

CLASSIFICATION of LOCOMOTIVES

Whyte System

TYPE	WHEEL ARRANGEMENT	NAME	TYPE	WHEEL ARRANGEMENT	NAME
0-4-0	000	4-WHEEL SWITCHER	2-10-4	4000000000	TEXAS
0-6-0	4000	6-WHEEL SWITCHER	4-4-0	40000	AMERICAN
0-8-0	40000	8 WHEEL SWITCHER	4-4-2	400000	ATLANTIC
0-10-0	400000	10 WHEEL SWITCHER	4-4-4	400000	JUBILEE
0-10-2	4000000	UNION	4-6-0	400000	10 WHEELER
2-4-2	40000	COLUMBIA	4-6-2	4000000	PACIFIC
2-6-0	40000	MOGUL	4-6-4	400000000	HUDSON
2-6-2	400000	PRAIRIE	4-8-0	4000000	12 WHEELER
2-8-0	400000	CONSOLIDATION	4-8-2	40000000	MOUNTAIN
2-8-2	4000000	MIKADO	4-8-4	400000000	NORTHERN
2-8-4	400000000	BERKSHIRE	4-10-0	400000000	MASTODON
2-10-0	4000000	DECAPOD	4-10-2	4000000000	SOUTHERN PACIFIC
2-10-2	400000000	SANTA FE	4-12-2	4000000000	UNION PACIFIC

TYPE	WHEEL ARRANGEMENT	NAME
0-6-6-0	4000000	MALLET COMPOUND
2-6-6-0	400000000	MALLET COMPOUND
2-6-6-2	4000000000	MALLET COMPOUND
2-6-6-4	40000000000	SIMPLE ARTICULATED
2-6-6-6	400000000000	ALLEGHENY
0-8-8-0	400000000	MALLET COMPOUND
2-8-8-0	4000000000	MALLET COMPOUND
2-8-8-2	40000000000	SIMPLE ARTICULATED
2-8-8-4	400000000000	YELLOWSTONE
2-8-8-8-2	40000000000000	TRIPLEX
2-8-8-8-4	400000000000000	TRIPLEX
2-10-10-2	4000000000000	MALLET COMPOUND
4-4-4-4	400000000	4 CYLINDER NON ARTICULATED
4-4-6-4	4000000000	4 CYLINDER NON ARTICULATED
4-6-6-4	40000000000	CHALLENGER
4-8-8-4	4000000000000	BIG BOY

STEAM LOCOMOTIVES are usually referred to by their classification in the Whyte system, developed by a New York Central official, which uses a series of numbers to show the number of pilot-truck wheels, drivers, and trailing truck wheels- for example, the early "American" type is a 4-4-0, which means that it has a four wheel pilot truck, two pairs of coupled drivers, and no trailing truck. Each group of drivers on articulated and multi-cylinder nonarticulated locomotives is shown separately- the Union Pacific's "Big Boy," the worlds biggest steam locomotive, is a 4-8-8-4. "Tank" locomotives, which have no separate tender but carry their water and fuel in tanks and bunkers on the locomotive itself, are designated by a "T" following the wheel arrangement; for example, 0-6-0T.

Electric and diesel locomotives are designated by the number of axles, non-powered axles are designated by numbers, powered axles by letters. The small locomotives used on many electric lines, diesel switchers, and many diesel freight units are "B+B," indicating that they have two four wheel power trucks; many diesel passenger units are "A1A+A1A," since they have two 6-wheel trucks with only the first and third axles powered. "C+C" would indicate a six wheel truck with all three axles powered. "D+D" indicated an eight wheel truck with all four axles powered.

While the above chart does not show all of the locomotive types that were used, it covers the common types of steam locomotives found in the United States.