



## WELDING CONSUMABLE CERTIFICATE

Certificate No: 650920-4753872-003 \_\_\_\_\_

Report No: 4753872 \_\_\_\_\_

Port of: Shanghai, P. R. China \_\_\_\_\_

Date: 26-August-2021 \_\_\_\_\_

### THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF TIEN TAI ELECTRODE (KUNSHAN) CO., LTD., ATTEND THEIR PLANT AT KUNSHAN, P. R. CHINA, ON THE 28TH DAY OF APRIL, 2021 AND ON SUBSEQUENT DATES, IN ORDER TO CARRY OUT A PLANT SURVEY OF FACILITIES AND ASSOCIATED QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND TO WITNESS AND REPORT ON THE ANNUAL APPROVAL TESTING OF WELDING CONSUMABLES; AND,

THAT THE FACILITY IS CONSIDERED CAPABLE OF PROVIDING AN ACCEPTABLE UNIFORM PRODUCT, AND THAT EACH WELDING CONSUMABLE LISTED BELOW WAS FOUND IN COMPLIANCE WITH THE SPECIFICATION INDICATED AND IS ELIGIBLE TO BE PLACED ON THIS BUREAU'S APPROVED WELDING CONSUMABLES LIST IN THE FLUX CORED ARC WELDING SECTION:

TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/POLARITY	SIZE
TM-70C	ABS	3YAH10	100% CO2	F, H	DCEP	1.2~1.6mm
TM-70C	ABS	3YSAH10	100% CO2	F, H	DCEP	1.2~1.6mm
TWE-110K3	ABS	4YQ690SAH5	100% CO2	ALL	DCEP	1.1, 1.2mm
TWE-712	ABS	3YSAH10	100% CO2	ALL V-DOWN	DCEP	1.2~1.6mm
TFW-308L	AWS A5.22	E308LT1-1	100% CO2	ALL	DCEP	1.2, 1.6mm
TFW-308L	AWS A5.22	E308LT1-1	100% CO2	ALL	DCEP	1.2mm
Note: The manufacturer's guaranteed properties: CVN: 31J @ -196 deg C						
TFW-309L	AWS A5.22	E309LT1-1	100% CO2	ALL	DCEP	1.2, 1.6mm
TFW-316L	AWS A5.22	E316LT1-1	100% CO2	ALL	DCEP	1.2, 1.6mm
TWE-81K2	ABS	5YQ460SAH5	100% CO2	ALL	DCEP	1.2, 1.4mm
TWE-81K2C	ABS	5Y400SAH5	100% CO2	ALL	DCEP	1.2, 1.4mm
TFW-2209	AWS A5.22	E2209T1-1	100% CO2	ALL	DCEP	1.2mm

Note: The manufacturer's guaranteed properties: CVN: 40J @ -20 deg C

Note: This Certificate evidences compliance with one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. This Certificate is a representation only that the structure, item of material, equipment, machinery or any other item covered by this Certificate has met one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping as of the date of issue. Parties are advised to review the Rules for the scope and conditions of classification and to review the survey records for a fuller description of any restrictions or limitation on the vessel's service or surveys. The validity, applicability and interpretation of this Certificate is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this Certificate or in any notation made in contemplation of the Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.

FabCO 308L-T1	AWS A5.22	E308LT1-4	75-80%Ar+CO2	ALL	DCEP	1.2mm
FabCO 309L-T1	AWS A5.22	E309LT1-4	75-80%Ar+CO2	ALL	DCEP	1.2mm
FabCO 316L-T1	AWS A5.22	E316LT1-4	75-80%Ar+CO2	ALL	DCEP	1.2mm
FabCO 308L-T1	AWS A5.22	E308LT1-1	100% CO2	ALL	DCEP	1.2, 1.6mm
FabCO 309L-T1	AWS A5.22	E309LT1-1	100% CO2	ALL	DCEP	1.2, 1.6mm
FabCO 316L-T1	AWS A5.22	E316LT1-1	100% CO2	ALL	DCEP	1.2, 1.6mm

Note: FabCO 308L-T1 is identical to TFW-308L  
 FabCO 309L-T1 is identical to TFW-309L  
 FabCO 316L-T1 is identical to TFW-316L

TWE-711	ABS	3YSAH5	100% CO2	ALL, V-DOWN	DCEP	1.2~1.6mm
TWE-711Ni	ABS	4YSAH10	100% CO2	ALL	DCEP	1.2~1.6mm



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