

No. 2591 whilst in the employ of Wadey at the Heatherton Asylum project. Note the radiused top corners of the front plate. Also the 'Sunflower' top to the chimney; typical of the original equipment on these early locos, but which seemed to be discarded early. Photo: Bruce Macdonald collection

Krauss Locomotives in Australia *A close look at their characteristics and an overview of their migrations* by Bruce Macdonald

At the time that Charlie Small and I embarked on the study of Krauss locomotives in Australia in 1961, it represented a ground-breaking approach wherein the entire Australian distribution of the products of one manufacturer was traced in detail. The results were published in the ARHS *Bulletin* No. 391 of May 1970. Since that time more information has come to hand which corrects and adds to that of thirty years ago. It was therefore considered appropriate that, as an addendum to Peter Evans' contribution on Krauss agencies (see LR 150) covering the Company's most productive period as far as Australian useage is concerned, our original study be revised and updated accordingly. It does not claim to be a definitive work because there are still a lot of uncertainties which may, in the future, be resolved. All constructive comments are invited.

Subsequent to the publication of the ARHS article, I was fortunate in obtaining photocopies of the Krauss order books through Dr Gerhard Nicolai, an engineer with Krauss-Maffei. These disclosed previously unknown details of the locomotives.

Krauss built locomotives of every conceivable gauge from 15in to 5ft 6in for all parts of the world. While they specialised in small industrial and light railway types they also built many main line engines.

The Krauss company amalgamated with J.A Maffei A G in 1931 to form Krauss-Maffei. A G. Maffei had built 5,896 locomotives at its Munich works during the period from 1831 to 1930. The new company exists today as a manufacturer of railway and heavy engineering products. The "Leopard" tanks used by the Australian Army were made by Krauss-Maffei.

It has been found that Krauss adopted a sophisticated system of standard designs and parts and this system was used in the identification of individual locomotives or groups of locomotives. Types of locomotives having common characteristics would be manufactured with a identification using Roman numerals. Individual production groups would be identified by a sub group of letters in lower case. (e.g XIV ff). The latter would progress through the alphabet to reflect subsequent productions and would be repeated after zz.

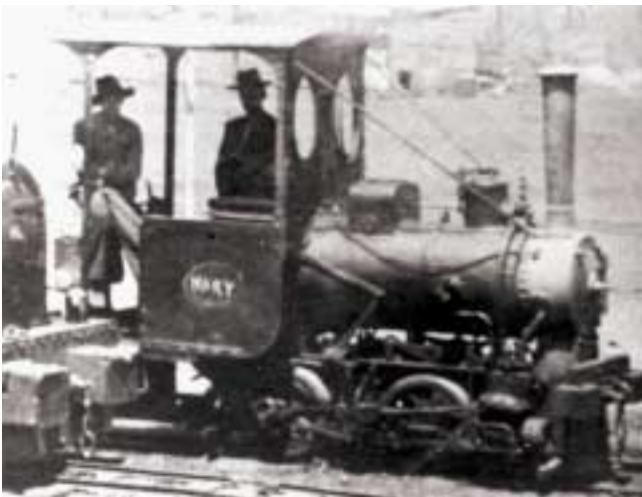
A page of the order book is reproduced opposite, and it shows, in column order, the factory in which the loco was built, being either Sendling or Marsfeld in the Munich area or at Linz in Austria. The next columns show the serial number, class and subclass, gauge in mm, horsepower, number of axles, loco name and/or road number if given, customer, date ordered, date required for completion, date despatched, weight in kg, price and shipping point. With regard to the number of axles, if a four coupled loco had a bogie it was shown as 2/3 but there is no indication if it was a 2-4-0 or 0-4-2. It will be seen that above the 2584 there is a note telling that there are ten items in that production batch of 30-40 horsepower tank engines. It should be noted that on the Continent, tank engines are referred to as "tenderlokomotivs".

The majority of 0-4-0T locomotives for Australia were 30 horse power class IV. There is an anomaly here because in this quantity there are some which weigh 6.5 tons and have 160 mm diameter cylinders and others which weigh 7.5 tons with 180 mm diameter cylinders, so I cannot understand how they could be of equal horsepower. Even the boilers were different for each, although each had 175 psi pressure.

The ten-ton 0-4-0T's had 225mm diameter cylinders. A stroke of 300mm was common for all. Driving wheels were 600mm diameter disc type with two holes for access for oiling the axle-boxes. Ten ton 0-4-0T's and 6854 had spoked wheels. Another peculiarity is that the four-coupled engines had Alligator type cross-heads (two bars) but six-coupled engines had Laird type (single bar). I am unable to see a practical reason for this.

