

No. 5349

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING

(Received at London 2nd)

TESTS OF BOILER STEEL

RECEIVED  
2 SEP 87

Tests of 103 Steel plates manufactured by The Steel Co. of Scotland of Glasgow for Boiler No. 844 to be constructed by Messrs J. Richardson & Co of Newcastle for the S.S. "Guth Castle"

Date first visit 29/7 last visit 31/8/87 No. of visits 8

The specified in the accompanying copy of Advice Notes were rolled from charges. The tensile test has been applied to 66 samples as set forth below, and the temper and bending tests to a shearing off each plate, and extra bends (cold) off shell plates; Results satisfactory

When a second test is applied, the result should be recorded immediately below the record of the original test. The number of plates or bars included in a rejection must be clearly stated.

No.	Purpose.	Charge Mark.	No. of plates or bars in same charge.	Mark on plate and test piece.	Dimensions.			Ultimate Stress.		Exten. in 8 ins.	Remarks.
					Thickn.	Brdth.	Area.	Total.	Sq. Inch		
					Ins.	Ins.	Ins.	Tons.	Tons.	%	
1	Shell	G.234	10326	1.09	1.22	1.33	39.3	29.5	28	} Cross piece	
2		—	"	1.09	1.27	1.384	41.6	30.0	26.5		
3	Shell	E.202	10358	1.1	1.22	1.342	38.4	28.6	27		
4		—	"	1.1	1.26	1.386	40.8	29.4	24.5	} Cross piece	
5	Tube plate	A.235	10391	.76	1.26	.958	27.2	28.3	24.5		
6	Shell	D.214	10401	1.09	1.22	1.33	39.6	29.7	23		
7		—	"	1.09	1.26	1.373	40.9	29.7	25	} Cross piece	
8	Shell	D.214	10403	1.07	1.24	1.327	39.25	29.5	27		
9		—	"	1.07	1.26	1.348	39.6	29.3	26		
10	Furnace front	A.235	10404	.78	1.09	.85	24.4	28.7	27	} Cross piece	
11	Shell	H.182	10415	1.07	1.1	1.177	34.3	29.1	25		
12		—	"	1.08	1.09	1.177	33.95	28.8	27		
13	Shell	H.182	10416	1.08	1.27	1.372	39.9	29.0	27	} Rejd for surface defects	
14		—	"	1.08	1.09	1.177	34.4	29.2	29		
15	Shell	H.182	10423	1.07	1.08	1.156	33.2	28.7	29		
16		—	"	1.07	1.1	1.177	33.5	28.4	25	} Cross piece	
17	End plate	A.237	10427	1.03	1.27	1.308	35.5	27.1	28		
18	Furnace front	"	10430	.76	1.27	.965	27.3	28.2	24.5		
19	Tube plate	J.236	10438	.96	1.24	1.19	34.3	28.8	22	} Cross piece	
20	"	J.235	10439	.945	1.1	1.04	30.0	28.8	26		
21	"	A.238	10448	.77	1.25	.963	26.85	27.8	27		
22	Gr. B. Btm	J.237	10449	.88	1.25	1.1	30.3	27.5	26.5	} Cross piece	
23	Washers	O.218	10456	1.04	1.25	1.3	37.5	28.8	26.5		
24	Brk. Tube pl.	C.233	10464	.94	1.09	1.025	29.9	29.1	25		
25	"	O.132	10481	.95	1.26	1.197	34.0	28.3	26.5	} Cross piece	
26	Shell	D.217	10489	1.09	"	1.373	40.6	29.5	24		
27		—	"	"	"	"	40.3	29.3	25		
28	Shell	O.219	10491	"	"	"	38.65	28.1	23.5	} Cross piece	
29		—	"	"	"	"	38.15	27.7	26.5		
30	Shell Shop	K.224	2618	.54	1.12	.605	17.05	28.1	22		
31	"	A.203	10375	.6	1.19	.714	20.1	28.1	27.5		

Fee ..... £ : :  
Expenses £ : :  
£ : :

To be paid by

J. H. Roberts  
Surveyor, Lloyd's Register.

Glasgow 31/8/87



No. 5349

(Received at London Office,

## TESTS OF BOILER STEEL.

Continuation of

Tests of Steel plate manufactured by *The Steel Co. of Scotland of Glasgow*  
for Boiler No. *844* to be constructed by *Messrs. J. Richardson & Co. of Newcastle*  
for the S.S. "*Garth Castle*"

Date first visit

last visit

No. of visits

The \_\_\_\_\_ specified in the accompanying copy of Advice Notes were rolled from  
charges. The tensile test has been applied to \_\_\_\_\_ samples as set forth below,  
and the temper and bending tests \_\_\_\_\_

