



WELDING CONSUMABLE CERTIFICATE

Certificate No: 607228-2545100-003

Report No: C2545100

Port of: CLEVELAND, OHIO

Date: 26 FEBRUARY 2014

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF HOBART BROTHERS CO-TUBULAR WIRE BUSINESS, ATTEND THEIR PLANT AT TROY AND PIQUA, OHIO, ON THE 12 TH DAY OF FEBRUARY, 2013 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 AND FLUX CORED ARC WELDING SECTION:

TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/POLARITY	SIZE
HOBART BROTHERS-TRIMARK BRAND						
METALLOY 76	ABS **	3YSA	80%Ar-20%CO2	F	DCEP	.035"-1/16"
		**Manufacturer's guaranteed CVN 34J at -40C.				
TM-770	ABS	3YSA	75%Ar-25%CO2	ALL	DCEP	.035"-1/16"
TM-770	ABS **	3YSA	80%Ar-20%CO2	ALL	DCEP	.035"-1/16"
		**Manufacturer's guaranteed CVN 34J at -40C.				
TM-770	MIL STANDARD	E71T-1M-MIL	75%Ar-25%CO2	ALL	DCEP	.035"-1/16"
TM-RX7	ABS	2YSA H10	100%CO2	F	DCEP	.045"-1/8"
TRIPLE 7	ABS	2YSA	75%Ar-25%CO2	ALL	DCEP	.045"-1/16"
TRIPLE 7	ABS	2YSA	100%CO2	ALL	DCEP	.045"-1/16"
TM-771	ABS	3YSA H10	100%CO2	ALL	DCEP	.035"-1/16"
TM-811N2	ABS **	3YSA	100%CO2	ALL	DCEP	.035"-1/16"
		**Manufacturer's guaranteed CVN 20ft-lbs.at -50F, tensile strength 80-100 ksi.				
TM-711M	ABS	2YSA	75%Ar-25%CO2	ALL	DCEP	.035"-1/16"
TM-711M	ABS	2YSA	100%CO2	ALL	DCEP	.035"-1/16"
METALLOY Vantage	ABS	3YSA H5	80%Ar-20%CO2	F	DCEP	.045"-1/16"
METALLOY Vantage	ABS	3YSA H5	90%Ar-10%CO2	ALL	DCEP	.045"-1/16"
TRIPLE 8	ABS	4YSA H5	100%CO2	ALL	DCEP	.045"-1/16"
TM-811N1	ABS	3YSA	100%CO2	ALL	DCEP	.045"-1/16"
METALLOY 80N1	ABS **	3YSA	80%Ar-20%CO2	F	DCEP	.045"
		**Manufacturer's guaranteed CVN 34J at -40C				
TM-791	ABS	3YSA H10	75%Ar-25%CO2	ALL	DCEP	.045"
TM-791	ABS	3YSA H10	100%CO2	ALL	DCEP	.045"
PREMIER 70	ABS	3YSA	100%CO2	F	DCEP	.045"-3/32"
TM-1101K3M	AWS A5.29**	E111T1-K3MJ H8	75%Ar-25%CO2	ALL	DCEP	.045"-1/16"
		**Manufacturer's guaranteed CVN 20ft-lbs at -60F.				

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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<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>
TM-1101K3C	AWS A5.29**	E111T1-K3CJ H8	100%CO2	ALL	DCEP	.045"-.052"
		**Manufacturer's guaranteed CVN 20ft-lbs at -60F.				
TM-72	AWS A5.20	E70T-1C	100%CO2	Flat/Horizontal	DCEP	.045"-1/8"
TM-121	AWS A5.20	E71T-11	NONE	ALL	DCEN	.045"-3/32"
TM-77	AWS A5.20	E70T-7	NONE	Flat/Horizontal	DCEN	5/64"-7/64"
TM-991K2	AWS A5.29	E91T1-K2M H8	75%Ar-25%CO2	ALL	DCEP	.045"-1/16"
TM-991K2	AWS A5.29	E91T1-K2C H8	100%CO2	ALL	DCEP	.045"-1/16"
TM-115	AWS A5.29	E110T5-K3C H4	100%CO2	Flat/Horizontal	DCEP	.045"-1/8"
TM-881K2	AWS A5.29**	E81T1-K2MJ H8	80%Ar-20%CO2	ALL	DCEP	.045"
		**Manufacturer's guaranteed CVN 34J at -60C.				
TM-911N2	AWS A5.29**	E91T1-Ni2C	100%CO2	ALL	DCEP	.035"-1/16"
		**Manufacturer's guaranteed CVN 20ft-lbs at -50F				
TM-81N1	AWS A5.29	E80T1-Ni1CJ H8	100%CO2	ALL	DCEP	5/64"-3/32"
TM-101	ISO-18276-B	T694T1-1MA- N3M1-UH5	75%Ar-25%CO2	ALL	DCEP	.045"

Keith Grant
Keith Grant SURVEYOR



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