Krauss were pioneers in the adaption of the main chassis to incorporate a water tank, known as a "well tank". This had the effect of lowering the centre of gravity of the loco and became a feature of small Continental built locos. A side effect of this was that it necessitated the use of "outside" valve motion which, in the case of Krauss, was of the "Stephenson" type. These features were typical on those locos supplied to Australia, except 6854 which had Walschaert valve gear. Our ten-ton 0-4-0Ts and 0-6-0Ts, except serial Nos. 3444, 6415 and 6416, had supplementary side tanks.

For the 0-4-0T type prior to No.2640 the throttle valve, attached to the front of the dome, had a flat, horizontal top cover. Subsequently this cover was domed and set at about 45 degrees. Prior to 2459 the rectangular front buffer plate had square corners. Subsequently they were radiused on the top corners. From 3267 all four corners were radiused. From 3423 to 4387 the safety valves were like buffalo horns on top of the dome. Prior and after, they were the Salter type with the vertical springs behind the dome. Prior to 4526 the cab windows were elliptical. Subsequently they were round. All 0-6-0Ts except 3444 had round windows. On class XIV the valve chest on the cylinders was placed towards the rear of the cylinder as opposed to the front. In all cases, the valve spindle had incorporated in it a turnbuckle with a left and right screwed thread, which allowed the easy adjustment of valve travel to provide the required "lap" and "lead".



No. 1824, in use at the Lancefield Goldmine, Beria, with Kalgoorlie Boulder Firewood Co., circa 1910. Photo: Adrian Gunzburg collection

Of course there are the inexplicable exceptions - 3263, 3266, 4722, 5679 and all the Mt. Lyell ten-ton locos had rectangular cab windows. 3267 & 4387 had a much "thicker" front "buffer beam" (illustrated on pages 5 and 8 of LR 150). The four locos at Burrenjack had the dome centrally placed on the boiler instead of close to the smokebox.

In the following listing, the Krauss serial number is shown with the date, number of axles, gauge in mm, horsepower, class type and selling agency. Below this is a chronology of its ownerships. It must be understood that the dates should not be taken as specific in all cases due to the vagueness of some information. A year either side of the date given may apply. The reference figures show the source of the later information. Unreferenced entries are from the former work or the author's records.

I would like to acknowledge and thank those persons who have contributed their information to increase this common wealth of knowledge.

The following abbreviations denote the agent. SKA= Shadler, Koeniger & Aron, B= Bloomfield Bros, D= Diercks

& Co., L= Lohmann & Co., AK= Arthur Koppel. The word "stored" or "St" means that the loco was out of regular use or possibly abandoned, The word "scrapped" or "Sc." is used to imply that it was dismantled to a point of being largely irretrievable. A question mark signifies an unknown or doubt. The code WA, SA, V, NSW, Q and T following the owners name denotes the Australian state in which the ownership existed, being Western Australia, South Australia, New South Wales, Queensland and Tasmania. In some cases the original owning Company changed name or ownership during the time of the loco's tenure and this is shown by following without wider spacing e.g. - J Smith (1922) Smith & Jones.- In some cases irrelevant changes are not shown.

For some engines or groups of engines a commentary on the data or lack of data helps clarify the situation. With regard to the seven 7.5 ton locos owned by Mt. Lyell, it has been difficult to trace specific locos through the boiler records because, the boiler inspection authority, having issued an official boiler number at the initial loco inspection, expected this boiler to remain with that loco. However, boilers could be swapped from loco to loco during overhauls, creating confusion both for the inspectors and researchers.

KRAUSS LOCOMOTIVES IN AUSTRALIA Serial Table

1824 1888 2/2 600 20 IV h SKA

1888 - Displayed at Melbourne Centennial Exhibition (V).²
1889 - unknown buyer. 1900 - WA Builder's Lime & Stone Co. Perth.(WA).⁵ 1905 - Briggs & Co. Perth (WA) Stored.⁵ 1906 - J Haydon Perth (WA) stored.⁵ 1908 - Kalgoorlie & Boulder Firewood Co. Beria (WA). 1935 - Derelict at Beria c.1950 - Sc.⁵

