

FORM 479

DOMINION BRIDGE COMPANY LIMITED

CONTRACT WELDING TEST REPORT

CONTRACT B.1147

DATE: November 25th, 1943.

FILE NO.

DESCRIPTION Scotch Marine Boiler - Front & Rear HeadPurchaser - Wartime Merchant ShippingCODE Lloyds Register of Shipping - Class IMATERIAL Fully killed steel - suitable for fusion weldingTensile strength 58,000 to 68,000 p.s.i.WELDER A. Barry SYMBOL 2 SHOP NO. 38WELDING PROCESS Union meltJOINT Double 90° V. Butt ELECTRODE Union melt No.36NO. OF LAYERS 2STRESS RELIEF 1150° F - 1 hr. per inch of thicknessRADIOGRAPH No slag - no porosity - no lack of fusion - acceptable

REDUCED SECTION TENSILE

TEST MARK	WIDTH INS.	THICK. INS.	AREA SQ. IN.	ULT. STR. LBS. ACT'L.	ULT. STR. LB. SQ. IN.	FRACTURE
S8	1.500	0.730	1.095	69,000	63,015	Angular in plate

ALL WELD METAL TENSILE

TEST MARK	DIAM. INS.	AREA SQ. INS.	YIELD LBS. ACT'L.	ULT. STR. LBS. ACT'L.	YIELD LB. SQ. IN.	ULT. STR. LB. SQ. IN.	% ELONG. 2 INS.	% R OF A
S8	0.505	0.200	7,650	13,250	38,250	66,250	32.5	59.7
S8	FRACTURE		Full cup					
	FRACTURE							

FREE BEND TEST

TEST MARK	GAUGE DIST. INS.	ELONG. INS.	ELONG. %	REMARKS
S8				180° No failure

IZOD IMPACT

TEST MARK	POSITION OF NOTCH	IMPACT FT. LB.
S8	IN WELD	49
S8	AT WELD-PLATE JUNCTION	69
	IN WELD	
	AT WELD-PLATE JUNCTION	

MACRO-ETCH

TEST MARK	REMARKS
S8	Complete penetration in weld

NICK BREAK

TEST MARK	Front Head	REMARKS	Rear Head
	Thick Pl.	Thick Pl.	Thick Pl.
S8	17235/264	19410/8	10372/266 19408/11

INSPECTION COMPANY LLOYD'S REGISTER OF SHIPPING

WITNESS

PROVINCIAL DEPT.

WITNESS

TEST SUPERVISED BY

BOILER LLOYD'S No. 7457 S. S. "BIRSFORD PARK"

DATE

DATE

DATE

Lloyd's Register
Foundation