

INFORMATION SHEET

CLASSIFICATION OF QR STEAM LOCOMOTIVES

Queensland Railways have used several different systems to classify their steam locomotives. The final system to have been used was introduced in 1890.

This system uses a letter to represent the number of driving wheels followed by a number which is the diameter of the cylinders in inches.

A = 4 driving wheels

B = 6 driving wheels

C = 8 driving wheels

For example: A10 4 driving wheels with 10 inch diameter cylinders

B13 6 driving wheels with 13 inch diameter cylinders

C17 8 driving wheels with 17 inch diameter cylinders

These letters are only used for tender locomotives. Tank locomotives were all classified – “D” – preceded by a number representing the number of driving wheels. Again the cylinder diameter in inches, followed the letter. In later years, all tank locomotives had six-driving wheels, so the number prefix was dropped.

For example: 4D10 Tank locomotive, 4 driving wheels, 10 inch diameter cylinders

8D15 Tank locomotive, 8 driving wheels, 15 inch diameter cylinders

There were later additions to this classification system to accommodate variations to the steam locomotive fleet.

The B15 Class were rebuilt with larger diameter driving wheels but retained their original 15 inch diameter cylinders. Following conversion they were reclassified B15 Con, which stood for – 6 driving wheels, 15 inch diameter cylinders Converted - to distinguish them from other class members that had not been rebuilt.

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A new class of locomotive similar to the B15, with larger diameter driving wheels and other improvements was introduced in the late Nineteenth Century. Due to its better turn of speed it was considered suitable for passenger trains and was classified as PB15 (P = Passenger).

Where a locomotive class already existed and an improved version was made it was classified by doubling the letters in the classification.

For example: B18 ¼ (introduced 1926)
BB18 ¼ (introduced 1951)
D17 (introduced 1924)
DD17 (introduced 1948)

The American Army brought out with them a number of steam locomotives fitted with 16 inch diameter cylinders during World War 2. Queensland Rail already had a C16 Class, so the new locomotives were classified – AC16 – “A” for American.

Queensland Rail had two types of Garratt locomotives which did not follow the usual classification system. One, introduced during World War 2, was classified ASG – Australian Standard Garratt. The second type was introduced in 1950 and were simply called “Beyer-Garratt” or plain “Garratt”

Named Wheel Arrangements

Wheel arrangements for steam locomotives sometimes have a name. Mainly used in the United States these names were not commonly used in Queensland but a couple of classes that are referred to by these names, are –

oo000o	4-6-2	Pacific	Class B18 ¼ and BB18 ¼
o0000o	2-8-2	Mikado	Class AC16

References:

1. *Report of the Queensland Railway Commissioners, For the Year Ended 30th June, 1891*, Queensland Railways

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Compiled by D. J. Mewes, Assistant Curator

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