2178 1889 2/2 610 30 IV qq SKA

1889 - J Robb for Victoria Dock Construction (V). 1892 - SA Water Supply, Happy Valley Reservoir Construction. 1896-1912 - unknown. c.1912 - Hassell Marion Bay Gypsum Co. (SA). 1925 - Victor Electric Plaster Mills Ltd. c.1928 - stored. c 1950 - Sc.⁴

2179 1889 2/2 610 30 IV qq SKA

1889 - J Robb for Victoria Dock Construction (V). 1892 - SA Water Supply Happy Valley Reservoir Construction. 1896-1910 - unknown, possible contract job in Victoria. 1910 - Norton Griffith contract for NSW Railways.⁷ 1913 - NSW Public Works Dept. No.23.⁷ 1917 - NSW Govt Rwy No. Lo 43.⁷ 1936 - Newbold Silica & Firebrick Co. Pattimore quarry (NSW). 1938 - converted to petrol engine by adaption of "Leyland" truck engine. 1945 - transferred to Home Rule quarry. 1947 - Stored.⁷ 1973 - donated to Illawarra Light Railway Museum Society (NSW).⁷

2180 1889 2/2 610 30 IV qq SKA.

1889 - J Robb for Victoria Dock Construction (V). 1892 - SA Water Supply, Happy Valley Reservoir Construction. 1896 - Tasmanian Govt Rwy No.H 1. c.1930 - Dismantled. c.1951 - Scrapped.³

2181 1889 2/2 610 30 IV qq SKA.

1889 - J Robb for Victoria Dock Construction (V). 1892 - SA Water Supply, Happy Valley Reservoir Construction. 1896-1903 - Unknown. 1903 - East Murchison United mine. (WA).⁵ 1919 - Western Machinery Co., Kalgoorlie (WA).⁵ 1963 - Aust. Rwy Historical Society (WA).⁵ 1984-WA Lt Rwy Pres. Assoc., Caversham (WA)¹¹



No.2178 working on the Happy Valley project. Note the flat top throttle chamber. Photo: Bruce Macdonald collection

2195 1889 2/2 610 30 IV ss SKA

1889 - J Robb for Victoria Dock Construction (V). 1892 - SA Water Supply, Happy Valley Reservoir Construction. 1897 - J Robb's Cudgen sugar mill. (NSW). 1912 - Colonial Sugar Refining Co. c.1923 - Transferred to CSR Condong Mill (NSW). c.1941 - Sc.

2196 1889 2/2 610 30 IV ss SKA

1889 - J Robb for Victoria Dock Construction (V). 1892 - SA Water Supply, Happy Valley Reservoir Construction. 1896-1900 - Unknown. 1900 - Stannary Hills Mines & Tramway Co. *POMPEY* (Q). 1912 - stored. 1912 - J Darling & Co. 1926 - It is uncertain if this loco was scrapped with the demolition of the mine or included with the tramway and stock purchased by the Queensland Government for use with the Irvinebank ore treatment works, remaining stored on site until that equipment was scrapped c.1941.¹⁴

Note re above locomotives: It is reasonably certain that the above six locomotives were ordered by Robb and that he used them on his consequent contracts. There is a photograph of a loco on the Happy Valley project numbered "6".

2437 1891 2/2 610 30 XIV t B

1891 - Bloomfield Bros for construction of Oceana tramway. (T).⁹ 1892 - Oceana Silver Mining Co. (T).⁹ 1893 - Western Silver Mining Co. *LITTLE WESTERN* (T).⁹ c.1916 - Queensland Govt Rwy construction.⁹ 1921 - State Rivers & Water Supply Commission (V). 1939 - Sc.¹⁰

2459 1891 2/2 610 30 IV yy B

1891 - Owner unknown. 1899 - Tasmanian Govt Rwy "No. H 3" (T).³ 1906 - Victorian Public Works Dept, Coode Canal work.² 1911 - Rubicon Timber & Tramway Co. (V). 1935 - stored. 1951 - Sc.¹

2589 1891 2/2 610 30 IV bc B

1891 - Owner unknown. 1898 - Tasmanian Govt Rwy "No. H 2" (T).³ 1906 - Victorian Public Works Dept, Coode Canal work.² 1908 - Corrimal-Balgownie Coal Co. (NSW). 1933 - stored. 1955 - Dumped.⁷ 1973 - Some parts recovered by R Hague for preservation.

Note regarding Nos. 2459 and 2589. Original owner unknown. One or possibly two Krauss locos were used at the Tarrawingee flux quarry near Broken Hill between 1892 and its closure in 1898. These two locos could have been available.

