

No. 2634.

TESTS OF BOILER STEEL.

Tests of 99 Steel plates manufactured by Messrs J. W. Beardmore of Parkhead for Boiler No. 812 to be constructed by T. Richardson & Sons of West Hartlepool for the S.S. 211
Date first visit April 27th last visit May 29th/85 No. of visits 14

The steel plates specified in the accompanying copy of Advice Notes were rolled from charges. The tensile test has been applied to 30 samples as set forth below, and the temper and bending tests to samples representative of every plate advised the results being satisfactory

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	3" 8" x 10" x $\frac{7}{8}$	B95		90	.88	1.05	.924	28.2	30.5	24	
2	" " " "	A242		53	.84	1.05	.913	23.25	25.4	23	bad sample
3	" " " "	"		"	.84	1.06	.922	24.98	24	20	duplicate passed
4	14" 5 $\frac{1}{2}$ " x 53 $\frac{1}{2}$ " x $\frac{3}{4}$	D34		284	.46	1.04	.813	21.18	26	24	
5	" " " "	A244		285	.44	1.29	.993	24.55	24.4	28	
6	" " " "	K211		284	.44	1.1	.844	24.42	28.8	31	
7	6" 1" x 41" x $\frac{13}{16}$	L124		288	.81	1.05	.85	24.65	29	28	
8	20" 8 $\frac{1}{2}$ " x 66 $\frac{1}{2}$ " x $\frac{1}{8}$	K211		296	1.04	1.06	1.134	31.45	24.4	28	
9	14" 1" x 40" x $\frac{3}{4}$	D34		294	.44	1.29	.993	26	26.1	26	
10	4" 2R x 65 $\frac{1}{4}$ " x 1	M34		300	1.01	1.05	1.06	28.4	24	28	
11	18" 1" x 41" x $\frac{17}{32}$	M43		443	.54	1.38	.486	23.62	30	25	
12	21" 0" x 66 $\frac{1}{2}$ " x $\frac{1}{8}$	M162		640	1.12	1.06	1.184	33.83	28.5	24	
13	" " " "	L40		644	1.14	1.06	1.24	34.9	28.1	30	
14	" " " "	K42		648	1.08	1.06	1.144	33.55	29.3	28	
15	6" 1" x 41" x $\frac{13}{16}$	L38		560	.8	1.32	1.056	31.8	30.1	25	
16	5" 6" x 43" x $\frac{5}{8}$	M42		563	.64	1.23	.484	21.08	26.4	30	
17	5" 8" x " x "	D104		485	.63	1.25	.484	21.85	24.4	11	Rejected
18	21" 0" x 66 $\frac{1}{2}$ " x $\frac{1}{8}$	M65		486	1.14	1.03	1.144	34.85	32.2	24	Rejected
19	" " " "	M41		823	1.12	1.05	1.146	34.4	29.2	21	
20	6" 1" x 41" x $\frac{13}{16}$	M191		824	.49	1.28	1.011	24.1	26.8	25	
21	21" 0" x 66 $\frac{1}{2}$ " x $\frac{1}{8}$	K111		928	1.11	1.03	1.143	34.4	30	15	Rejected, failed in bend test
22	" " " "	M65		934	1.13	1.04	1.145	36.54	31.1	23	Rejected, failed in bend test
23	" " " "	K44		60	1.15	1.06	1.219	36.1	29.6	24	
24	" " " "	M41		396	1.1	1.02	1.122	32.8	29.2	26	
25	" " " "	B44		448	1.11	1.06	1.146	36.13	30.4	24.5	
26	" " " "	D43		482	1.14	1.04	1.219	34.5	30.4	23.5	
27	9" 6" x 36" x $\frac{1}{2}$	K128		446	.51	1.54	.485	21.48	24.4	28	
28	3" 8" x 10" x $\frac{7}{8}$	L81		940	.89	1.05	.934	25.6	24.4	28	
29	20" 8 $\frac{1}{2}$ " x 66 $\frac{1}{2}$ " x $\frac{1}{8}$	D89		96	1.06	1.02	1.081	31.65	29.2	24	
30	5" 6" x 43" x $\frac{5}{8}$	A16		988	.65	1.25	.812	23	28.3	24	

Fee £ : :

Expenses £ : :

£ : :

To be paid by Messrs J. W. Beardmore Glasgow
2-6-85