



DATA SHEET

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| Sheet #: | D9a.1 |
| Title: | CLASSIFICATION OF LOCOMOTIVES STEAM TYPE |
| Reviewed by: | Charles McCoy, MMR |
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Different types of steam locomotives can be identified by their wheel arrangements, as demonstrated by the drawings. For instance, a Pacific type locomotive has two pairs (4) of small wheels in front, three pairs (6) of drivers followed by a single pair (2) of small wheels under the cab. Thus, the engine is known as a 4-6-2, or Pacific type. The following drawings, although not complete, permit identification of most locomotives operating on the American railroads. This method of identification is known as the Whyte System. Always start at the front of the engine and read back. The figures appearing in the bottom line under each drawing give the dates during which each type was built and the number built.



0-4-0 4-wheel Switcher
For light switching on sharp curves
1870-90: 1,500



0-6-0 6-wheel Switcher
Freight and passenger switcher
1870-1946: 15,000



0-8-0 8-wheel Switcher
For freight switching in classification yards
1900-1951: 2,800



0-10-0 10-wheel Switcher
For heavy switching service
1905-25: 60



2-4-2 Columbia
Obsolete light passenger type
1890-1900: 121



2-6-0 Mogul
One time freight,
now used on branches
1860-1910: 11,000



2-6-2 Prairie
Rare, light freight type
1901-10: 1,700



2-8-0 Consolidation
For way freights and
heavy switching
1866-1916: 33,000



2-8-2 Mikado (or MacArthur)
Most used freight type
1905-30: 14,000



2-8-4 Berkshire
For freight service(more modern than Mikado)
1925-49: 750



2-10-0 Decapod
Heavy slow freight or helper service
1893-1926: 4100



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STEAM LOCOMOTIVES - continued



2-10-4 Texas
High speed, heavy tonnage freight engine
1925-46: 450



2-10-2 Santa Fe
High slow freight
1902-20: 2,200



4-4-0 American
Standard in mid 19th century,
later used on branches
1840-1905: 25,000



4-4-2 Atlantic
Fast passenger, early 20th century
1896-1935: 1,900



4-6-0 10-Wheeler
Heavy duty, late 19th century
1850-1920: 17,000



4-6-2 Pacific
The most common passenger engine
1902-30: 6,800



4-6-4 Hudson
High speed passenger engine
1927-48: 500



4-8-0 Mastodon
A very rare freight type
1870-1933: 600



4-8-2 Mountain
For fast freight and heavy passenger service
1911-30: 2,400



4-8-4 Northern (or Niagara)
Very popular dual service locomotive
1927-46: 1,000



4-10-0
A rare freight type
1880: few



4-10-2 Overland
For heavy freight service
1925-26: 60



4-12-2 Union Pacific
Generally used for fast freight service
1926-30: 90



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ARTICULATED AND DUPLEX TYPES

These locomotives are really two engines put under the same boiler. Articulated locomotives have the front engine mounted to permit swiveling and sideways motion and hence can have long wheelbases permitting a larger and more powerful locomotive. Duplex locomotives have all wheels mounted on the same frame and therefore must have shorter wheelbases. The extra cylinders permit lighter rods, cranks, etc. and hence a better balanced and faster locomotive.



0-6-6-0 1903-13: 80



0-8-8-0 1907-20: 150



2-6-6-0 1909: 10



2-6-6-6 1941-45: 70 Allegheny



2-6-6-4 1935-40: 65



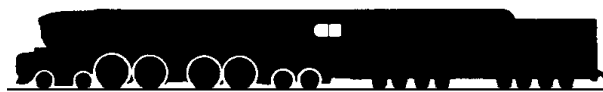
2-6-6-2 1906-49: 1,300



2-10-10-2 1918: 10 Virginian



4-8-8-2 1928-43: 200 Cab Forward



4-4-4-4 1942: 52 Duplex T-1



4-4-6-4 1942: 25 Duplex Q-2



4-6-6-4 1936-44: 200 Challenger



4-8-8-4 1941-44: 25 Big Boy



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TANK LOCOMOTIVES

Tank locomotives carry a limited supply of water and fuel on the locomotive and hence no separate tender is needed. They are necessarily limited in use to dock, yard and industrial switching and suburban or local short-run service.