2591 1891 2/2 610 30 IV bc B

1891 - Owner unknown. 1895 - Mt Lyell Mining & Rwy Co. No.1 (T). 1908 - Wadey & Co. Heatherton Asylum

construction *THE NANCY* (V). 1911 - Metrop. Abattoir Construction (SA).⁴ 1912 - FA McCarthy, contractor *NANCY* (SA).⁴ 1913 - J Timms, contractor. (SA).⁴ 1915 - HT Smith, railway contractor *NANCY* (SA).⁴ 1917 - Australian Salt Co. Lochiel (SA).⁴ 1919 - Rubicon Lumber & Twy Co.(V).⁴ 1935 - stored. c.1955 - Sc.²

2640 1892 2/2 610 30 IV cd B

1893 - Zeehan Twy Co. (T).⁹ 1908 - Dunkley Bros Tullah Twy *PUPPY* (T).⁹ 1924 - Dunkley Bros Trowutta sawmill (T).⁹ 1934 - Australian Commonwealth Carbide Co., Ida Bay quarry (T). 1938 - Sc.⁹

3263 1895 2/2 610 30 IV vw B

1896 - Plane Creek Central sugar mill *COFFEE POT* (Q).¹⁶ 1911 - Aust. Estate & Mortgage Co. Palms sugar mill (Q). 1919 - became Amalgamated Sugar Mills P/L.¹¹ 1924 - ASMPL Pleystowe mill No.6. 1945 - stored. c.1947 - dumped on Pioneer River bank.¹⁶

3266 1895 2/2 610 30 IV vw B

1896 - Plane Creek Central sugar mill (Q).¹¹ 1907 - Markwick and Macdonald banana plantation (Q).¹¹ 1916 - Sth Johnstone Central sugar mill. No.6 (Q). 1945 - Stored. 1955 - Sc.¹¹

3267 1895 2/2 610 30 IV vw B

1896 - Mt. Lyell Mining & Rwy Co.No.2. (T). 1908 - Wadey & Co. Heatherton Asylum construction *ELFREDA*. 1911 - Metrop. Abattoir construction. *ELFREDA* (SA). 1911 - The Mourilyan Syndicate Ltd, Mourilyan sugar mill. *FREDA* (Q). 1914 - became Aust. Sugar Co. Ltd. 1955 - dismantled. Frame used as transporter wagon for mill rollers.¹¹

On the Krauss shipping list there is an intriguing notation bracketing the above three locomotives together and stating "North Eaton(sic) Central Mill.?" In different writing, this is followed by two short illegible words and, barely legible but beginning with what looks like "Tin—" (a word of 10 letters) followed by another of six letters and the date of "23.3.14".

3423 1897 3/3 610 55 XVIII II AK

1897 - Gin Gin Central Milling Co. sugar mill. *STELLA* (Q). 1967 - B Macdonald, Museum of Historic Engines, Goulburn. *STELLA* (NSW). 1971 - Goulburn City Council Marsden Museum of Historic Engines *STELLA*. 1974 - Goulburn Steam Museum Ltd. "Stella". 1987 - Goulburn City Council. *STELLA*. 1989 - Dismantled. 2000 - Echuca Steam Railway (V).



No.2437 whilst working on railway construction in Queensland. Note the square corners on the front plate, and the valve chest set towards the rear of the cylinder block. Photo: Bruce Macdonald collection



No.3444 shown working at the Lake George mine.

Photo: Jim Longworth collection

3444 1896 3/3 610 20 XIV ff D

1897 - Lake George Mines Ltd. (NSW). 1902 - unknown. c.1920 - Victorian Govt Rwy's quarry.¹⁹ 19?? - Cameron & Sutherland (merchants). c.1930 - Wilson Lime Co. Mt Frome (NSW). c.1932 - dismantled. c.1940 - Sc.

According to a notation on the Krauss shipping list this loco was destined for Cairns (Q). The Mulgrave sugar mill ordered a loco through Diercks but refused to take delivery due to late arrival on 1/97. It is more than likely that 3444 was that loco.¹¹

3549 1897 2/2 610 30 IV zd D

1897-Mt.Lyell Mining & R'y Co. No.3.(T).

There has been a contention that this loco.was destroyed in an accident in 1909. Evidence of this is lacking Entry No.2301 in Boiler Inspection records shows that a boiler made by Mt.Lyell shops was inspected in 1920 fitted to loco No.3. No other information is available. See also 3729.

