



WELDING CONSUMABLE CERTIFICATE

Certificate No.: 872433-5916600-001_____

Report No.: 5916600_____

Port of: Cleveland, Ohio_____

Date: 24 July 2023_____

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF LINCOLN ELECTRIC COMPANY, ATTEND THEIR PLANT AT CLEVELAND, OHIO, ON THE 22ND DAY OF JUNE, 2023 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 SUBMERGED ARC WELDING SECTION:

<u>TRADE NAME</u>	<u>SPECIFICATION</u>	<u>GRADE OR CLASS</u>	<u>SHIELDING GAS</u>	<u>POSITION</u>	<u>CURRENT/ POLARITY</u>	<u>SIZE</u>
Lincolnweld L50/960	AWS A5.17	F7A2-EM 13K-H4			DCEP	.035"-3/16"
Lincolnweld L60/761	AWS A5.17	F7A2-EL 12-H8			DCEP	5/64"-7/32"
Lincolnweld L60/780	AWS A5.17	F7A0-EL 12-H8			DCEP	1/16"-3/16"
Lincolnweld L60/860	AWS A5.17	F6A2-EL 12-H4			DCEP	5/64"-7/32"
Lincolnweld L61/761	AWS A5.17	F7A2-EM 12K-H8			DCEP	1/16"-3/16"
Lincolnweld L61/780	AWS A5.17	F7A2-EM 12K-H8			DCEP	1/16"-3/16"
Lincolnweld L61/860	AWS A5.17	F7A2-EM 12K-H8			DCEP	1/16"-3/16"
Lincolnweld L61/882	AWS A5.17	F7A6-EM 12K-H8			DCEP	1/16"-3/16"
Lincolnweld L61/960	AWS A5.17	F7A2-EM 12K-H8			DCEP	1/16"-3/16"
Lincolnweld 309/309L	AWS A5.9	ER309/ ER309L			DCEP	5/64"-5/32"
Lincolnweld 316/316L	AWS A5.9	ER316/ ER316L			DCEP	5/64"-5/32"
Lincolnweld 308/308L	AWS A5.9	ER308/ ER308L			DCEP	5/64"-5/32"
Lincolnweld 310	AWS A5.9	ER310			DCEP	.030"-3/16"

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.

Lincolnweld 347	AWS A5.9	ER347	DCEP	.030"-3/16"
Lincolnweld 2209	AWS A5.9	ER2209	DCEP	.030"-1/8"
Lincolnweld ER308/308LCF	AWS A5.9	ER308/308L		1/16",1/8", 3/32"
Lincolnweld ER316/316LCF	AWS A5.9	ER316/316L		1/16",1/8", 3/32"


 Thomas Perk, SURVEYOR



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WELDING CONSUMABLE CERTIFICATE

Certificate No.: 872433-5916600-002_____

Report No.: 5916600_____

Port of: Cleveland, Ohio_____

Date: 24 July 2023_____

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF LINCOLN ELECTRIC COMPANY, ATTEND THEIR PLANT AT CLEVELAND, OHIO, ON THE 22ND DAY OF JUNE, 2023 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:

