



NIPPON KAIJI KYOKAI

Approval No. NKY-3302
Certificate No. TA16499E

Certificate

OF TYPE APPROVAL FOR WELDING CONSUMABLE

Brand: TWE-81K2
Applicant: Tien Tai Electrode Co., Ltd.
Tainan, Taiwan
Manufacturer: Tien Tai Electrode Co., Ltd.
Tainan, Taiwan
Grade: KSWL3G(C)H5
Welding Process: Semi-Automatic Welding (MAG Welding)
Welding Positions and Max. Diameter of Wire: See Table 1 below
Current: DCEP
Shielding Gas: CO₂
Applicable Parent Material: Steels for Low Temperature Service

Table 1 Welding Positions and Max. Diameter of Wire

Butt Weld		Fillet Weld	
Flat:	1.6mm	Flat:	1.6mm
Horizontal:	1.6mm	Horizontal Vertical:	1.6mm
Overhead:	1.6mm	Horizontal:	1.6mm
Vertical Upward:	1.6mm	Horizontal Overhead:	1.6mm
Vertical Downward:	Not Applicable	Overhead:	1.6mm
		Vertical Upward:	1.6mm
		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.

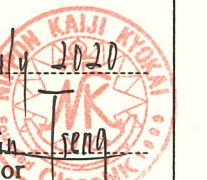
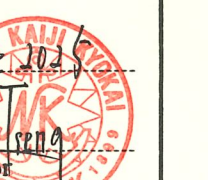
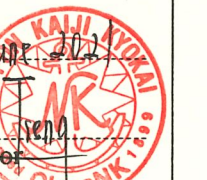
This Certificate will remain in force until 25 April 2017.

Issued at Tokyo on 26 April 2016.



T. Imamura
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.

The validity of this certificate has been renewed until <u>25th April 2018</u> . Date: <u>14 June 2017</u> <u>Ed.ulu</u> Surveyor 	The validity of this certificate has been renewed until <u>25th April 2023</u> . Date: <u>27 June 2022</u> <u>[Signature]</u> Surveyor 
The validity of this certificate has been renewed until <u>25th April 2019</u> . Date: <u>4 June 2018</u> <u>Ed.ulu</u> Surveyor 	The validity of this certificate has been renewed until <u>25th April 2024</u> . Date: <u>19 June 2023</u> <u>Kun-Jin Seno</u> Surveyor 
The validity of this certificate has been renewed until <u>25th April 2020</u> . Date: <u>24 July 2019</u> <u>Ed.ulu</u> Surveyor 	The validity of this certificate has been renewed until <u>25th April 2025</u> . Date: <u>5 July 2024</u> <u>Kun-Jin Seno</u> Surveyor 
The validity of this certificate has been renewed until <u>25th April 2021</u> . Date: <u>9 July 2020</u> <u>Kun-Jin Seno</u> Surveyor 	The validity of this certificate has been renewed until <u>25th April 2026</u> . Date: <u>24 June 2025</u> <u>Kun-Jin Seno</u> Surveyor 
The validity of this certificate has been renewed until <u>25th April 2022</u> . Date: <u>18 June 2021</u> <u>Kun-Jin Seno</u> Surveyor 	The validity of this certificate has been renewed until <u>25th April 2027</u> . Date: <u>21 July 2026</u> <u>[Signature]</u> Surveyor 