3554 1897 2/2 610 30 IV zd D

1897 - Kauri Freehold Gold Estates, Opitonui, New Zealand.¹¹ 1906 - Drury Brick & Tile Co. Auckland (NZ).¹¹ 1918 - Mt. Torlesse Coal Co. (NZ). 1928 - stored. 1950's - sc.¹¹

3644 1897 2/2 610 30 IV ze D

1897-Mt.Lyell Mining & Rwy Co. No.4 (T). 1911 - Aust. Estate & Mortgage Co. Palms sugar mill (Q). 1919 - became Amalgamated Sugar Mills Pty Ltd.¹¹ 1924 - AS MPL Pleystowe mill No.5.¹¹ 1953 - Farleigh Co-op. sugar mill PAW PAW.¹¹ 1957 - Cattle Creek Co-op. sugar mill PAW PAW. c.1965 - stored. c.19?? - Sc.¹¹



No.3423 shown working at the Goulburn Steam Museum

Photo: Bruce Macdonald collection

3729 1897 2/2 610 30 IV zg D

1898 - Mt.Lyell Mining & Rwy Co.No.5 (T). c.1933 - Great Boulder Gold Mining Co. No.1 (WA). 1953 - stored. 19?? - Scrapped.

In W.A. Boiler records there is a notation stating that the boiler was new in 1920. This raises the question of the identity of the G.B. loco. Is it M.L. 3 or 5?

3941 1898 2/2 610 30 IV zk D

1899 - Zeehan Tramway Co. No.1 (T). 1919 - Dunkley Bros. Zeehan (T). 1932 - J Howard Zeehan. c.1940 - stored. c.1950 - Deeded to Renison Assoc. Tin Mining as spare parts source. 1969 - scrapped.

4080 1899 2/2 610 30 IV zm D

1899 - Tasmanian Govt Rwy's No.H4 (T).⁹ 1926 - Catamaran Collieries Ltd (T). 1935 - Parts used to repair 4526. 193? - Scrapped.¹²



No.4087 in Rotary Park, Devonport, May 1982. Photo: Bruce Belbin

4087 1899 2/2 610 30 IV zm D

1900 - Nth Mt Lyell Copper Co. (T).⁶ 1903 - Mt Lyell Mining & Rwy Co. No.6 (2nd) (T).³ 1945 - Renison Assoc. Tin Mining Co. (T).⁹ 1959 - Combined with parts of 5800. 1960 - Stored. 1965 - Rotary Park, Devonport (T). 1983 - West Coast Pioneers Memorial Museum Zeehan (T).⁹

There is evidence that this loco.was No.6 in 1928¹⁸ Its identification prior to this would be uncertain. No.4387 (first No.6) was sold in 1910.

4298 1900 3/3 610 55 XVIII ac A.K.

1900 - Proserpine Central sugar mill No.5 BONNIE JEAN. 1955 - Stored. c.1960 - Sc.¹¹

4387 1900 2/2 610 30 IV zp D

1900 - Mt Lyell Mining & Rwy Co. No.6 (T).³ 1910 - Wadey & Co. Metrop. Abbatoir Construction (SA).⁴ 1912 - Hasell Marion Bay Gypsum Co. (SA).⁴ 1925 - Rubicon Timber & Twy Co. (V). 1935 - stored. 1957 - Scrapped.¹

4526 1901 2/2 610 30 IV zq D

1902 - Hendrickson & Knutson, Dunalley. (T).⁹ 1906 - Sandfly Colliery. (T).⁹ 1908 - Tasmanian Wallsend Colliery Co. (T). 1916 - Tasmanian Govt/Kingsborough Council (T).⁹ 1922 - Catamaran Colliery Co.(T). 1935 - combined with parts of 4080. c.1940 - Sc.¹²



No.4722 spent all its life at Plane Creek mill. In its declining years, it was utilised for weed killing duties. Photo: Ken Rogers via George Bond

4687 1901 3/3 610 55 XVIII ah AK

This loco. was despatched from Bremen in November 1901 for Australia. A note shows it was to be a duplicate of 4298. A hypothesis is that it was intended to be a second loco for Proserpine sugar mill, but possible bad times caused a cancellation or repossession by Koppel or Granowski, the Queensland agent, who stored it awaiting future sale.

1905 - Moreton Central sugar mill Nambour MORETON (Q). 1967 - Currie Park Nambour MORETON (Q).¹¹ 1972 - G Simpson. MORETON (Q).¹¹ 1978 - Exhibition Grounds Herston MORETON (Q). 1988 - R Robertson Yandina (Q) restored in appearance. Driven by a diesel engine. For use at the Ginger Plantation railway, Yandina (Q.)

