

Tests of Steel Plates and Rivets to be used in the construction of Boilers to be made by *The Bessemer Process*

of *the Motala Company*, for *Steam Ship "Novoselsky"* Port *Göthenburg 4th of Nov 1880*

No.	MAKERS OF STEEL.	DATE OF TEST.	WHERE TESTED.	TENSILE TESTS OF PLATES.											
				Purpose intended for.	Number of Plates Selected from.	Surveyor's Mark on Plate, and Test-piece.	Dimensions of Test-piece.			Ultimate Stress.		Contraction of Area at Fracture.	Stress Per Sq. Inch of Fractured Area.	Extension.	
							Br'dth.	Thick- ness.	Area.	Total.	Per Square Inch.			In Sin.	Per Cent.
							Inches.	Inches.	Sq. Ins.	Tons.	Tons.	Per Cent.	Tons.	Inches.	
1	Motala Steel	28/5 1880	Motala	Shell	1	RP 1/3	35.0	14.90	521.10 0.808	23.35	28.90	55.00	64.		21.00
2	and Iron Company	" "	"	"	2	RP 3/4	34.8	15.00	522.00 0.809	21.62	26.72	55.46	54.05		22.00
3	"	" "	"	"	1	RP 4/3	34.7	15.10	522.47 0.812	21.55	26.56	54.50	58.40		24.00
4	"	" "	"	"	2	RP 2/1	35.5	15.15	537.83 0.824	23.60	28.29	50.20	57.00		23.50
5	"	" "	"	"	1	RP 3/5	34.5	15.10	520.95 0.807	22.55	27.82	54.50	61.44		22.00
6	"	" "	"	"	1	RP 3/5	35.0	14.80	512.00 0.803	21.10	26.27	54.50	57.80		22.50
7	"	" "	"	"	2	RP 3/4	34.6	15.20	529.58 0.821	21.10	26.19	54.55	57.75		20.00
8	"	3/6 "	"	"	2	RP 3/5	34.6	15.25	527.65 0.818	21.65	26.43	56.82	61.33		20.50
9	"	" "	"	"	2	RP 3/4	35.4	15.10	524.54 0.829	22.25	26.34	54.00	59.40		25.00
10	"	" "	"	"	1	RP 3/5	34.6	14.75	510.95 0.790	20.40	25.82	60.00	64.50		25.00
11	"	" "	"	"	1	RP 3/4	34.9	15.20	525.97 0.828	22.55	27.23	46.00	50.40		23.00
12	"	" "	"	"	1	RP 2	34.5	15.25	526.13 0.816	22.60	27.69	47.00	52.31		21.50
13	"	" "	"	"	2	RP 3/5	35.0	15.25	527.75 0.827	22.00	27.81	46.80	52.27		21.00
14	"	" "	"	"	1	RP 3/4	35.0	15.20	525.50 0.820	22.50	27.11	46.00	50.22		21.00
15	"	" "	"	"	1	RP 3/5	35.0	15.00	525.00 0.810	20.65	25.50	56.80	59.00		27.50
16	"	" "	"	"	1	RP 3/5	34.9	15.15	528.73 0.820	22.35	27.26	47.00	51.26		20.00
17	"	" "	"	"	1	RP 2/5	34.5	15.45	525.02 0.826	22.50	27.24	47.70	52.08		21.50
18	"	" "	"	"	1	RP 3/5	35.3	15.20	540.09 0.827	22.90	28.43	56.40	65.20		20.00

TEMPER TESTS OF PLATES.						SHEARING TESTS OF RIVETS.					
No. of Test.	For what purpose intended.	Dimensions.		Required Curve.	RESULTS.	No. of Test.	Diamtr. of Rivet.	Area of Rivet.	Ultimate Stress.		Sketch of Joint and Remarks.
		Br'dth.	Thick-ness.						Total.	Per Sq. Inch.	
Two tests on each Number of Plate - from end	Shell	Inches. 2"	Inches. 5/8"	13/16	Bent to 10 1/2"		Inches.	Sq. Inches.	Tons.	Tons.	
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 10 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						
	"	"	"	1 1/8	" 9 1/2"						

Two tests on each Number of Plates - from and from