<u>TRADE NAME</u>	<u>SPECIFICATION</u>	<u>GRADE OR CLASS</u>	<u>SHIELDING GAS</u>	<u>POSITION</u>	<u>CURRENT/ POLARITY</u>	<u>SIZE</u>
Murex 6011C	AWS A5.1	E6011		All	AC, DCEP	3/32"-3/16"
Excalibur 7018-A1 MR	AWS A5.5	E7018-A1-H4R		All	AC, DCEP	3/32"-5/52"
Excalibur 8018-C3 MR	AWS A5.5	E8018-C3-H4R		All	AC, DCEP	3/32"-1/4"
Excalibur 9018M MR	AWS A5.5	E9018M-H4R		All	DCEP	3/32"-3/16"
Excalibur 11018M MR	AWS A5.5	E11018M-H4R		All	DCEP	3/32"-3/16"
Fleetweld 35	AWS A5.1	E6011		All	AC, DCEP	3/32"-1/4"
Fleetweld 37	AWS A5.1	E6013		All	AC, DCEN	1/16"-3/16"
Fleetweld 47	AWS A5.1	E7014		All	AC, DCEN	3/32"-3/16"
Fleetweld 5P+	AWS A5.1	E6010		All	DCEP	3/32"-3/16"
Fleetweld 5P	AWS A5.1	E6010		All	DCEP	3/32"-1/4"
Jet - LH78 MR	AWS A5.1	E7018		All	DCEP	3/32"-1/4"
Jetweld 1	AWS A5.1	E7024-1		All	AC, DCEN	3/32"-1/4"
Jetweld LH-70	AWS A5.1	E7018		All	DCEP	3/32"-1/4"
Shield Arc 70+	AWS A5.5	E8010-G		All	DCEP	1/8"-3/16"
Shield Arc 85	AWS A5.5	E7010-A1		All	DCEP	3/32"-3/16"
Shield-Arc HYP+	AWS A5.5	E7010-P1		All	DCEP	1/8"-3/16"
Pipeliner 6P+	AWS A5.1	E6010		All	DCEP	2.5mm-5.0mm
Pipeliner 7P+	AWS A5.5	E7010-P1		All	DCEP	3.2mm-5.0mm
Pipeliner 8P+	AWS A5.5	E8010-P1		All	DCEP	3.2mm-5.0mm
Pipeliner 16P	AWS A5.1	E7016-H4		All	AC, DCEP	2.5mm-4.0mm
Pipeliner LH-D80	AWS A5.5	E8045-P2 H4R		All	DCEP	3.2mm-4.5mm
Pipeliner LH-D90	AWS A5.5	E9045-P2 H4R		All	DCEP	3.2mm-4.5mm

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Pipeliner LH-D100	AWS A5.5	E10045-P2 H4R	All	DCEP	3.2mm-4.5mm
Excalibur 308L-16	AWS A5.4	E308L-16	All	DCEP	3/32"-3/16"
Excalibur 308/ 308L-15	AWS A5.4	E308-15/ E308L-15	All	DCEP	3/32"-1/8"
Excalibur 308/ 308H-16	AWS A5.4	E308-16/ E308H-16	All	DCEP	3/32"-3/16"
Excalibur 308/ 308L-17	AWS A5.4	E308-17/ E308L-17	All	AC, DCEP	3/32"-3/16"
Excalibur 309/ 309L-15	AWS A5.4	E309-15/ E309L-15	All	DCEP	3/32"-1/8"
Excalibur 309/ 309L-16	AWS A5.4	E309-16/ E309L-16	All	DCEP	3/32"-3/16"
Excalibur 309/ 309L-17	AWS A5.4	E309-17/ E309L-17	All	AC, DCEP	3/32"-3/16"
Excalibur 316/ 316L-15	AWS A5.4	E316-15/ E316L-15	All	DCEP	3/32"-1/8"
Excalibur 316/ 316L-16	AWS A5.4	E316-16/ E316L-16	All	DCEP	3/32"-3/16"
Excalibur 316/ 316L-17	AWS A5.4	E316-17/ E316L-17	All	AC, DCEP	3/32"-3/16"


 Thomas Perk, SURVEYOR



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WELDING CONSUMABLE CERTIFICATE

Certificate No.: 872433-5916600-003_____

Report No.: 5916600_____

Port of: Cleveland, Ohio_____

Date: 24 July 2023_____

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF LINCOLN ELECTRIC COMPANY, ATTEND THEIR PLANT AT CLEVELAND, OHIO, ON THE 22ND DAY OF JUNE, 2023 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:

<u>TRADE NAME</u>	<u>SPECIFICATION</u>	<u>GRADE OR CLASS</u>	<u>SHIELDING GAS</u>	<u>POSITION</u>	<u>CURRENT/ POLARITY</u>	<u>SIZE</u>
Innershield NR-207	AWS A5.29	E71T8-K6		All, V-Down	DCEP	.068"-5/64"
Innershield NR-211 MP	AWS A5.20	E71T-11		All	DCEN	.030"-3/32"
Innershield NR-305	AWS A5.20	E70T-6-H16		Flat	DCEP	3/32"
Innershield NR-311	AWS A5.20	E70T-7		F, H	DCEN	5/64"-7/64"
Outershield 91K2-H	AWS A5.29	E91T1-K2M-H8	75%Ar-25%CO2	Flat	DCEP	1/16"-.052"
Innershield NR-211MP-RSP	AWS A5.20	E71T-11		All	DCEN	.030", .035", .045"
Innershield NR-233	AWS A5.20-05	E71T-8-H16		All	DC-	1/16"-5/64"
Innershield NR-233	AWS A5.20-05	E71T-8-H10		Flat	DCEN	5/64"
Pipliner NR-207+	AWS A5.29	E71T8-K6		All, V-Down	DCEP	5/64"
Pipliner G90M	AWS A5.29	E111T1-K3MJ-H8		All	DCEP	1.2mm