4722 1902 2/3 (0-4-2) 610 50 XXVI zx AK

1902 - Plane Creek Central sugar mill, No.15G COMET (Q). 1957 - Sc.¹¹

5261 1905 3/3 610 55 XVIII at AK

1905 - Irvinebank Mining Co. BETTY (Q).¹¹ 1919 - State Treatment Works No.1 Irvinebank (Q).¹¹ 1922 - Qld Govt Rwy's, Innisfail Twy No.7 (Q). 1927 - stored. 1941 - Sc.¹¹

5479 1906 2/2 610 55 XVIII av L

1906 - Mt Lyell Mining & Rwy Co. No.7 (T). 1954 - Sc.

5480 1906 2/2 610 55 XVIII av L

1906 - Mt Lyell Mining & Rwy Co. No.8 (T). 1963 - West Coast Pioneers Memorial Museum, Zeehan (T).



No.5800, in its original form, as Zeehan Tramway Co. No.2.

Photo: JL Southern

5530 1906 2/2 610 30 IV bl L

1907 - Irvinebank Mining Co BABY (Q)¹⁴ 1919 - State Treatment Works, Irvinebank No.2 (Q). 1922 - stored. c.1941 - Sc.¹⁴

5671 1907 2/2 600 20 XIV af AK

1907 - Pacific Phosphate Co., Nauru.?

This loco was despatched to Sydney. A photo exists of a Krauss loco at Nauru showing it to be one of the rare XIV class. It also has round windows and an Arthur Koppel plate

The Krauss order book indicates it to be named NELLIE.

5679 1907 2/3(0-4-2) 610 50 XXVII av L

1907 - Plane Creek Central sugar mill, No.15F KAISER. 1956 - stored. 19? - Sc.¹¹

5682 1907 2/3(2-4-0) 610 40 IV bn L

1907 - Sandfly Colliery Co. (T).⁹ 1908 - Tasmanian Wallsend Colliery Co. 1916 - Tasmanian Government/Kingsborough Council.⁹ 1922 - Carbide & Electro Products Co., Ida Bay quarry (T). c.1948 - dismantled.⁹ 1962 - Boiler, tanks, cylinders & cab combined with frame etc. of 5800 by Tasmanian Steam Preservation Society.⁸

This locomotive was quite unique. It was not a "well tank" and had the driving wheels inside the frame. The wheelbase was very short and the cylinders were placed well back necessitating the throttle assembly to be placed on the rear of the dome. The reason for the purchase of such design features is incomprehensible, considering that orthodox 4526 was already working the line. The Krauss record gives no indication of the unusual features.



No.5682, in its original form, at the Lune River Quarry.

Photo: F Lewis

5800 1907 2/2 610 40 IV bo L

1907 - Zeehan Tramway Co. No.2 (T). 1918 - Dunkley Bros Zeehan.¹² c.1935 - RJ Howard.⁹ c.1952 - Renison Associated Tin Mines Ltd (T). 1959 - Boiler & parts used to recondition No.4087, remainder stored.⁹ 1962 - Tasmanian Steam Preservation Society. Restored to working order using parts of 5682. Used on the Second River Tramway at Karoola, then on the Redwater Creek Tramway at Sheffield (T).⁸

5869 1907 2/2 610 55 XVIII bf L

1907 - NSW Dept of Public Works, Burrinjuck DULCE. 1913 - NSW Water Conservation & Irrigation Commission, Burrinjuck DULCE.¹³ 1928 - E Sloman (merchant) Sydney.¹³ 1929 - North Eton Co-op. sugar mill No.5. (Q). 1937 - converted to 0-6-0T. 1964 - stored.¹¹ 1970 - R Aubrey, Forest Glen (Q).¹¹ 1972 - Seal Park, Tanawha (Q).¹¹ 1982 - E Morris, Kin Kin (Q).¹¹ 1988 - G Chapman, Kallangur (Q).

Translation

Zeichnung: *List of the main relationships*
 Verzeichnis der Hauptverhältnisse

2/2 ^{connected} gekuppelten ^{HORSE POWER} 55 PS Lokomotive ^{SERIAL NUMBER} Nr. 5945 Best.-Nr. XVIII bf
 ORDER NO

DAY OF DELIVERY: Tag der Ablieferung 18. November 1907.

