

No. 672.

(Received in London Office, 17th JAN. 83)

TESTS OF BOILER STEEL.

Tests of 213 Steel Plates manufactured by *Mr. D. Colville of Motherwell.*
for Boiler No. 77. to be constructed by *the Brw. Eng. Co. of Barrow-in-Furness.*
for *the S.S. "City of Rome", (additional boilers).*

Date first visit *30th Oct/82* last visit *30th Dec/82* No. of Visits *9*.

The steel plates specified in the accompanying copy of Advice Notes were rolled from
140 charges. The tensile test has been applied to *23* samples as set forth below,
and the temper and bending tests to samples representing each of the
plates advised, all of which proved 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.		
					Inch.	Inch.	Inch.	Tons.	Tons.	%	
1	Combustion	D. 549	1	3380	.5	1.492	.746	21.07	28.2	23.7	
2	Chamber	E. 205	3	3381	.48	1.072	.574	14.67	28.5	24.7	
3	- - -	C. 537	23	3414	.543	1.015	.985	20.22	28.6	22.5	
4	- - -	S. 218	2	3476	.534	1.52	.842	24.14	28.6	27.5	
5	Front tube plate	F. 200	3737	.74	1.425	1.054	30.01	28.4	27.5		
6	Back - - -	F. 210	3688	.67	1.02	1.219	33.78	27.7	24.0		
7	Combustion	D. 555	4	327	.494	1.246	.615	18.56	30.1	24.0	
8	Chamber	S. 224	6	420	.55	1.375	.756	22.16	29.3	19.2	Rejected.
9	- - -	S. 810	10	469	.48	1.58	.758	21.6	28.4	24.5	Deficient elongation.
10	Outer shell	F. 228	2	66	.8	1.57	1.256	35.07	27.9	25.0	
11	Inner - -	C. 558	1	2571	.833	1.02	1.516	41.1	27.1	27.8	
12	Outer - -	F. 281	8	1614	.735	1.35	.992	28.3	28.5	27.5	
13	Butt straps - outside	E. 262	8	1518	.615	1.102	.727	20.08	27.6	22.5	
14	Outer shell.	S. 264	3	1657	.81	1.362	1.103	31.5	28.5	25.0	
15	Back tube plate	C. 579	5	1713	.68	1.36	.924	26.12	28.25	24.3	
16	Outer shell.	F. 284	2	1838	.78	1.36	1.06	30.84	29.0	25.0	
17	Inner - -	F. 285	3	1905	.794	1.23	.976	28.9	29.6	28.7	
18	Butt straps, outside	C. 586	6	2006	.615	1.215	.747	20.86	27.9	30.0	
19	Back middle.	F. 288	2	2068	.76	1.34	1.018	28.4	27.8	22.5	
20	Front tube plate	F. 687	4	2104	.732	1.7	1.244	34.28	27.5	25.0	
21	Combustion Chamber	E. 271	2	2358	.485	1.23	.596	16.13	27.0	26.4	
22	Manhole in front	C. 490	2	2974	.69	1.32	.91	25.86	28.4	20.0	
23	Outer shell.	F. 233	1	2242	.55	1.297	.713	18.64	26.1	28.5	Rejected by the Board of Trade Surveyor

Fee £ : :

Expenses £ : :

11 £ : :

To be paid by

Mr. D. Colville

© 2018



Surveyor, Lloyd's Register

Lloyd's Register
Foundation