <p>Date: 7. MAR. 2025</p> <p>Surveyor </p>
<p>The validity of this certificate has been renewed until 3. MAR. 2022.</p> <p>Date: 5. MAR. 2021</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 3. MAR. 2023.</p> <p>Date: 7. MAR. 2022</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 3. MAR. 2024.</p> <p>Date: 6. MAR. 2023</p> <p>Surveyor </p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>Surveyor _____</p>