RECEIVED BY Empfänger Lohmann & Co
Melbourne.

	Bestimmungsstation		
GAUGE	Spurweite (zwischen den Schienenköpfen)	610	mm
DIA. OF STEAM CYLINDER	Durchmesser des Dampfsylinders	225	"
PISTON TRAVEL	Kolbenhub	300	"
DIA. OF WHEELS	Durchmesser der Räder	620	"
AXLE SPACING	Radstand	1200	"
MAX STEAM PRESS.	Dampfdruck	12	Atm. atmospheres
HEATING SURFACE	Heizfläche	22,0	qm } square metres
GRATE SURFACE	Rostfläche	0,4	" }
BOILER WATER (LITRES)	Kesselwasser	755	l }
VOLUME OF FEEDER TANKS	Raum für Speisewasser	400 + 1050 = 1450	" } litres
FUEL STORAGE VOLUME	Brennmaterial, Holz, Kohlen	500	" }
TARE (without any fittings)	Leertgewicht der Lokomotive (ohne Ausrüstung)	8820	kg
GROSS (IN SERVICE)	Dienstgewicht	11610	"
		ohne Vorräte	mit Vorräten
AXLE LOADING	I. Achse	5840	kg
	II. "	5770	"
	III. "	-	"
	IV. "	-	"
	V. "	-	"
	VI. "	-	"

EFFECTIVE PULL: Effektive Zugkraft . . . 60% . . . 1470 „ 1770.

REMARKS: Bemerkungen: *) gewogen mit 755 Kg. Kesselwasser, 1450 Kg. Speisew.
 355 Kg. Kohlen, 140 Kg. Mannschaft, 90 Kg. Ausrüstung I.
 Americ. F.F. Kamin, seill. Wasserkästen, Westinghouse-Bremse,
 Messingsiederöhren.
 * weighed with
 755 kg boiler water
 1450 kg feeder tank water
 355 kg coals
 140 kg crew
 90 kg fittings, ~~American~~ F.F. Kamin water tanks on sides, Westinghouse brakes
 Brass heating pipes



No. 5945 at Goulburn Steam Museum.

Photo: Bruce Macdonald collection

5870 1907 2/2 610 55 XVIII bf L

1907 - NSW Dept of Public Works, Burrinjuck *ROBIN*.
1913 - NSW Water Conservation & Irrigation Commission, Burrinjuck *ROBIN*.¹³ 1924 - NSW State Metal Quarries, Kiama, 1932 - stored. c.1938 - buried on site

In the Krauss order book these two locos are noted as being "Zwilling" or "twin" type. That is, they were semi-permanently coupled back to back, to be driven by one crew. They could also be used singly. It would appear that this was the original intention but altered during construction to become two separate locos. as the note is crossed out.

5945 1907 2/2 610 55 XVIII bf L

1908 - NSW Dept. of Public Works, Burrinjuck *JACK*. 1913 - NSW Water Conservation & Irrigation Commission, Burrinjuck *JACK*.¹³ 1928 - E A Sloman (merchant) Sydney.¹³ 1929 - Fairymead Sugar Co. No.7 (Q). 1963 - stored. 1965 - E Baldwin, (collector) Sydney. 1970 - On loan to B Macdonald, Museum of Historic Engines, Goulburn *JACK* (NSW). 1978 - Stored at Canberra (ACT). 1980 - Returned to Baldwin family. 1985 - NSW Dept of Water Resources, for proposed preservation at Burrinjuck.

5947 1908 2/2 610 55 XVIII bg L

1908 - Kalgoorlie & Goldfield Firewood Supply Co. *KATE* (WA). 1921 - stored. c.1940 - sc.⁵

A notation in the Krauss order book shows this loco was for Mt. Lyell and was to be identical to Nos 5479 & 5480. The reason for the diversion is unknown.

5988 1908 2/2 610 55 XVIII bi L

1908 - Mt.Lyell Mining & Rwy Co. No.9 (T). 1947 - Australian Commonwealth Carbide Co. Ida Bay Quarry (T).⁹ 1949 -Mt. Farrell Mining Co. (T).⁹ 1960 - stored. 1972 - Van Diemen Light Railway Society Devonport (T). 1993 - Wee Georgie Wood Steam Railway, Tullah (T).

6063 1908 2/2 610 55 XVIII bl L

1908 - NSW Dept of Public Works, Burrinjuck *ARCHIE*.