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WELDING CONSUMABLE CERTIFICATE

Certificate No.: 872433-5916600-004_____

Report No.: 5916600_____

Port of: Cleveland, Ohio_____

Date: 24 July 2023_____

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF LINCOLN ELECTRIC COMPANY, ATTEND THEIR PLANT AT CLEVELAND, OHIO, ON THE 22ND DAY OF JUNE, 2023 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
Blue Max MIG 308L	AWS A5.9	ER308/ ER308L		All	DCEP	.030"-3/16"
Blue Max MIG 309L	AWS A5.9	ER309/ ER309L		All	DCEP	.030"-3/16"
Blue Max MIG 310	AWS A5.9	ER310		All	DCEP	.030"-3/16"
Blue Max MIG 316L	AWS A5.9	ER316/ ER316L		All	DCEP	.030"-3/16"
Blue Max MIG 347	AWS A5.9	ER347		All	DCEP	.030"-3/16"
Blue Max MIG 2594	AWS A5.9	ER2594	Argon	All	DCEP	.030"-3/16"
Blue Max MIG 308LSi	AWS A5.9	ER308Si/ ER308LSi		All	DCEP	.030"-3/16"
Blue Max MIG 309LSi	AWS A5.9	ER309Si/ ER309LSi		All	DCEP	.030"-3/16"
Blue Max MIG 316LSi	AWS A5.9	ER316Si/ ER316LSi		All	DCEP	.030"-3/16"
Blue Max MIG 2209	AWS A5.9	ER2209		All	DCEP	.030"-1/8"
Blue Max Orbital TIG 316L	AWS A5.9	ER316/ ER316L		All	DCEP	.030"-3/16"
Lincoln ER2594	AWS A5.9	ER2594		All	DCEP	.030"-3/16"
Lincolnweld 2594	AWS A5.9	ER2594		All	DCEP	.030"-3/16"
Lincoln ER308/308L	AWS A5.9	ER308/ER308L		All	DCEP	.030"-3/16"

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Lincoln ER309/309L	AWS A5.9	ER309/ER309L		All	DCEP	.030"-3/16"
Lincoln ER310	AWS A5.9	ER310		All	DCEP	.030"-3/16"
Lincoln ER316/316L	AWS A5.9	ER316/ER316L		All	DCEP	.030"-3/16"
Lincoln ER347	AWS A5.9	ER347		All	DCEP	.030"-3/16"
Lincoln ER2209	AWS A5.9	ER2209		All	DCEP	.030"-1/8"
Techalloy 413	AWS A5.7	ERCuNi	Argon	All	DCEP	.030"-3/16"
Techalloy 625	AWS A5.14	ERNiCrMo-3	Argon	All	DCEP	.030"-3/16"
Techalloy 825	AWS A5.14	ERNiFeCr-1	Argon	All	DCEP	.030"-3/16"
LINCOLN Red Max 308Lsi	AWS A5.9	ER308Lsi ER308Si		All		.035",.045", 1/16"
LINCOLN Red Max 309Lsi	AWS A5.9	ER309Lsi ER309Si		All		.035",.045", 1/16"
LINCOLN Red Max 316Lsi	AWS A5.9	ER316Lsi ER316Si		All		.035", .045",1/16"
Lincoln ER308/308LCF	AWS A5.9	ER308/308L				1/16",1/8", 3/32"
Lincoln ER316/316LCF	AWS A5.9	ER316/316L				1/16",1/8", 3/32"

Thomas Perk, SURVEYOR



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