No.	Purpose.	Charge Mark.	No. of plates or bars in same charge.	Mark on plate and test piece.	Dimensions.			Ultimate Stress.		Extens. in 8 ins.	Remarks.
					Thickn.	Br.lth.	Area.	Total.	Sq. Inch		
					In.	In.	In.	Tons.	Tons.	%	
1	Shell Strap	B.181		10377	.875	1.19	1.041	28.3	27.1	28	
2	Washers	"		10378	.99	1.2	1.188	31.1	26.1	25	
3	Shell Strap	C.203		10379	.855	"	1.026	28.55	27.8	24	
4	"	F.211		10403	.58	1.19	.69	20.25	29.3	25.5	
5	"	C.203		10386	"	"	"	20.1	29.1	24	
6	"	A.204		10441	1.04	1.24	1.29	37.55	29.1	23	
7	Firebox Btm	M.223		10443	.89	"	1.104	33.5	30.3	23	Rejected
8	Shell	C.206		10460	1.09	1.22	1.33	37.4	28.1	26	
9	"	"		"	1.09	1.24	1.352	38.2	28.2	30.5	Cross piece
10	Shell Strap	K.227		10459	1.1	1.22	1.342	40.1	29.8	26	
11	Front Top	F.215		10478	1.03	1.12	1.154	34.1	29.5	24.5	
12	Furnace Front	"		10483	.75	1.24	.93	26.45	28.4	28.5	
13	"	C.207		10488	.76	"	.942	28.05	29.7	26	
14	B.K. Lufe pl.	"		10490	.94	"	1.166	34.2	29.3	24.5	
15	Washers	E.194		10497	.99	"	1.228	35.6	28.9	22.5	
16	Firebox	C.226		2477	.55	1.13	.622	17.45	28.0	25.5	
17	"	D.201		2570	.55	1.26	.693	19.4	27.9	30.5	
18	"	"		"	.555	1.27	.705	19.1	27.0	34	Cross piece
19	Shell Strap	A.223		10225	.88	1.16	1.021	30.1	29.4	20.5	Cross piece
20	B.K. Lufe plate	F.228		10297	.96	1.14	1.094	32.8	29.9	21	
21	Shell	K.253		10316	1.09	1.28	1.395	40.65	29.1	21	
22	"	"		"	1.09	1.12	1.221	36.1	29.5	23	Cross piece
23	Firebox Btm	F.226		1526	.86	1.32	1.135	32.3	28.4	22.5	
24	Shell	H.187		10505	1.1	1.22	1.342	42.1	31.3	22	
25	"	"		"	1.1	1.16	1.276	40.2	31.5	23	Cross piece
26	"	"		"	1.11	1.21	1.343	38.2	28.4	28.5	Annealed
27	"	"		"	"	"	"	39.85	29.6	28	Cross piece
28	Shell	F.232		10519	1.09	1.22	1.33	38.6	29.0	23.5	
29	"	"		"	1.09	1.16	1.264	36.65	28.9	27	Cross piece
30	Shell	H.189		10546	1.1	1.17	1.287	35.5	27.5	28	
31	"	"		"	1.07	1.16	1.241	32.3	26.0	30	Cross piece

Fee ..... £ : :

Expenses £ : :

£ : :

To be paid by

Surveyor, Lloyd's Register.



TESTS OF BOILER STEEL.

Tests of — Steel plate manufactured by The Steel Co of Scotland of Bochain for Boilers No. 844 to be constructed by C. Richardson & Sons of Newcastle for the S.S. "Gairn Castle"

Date first visit last visit No. of visits

The specified in the accompanying copy of Advice Notes were rolled from charges. The tensile test has been applied to samples as set forth below, and the temper and bending tests

When a second test is applied, the result should be recorded immediately below the record of the original test. The number of plates or bars included in a rejection must be clearly stated.

No.	Purpose.	Charge Mark.	No. of plates or bars in same charge.	Mark on plate and test piece.	Dimensions.			Ultimate Stress.		Exten. in 8 ins. %	Remarks.
					Thickn.	Brdth.	Area.	Total.	Sq. Inch		
					Ins.	Ins.	Ins.	Tons.	Tons.		
1	Shell	0.221	10534	1.09	1.16	1.264	33.3	26.3	23.5	Cross piece — do —	
2		—		1.07	"	1.241	34.3	27.6	25		
3	Tube plate	J.243	10587	.77	1.17	.901	25.0	27.4	30		
4	"	"	10589	.95	1.16	1.102	30.7	27.8	27.5		
Long X cross piece tested off each Shell plate.											

Long Cross piece tested off each Shell plate.

Fee ..... £ : :  
 Expenses £ : :  
 £ : :

To be paid by

Surveyor, Lloyd's Register.

Glasgow 31/8/85



Wm. L. Richardson Esq.  
No. 844 B<sup>rd</sup>



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