1913 - NSW Water Conservation & Irrigation Commission, Burrinjuck *ARCHIE*.¹³ 1928 - E A Sloman (merchant) Sydney.¹³ 1933 - Farleigh Co-op sugar mill. *ARCHIE* (Q). 1963 - stored.¹¹ 1966 - NSW Rail Transport Museum *ARCHIE*.

6067 1910 2/2 610 55 XVIII bm L

1910 - Mt.Lyell Mining & Rwy Co. No.10. (T). 1963 - stored 1966 - Queen Victoria Museum, Launceston (T). On loan to Tasmania Steam Preservation Society, Second River Tramway Karoola, then on the Redwater Creek Tramway, Sheffield (T).⁸

6415 1910 3/3 610 55 XXVII bn L

1911 - Goodwood Timber & Tramway Co Port Albert *MONA* (V).¹⁵ 1920 - Cameron & Sutherland (merchant).¹⁵ c.1924 - Nerang Hardwood Co. Mudgeeraba *KATHLEEN* (Q). 1926 - stored.¹¹ 1937 - Drysdale & Ridgway (merchants) Brisbane (Q).¹¹ 1939 - On approval to Gin Gin Co-op. sugar mill. (Q) rejected.¹¹ 1940 - Plane Creek Central sugar mill, Sarina No.15A *KOUMALA* (Q). 1958 - Sc.¹¹



No. 5480 on dual gauge track at Queenstown, in 1963. Note the detail differences with classmate 5945, above. Photo: Peter Charrett



The locomotive which was produced by the amalgamation of parts of both 5682 and 5800, shown working on the Second River Tramway. Photo: Ralph Proctor

6416 1910 3/3 610 55 XXVII bn L

1910-1915 - unknown. 1915 - Hampton-Cloncurry Copper Mines Ltd McGregor Mine tramway. (Q). c.1918 - stored.¹¹ c.1925 - Aust. Estates Co Ltd Kalamia sugar mill.(Q) - later used as stationary boiler, Plantation Creek. 1949 - abandoned.¹¹

6486 1912 3/3 760 80 XXXII ah L

1912 - Forester Timber & Tramway Co (T) *EDIE*. 1932 - H Jones & Co.Warrentina (T). 1950 - Sc.⁹

6611 1913 2/2 610 40 IV bx L

1913 - Mount Bauple Central Mill Co. Ltd. (Q). 1928 - Mt Bauple Co-op. sugar mill (Q). 1950 - abandoned. 1972 - B Macdonald, Museum of Historic Engines, Goulburn (NSW). 1975 - R Hague, Sydney (NSW).

6854 1914 3/4 (0-6-2) 762 80 XXXV zv L

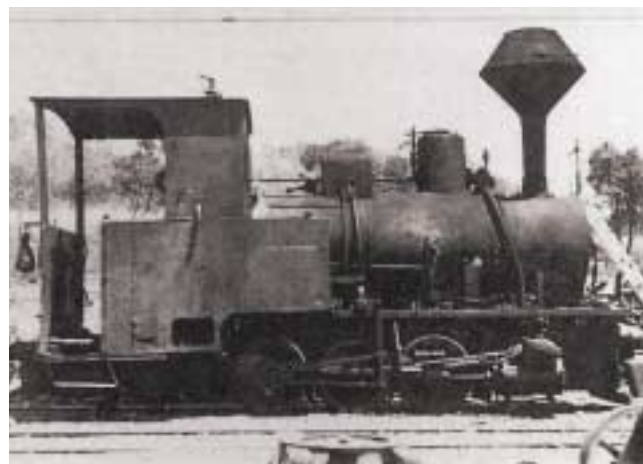
1914 - Maroochy Shire Council Buderim Tramway (Q). 1936 - Gauge converted to 2ft for Gibson & Howes Ltd, Bingera sugar mill *KRAUSS* (Q). 1967 - M Loveday, Mareeba (Q) - Storage with Aust. Narrow Gauge Railway Museum Society. 1992 - transferred to G Chapman's property, Kallangur (Q).¹⁷



No.6854, the largest of the imports, shown working on the Buderim Tramway, before its sale and conversion to 2ft gauge. Photo: Blakey

6927 1914 2/2 610 40 IV ca L

1914 - Corrimal-Balgownie Coal Co. (NSW). c.1944 - stored. 1971 - Chassis to B Macdonald, Museum of Historic Engines, Goulburn (NSW). 1975 - R Hague, Sydney (NSW)



Krauss 6416 on the MacGregor tramway, 1925.

Photo: ANU Archives of Business & Labour

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