

Plate Mills in Scotland © C Findlay 2005

Works			Size of Rolls				Plate Production		Prime Mover	Type	Bore inch	Stroke inch	Press PSI	Ratio	Remarks	
			Roughing Dia inch	Roughing Length Feet	Finishing Dia inch	Finishing Length Feet	Started	Ceased								
1	Hallside	Two Stand Reversing	26	7	26	7	1877	1890	Steam Engine	Twin Reversing	34	48		Direct Coupled		
2	Hallside	Two Stand Reversing	26	7	26	7	1878	1890	Steam Engine	Twin Reversing	34	48		Direct Coupled		
3	Dalzell	Two Stand Reversing	No 1 Plate Mill	28	8	28	8	1880	1921	Steam Engine	Twin Reversing	40	54	80		Engine also drove 27-inch bar mill. Probably the mill that rolled plates for the Titanic.
4	Dalzell	Two Stand Reversing	No 2 Heavy Plate Mill	36	14	34	10.5	1914?	1970	Steam Engine Electric	Twin Reversing 4600 HP	46	60		1.25:1	Engine rebuilt in 1906 as 38.5 in x 55 in x 60 in twin tandem compound at 200 PSI; mill train reconstructed in 1937 and rolls altered to 44.5 in x 14 feet and 44.5 in x 9.5 feet. Ratio of reduction gear 2.5:1. Converted to electric drive in 1955. Ilgner sets later used for 4-High Mill
5	Dalzell	Two Stand Reversing	No 3 Plate Mill	28	7	30	6.5	1914?	1927	Steam Engine	Twin Tandem Compound Reversing	37 & 56	54		Direct Coupled	
6	Glengarnock	Two Stand Reversing		26	7.5	26	7.5	1885	c 1900	Steam Engine (Miller & Co Coatbridge)	Twin Reversing	42	60	80		Engine also drove 36 in x 7.5 ft blooming & slabbing mill until 1909 when additional engine of same size was installed for plate mill
7	Clydebridge	Two Stand Reversing	No 1 Heavy Plate Mill (R B Tennant)	29	8	29	8	1887	1921	Steam Engine (Lamberton)	Twin Reversing	42	60	100		From 1907 engine also used for No 3 single stand Plate mill
8	Clydebridge	Two Stand Reversing	No 2 Light Plate Mill	29	8	29	8	c 1888 - 1894	1921	Steam Engine (Markham)	Twin Reversing	38	60	100		
9	Mossend	Two Stand Reversing		29	8	29	8	1880?	1905	Steam Engine	Beam Reversing			50		
10	Mossend	Two Stand Reversing		26	6.5	26	6.5	1880?	1905	Steam Engine	Beam Reversing			50		
11	Calderbank	Two Stand Reversing		36	10	36	8.5	1890	1929	Steam Engine	Twin Reversing	48	54	80	2.35:1	Roughing Rolls increased to 12 ft long and later altered back to 10 ft.
12	Wishaw	Two Stand Reversing		30	8	30	8	1893	1924	Steam Engine	Twin Reversing	52	60	100	2.5:1	Engine also drove 40in x 12ft single stand plate mill
13	Blochair	Two Stand Reversing		28	8	28	8	1895	1923	Steam Engine	Twin Tandem Compound Reversing			100		Continuously running engine also drove 28in x 19in x 8.5 ft three-high mill
14	Blochair	Two Stand Reversing		33	10.75	28	8	1895	1946	Steam Engine	Twin Reversing	42	54	100	2.16:1	Rolls increased to 34in x 13 ft and 34in x 10ft.
15	Blochair	Two Stand Reversing		32	8	32	8	1923	c1962	Steam Engine	Tripple Reversing	46	54	100	Direct Coupled	Mill train reconstructed in 1941, and rolls increased to 34in x 8ft
16	Clydesdale	Two Stand Reversing		28	7.5	30	7.5	1901	1922	Steam Engine	Twin Reversing	42	60	100	Direct Coupled	
17	Clydesdale	Two Stand Reversing		36	12	35	10.5	1905	1922	Steam Engine	Twin Reversing	52	60	100	1.5:1	
18	Lanarkshire	Two Stand Reversing		27	7	33	7	1924	1944	Steam Engine	Twin Reversing	54	60	100	Direct Coupled	27in blooming & bar mill originally installed in 1889
19	Wishaw	Single-Stand Reversing				40	12	1893	1924	Steam Engine	Twin Reversing	52	60	100	2:1	Engine also drove 30inx 8ft two stand reversing plate mill
20	Clydebridge	Single-Stand Reversing	No 3 Plate Mill			42	13.5	1907	1914	Steam Engine	Twin Reversing	38	60	100	Direct Coupled	Engine also drove No 1 29inx 8ft two stand reversing plate mill. Mill Housings and Bed Plate altered at Dalzell to become No 2 Cogging Mill and these Housings then in use from May 1918 until the re-construction of the Cogging Mill in 1951.
21	Parkhead	Single-Stand Reversing				49	15	1913	1961	Steam Engine	Twin Reversing	42	60	120	7.38:1	Armour-plate rolling mill
22	Blochair	Duo reversing universal				20 to suit 30 inch max width		1885	c 1900	Steam Engine	Twin Reversing	36	48	100		
23	Wishaw	Duo reversing universal				30	6.5	1906	1924	Steam Engine	Single Compound Reversing	42 & 67	48	160		
24	Clydesdale	Duo reversing universal				34	8	1925	1933	Electric Reversing	4500 HP				0-80-135	
25	Blochair	3-High		28	Back up roll	19	8.5	1888	1894	Steam Engine	Twin Tandem Compound Continuously Running				70 RPM	Engine, with flywheel, also drove 28in x 8ft two-stamd plate mill.
26	Mossend	3-High		29.5	Back up roll	21.5	7ft 8.5in	1908	1930	Gas Engine	1850 HP				75 RPM	Gas engine replaced in 1918 by electric motor, 2000 hp. 300/270 RPM coupled to mill through single reduction gear unit.
27	Calderbank	3-High		28	Back up roll	19	7	1909	1929	Steam Turbine	750 HP				70 RPM	
28	Clydebridge	3-High		36	Back up roll	24	9	1923	1962	Electric Reversing	4500 HP				0-65-110 RPM	
29	Clydebridge	4-High		60	Back up roll	39	11	1962	1982	Electric Reversing	2 x 5000 HP				Direct Coupled	Heat Treatment plant still operating 2006.
30	Dalzell	4-High		72	Back up roll	39.4	13.8	1970	Still operating 2006	Electric Reversing	2 x 4600 HP					