ABS

COPY

WELDING CONSUMABLE CERTIFICATE

Certificate No.: 083238-3613325-001

Report No.: NA3613325

Port of: Nagasaki, Japan

Date: 22 March 2019

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF NIPPON STEEL & SUMIKIN WELDING CO., LTD., ATTEND THE PLANT AT HIKARI, YAMAGUCHI, JAPAN, ON THE 22ND DAY OF MARCH, 2019 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 SHIELDED METAL ARC WELDING SECTION:

TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/ POLARITY	SIZE
NSSW A-200	ABS	3	-	ALL	AC / DC	2.6 - 5.0
				F	AC / DC	6.0
NSSW G-200	ABS	3	-	ALL	AC / DC	2.0 - 5.0
				F	AC / DC	6.0 - 7.0
NSSW EX-4	ABS	2 Recommended by Mfr for (HF) gravity welding with 550/900mm x 4.0/7.0mm	-	F	AC / DCEN	4.0 - 7.0
NSSW FT-51	ABS	2	-	F, HF, Vu, O	AC / DC	2.6 - 5.0
NSSW 7018	ABS	3Y H10	-	ALL	AC / DCEP	2.6 - 5.0
NSSW-16V	ABS	3Y	-	F, O, Vd	AC / DCEP	3.2 - 5.0
				F, Vd	AC / DCEP	5.5 - 6.0
NSSW L-55	ABS	3Y400	-	ALL	AC / DCEP	2.6 - 5.0
				F	AC / DCEP	5.5 - 6.0
NSSW L80SN	ABS	5YQ690MW	-	ALL	AC / DCEP	3.2 - 5.0
NSSW LM-55G	ABS	3Y Recommended by Mfr for (HF) gravity welding with 550/900mm x 4.0/7.0mm	-	F	AC / DCEP	4.0 - 8.0
NSSW L-60LT	ABS	5YQ550 H5	-	ALL	AC / DCEP	3.2 - 4.0

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

Kobayashi, Eiji SURVEYOR

ABS NAGASAKI

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.

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WELDING CONSUMABLE CERTIFICATE

Certificate No.: 083238-3613325-002

Report No.: NA3613325

Port of: Nagasaki, Japan

Date: 22 March 2019

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF NIPPON STEEL & SUMIKIN WELDING CO., LTD., ATTEND THE PLANT AT HIKARI, YAMAGUCHI, JAPAN, ON THE 22ND DAY OF MARCH, 2019 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 GAS METAL ARC WELDING INCLUDING MIG/TIG WELDING SECTION:

TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/ POLARITY	SIZE
NSSW YM-28	ABS	3YSA	CO2	ALL	DCEP	0.9 - 1.2
				F, Vu	DCEP	1.4 - 1.6
NSSW YM-28	ABS	3YA	85% Ar 15% CO2	H, O	DCEP	1.2
				HF	DCEP	1.2
NSSW YM-28S	ABS	3YSA	80% Ar 20% CO2	F, Vu, H	DCEP	1.0 - 1.6
NSSW YM-25	ABS	3YA	80% Ar 20% CO2	F	DCEP	1.2
NSSW YM-55A	ABS	3YSA	80% Ar 20% CO2	ALL	DCEP	1.2 - 1.6
NSSW YM-47E	ABS	3Y400SAH5 + Mfr's Mfr's Guarantee min. properties TS 570-720 N/sq mm min. YP 460 N/sq mm min. EL 20%, CNV 64J min. at -20C	CO2	F, Vu, HF	DCEP	1.2 - 1.4

Note: F-Flat, H-Horizontal, Vu-Vertical Upwoard, O-Overhead, HF-Horizontal Fillet, All-F,H,Vu & O

Kobayashi, Eiji SURVEYOR

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WELDING CONSUMABLE CERTIFICATE

Certificate No.: 083238-3613325-003

Report No.: NA3613325

Port of: Nagasaki, Japan

Date: 22 March 2019

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THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF NIPPON STEEL & SUMIKIN WELDING CO., LTD., ATTEND THE PLANT AT HIKARI, YAMAGUCHI, JAPAN, ON THE 22ND DAY OF MARCH, 2019 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
NSSW SF-1A	ABS	2YSA H5	70-80% Ar + CO2	ALL	DCEP	1.0 - 1.4
NSSW SM-1F	ABS	2YSA H5	CO2	F, H	DCEP	1.2 - 1.6
NSSW SF-1GP	ABS	2YSA H5	CO2	ALL	DCEP	1.2 - 1.6
NSSW SM-1GP	ABS	2YSA H5	CO2	F, HF	DCEP	1.2 - 1.6
NSSW SF-N309L	ABS	Mfr's Guarantee min. properties TS 510 N/sq mm, Min. YP 245 N/sq mm, Min. EL 30%, CNV 34J at -20C	-	F, HF	DCEP	1.2

Note: F-Flat, H-Horizontal, O-Overhead, HF-Horizontal Fillet, All-F,H,Vu & O

ABS NAGASAKI

Kobayashi, Eiji SURVEYOR

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