COPY

WELDING CONSUMABLE CERTIFICATE

Certificate No.: 083238-4334847-003

Report No.: 4334847

Port of: Nagasaki, Japan

Date: 28 August 2020

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF NIPPON STEEL WELDING & ENGINEERING CO., LTD, ATTEND THEIR PLANT AT HIKARI, YAMAGUCHI, JAPAN, ON THE 03RD DAY OF JULY, 2020 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 (mm)
SF-1	ABS	2YSA H5	CO2	ALL, Vd	DCEP	1.0 - 1.6
SF-1	ABS	2Y400SA H5	CO2	ALL, Vd	DCEP	1.2 - 1.6
SF-3	ABS	3YSA H5 3Y400SA H5	CO2	ALL, Vd, HF	DCEP	1.2 - 1.6
SF-3Y	ABS	3Y400SA H5	CO2	ALL, Vd, HF	DCEP	1.2 - 1.4
SF-36E	ABS	3YSA+Mfr's* H5 *Min. CVN 34 J at -60 °C	CO2	ALL, Vd, HF	DCEP	1.2 - 1.4
SF-36F	ABS	3YSA+Mfr's* H5 *Min. CVN 34 J at -60 °C	CO2	F, HF	DCEP	1.2 - 1.4
SF-3E	ABS	4YQ420SA H5	CO2	ALL, HF	DCEP	1.2 - 1.6
SF-3A	ABS	3YSA H5	80%Ar 20%CO2	ALL, HF	DCEP	1.2 - 1.6
SF-3AM	ABS	5YQ460SA H5	80%Ar 20%CO2	ALL, HF	DCEP	1.2 - 1.6

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 this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.

COPY

SF-1B	ABS	3YSA H5	CO2	ALL, Vd, HF	DCEP	1.2 - 1.6
SF-1B	ABS	3YSA H5	80%Ar 20%CO2	ALL, Vd, HF	DCEP	1.2 - 1.6

Note: F-Flat, H-Horizontal, Vu-Vertical Upward, Vd-Vertical Down, O-Overhead, HF-Horizontal Fillet, ALL-F, H, V, O

Kageyama Shingo, SURVEYOR

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 this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.