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BALDWIN LOCOMOTIVES

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The cover design shows a Baldwin 4-6-4 Type Locomotive in service on the Chicago, Milwaukee, St. Paul & Pacific. Reproduced from a photograph by Fletcher A. Webster.

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A New Whitcomb Diesel Locomotive for Puerto Rico

THE Baldwin Locomotive Works, of which The Whitcomb Locomotive Company is a subsidiary, shipped its first steam locomotive to Puerto Rico in 1879. Since that time Baldwin has supplied about 150 locomotives for service on the island. In 1923, a steam passenger car was built for the American Railroad Company of Puerto Rico.

Since 1930, a number of Whitcomb gasoline and Diesel locomotives have been built for the sugar centrals of Puerto Rico, and they have been most successful in service. One central which purchased an 8-ton Diesel in December, 1932, reports a saving of 65 per cent of their previous locomotive operating costs.

Whitcomb recently completed a 12-ton, 0-4-0 Diesel locomotive with mechanical drive for Central San Vicente. This central is located near the main line of the American Railroad Company of Puerto Rico in the Arecibo District.

The new Diesel locomotive will start 390 trailing tons on the level with sanded rail, or 290 tons with clean dry rail. It will haul 324 trailing tons up to 10.82 miles per hour and 190 tons up to 16.87 miles per hour, thus affording a wide range of effectiveness for industrial haulage. It can be built to any track gauge from 30 inches up.

Power is furnished by a 6-cylinder, $4\frac{7}{8}$ " x 6" full Diesel engine, rated conservatively by the locomotive builder at 85 net horsepower at 1200 R.P.M.

The locomotive frame is a unit casting with integral engine and transmission mountings, thus insuring accurate and permanent alignment. Semi-elliptical springs are used, with full cross equalization, which enables the locomotive to negotiate rough tracks without derailment.

The clutch, designed and manufactured by the locomotive builder especially for locomotive service, is of the multiple disc, cork insert type running in oil. Eight pairs of $15\frac{1}{4}$ " diameter discs are used.

Transmission is by selective gears, with four speeds forward and four speeds reverse. Drive is from a jack shaft directly to the rear axle by two chains and from rear axle to front axle by one chain. Only two gear reductions are employed, thus delivering a high percentage of the engine power to the driving wheels.

Special attention has been given to providing a clean-cut design with a maximum of accessibility and convenience for the operating and maintenance personnel as evidenced by the accompanying illustrations.

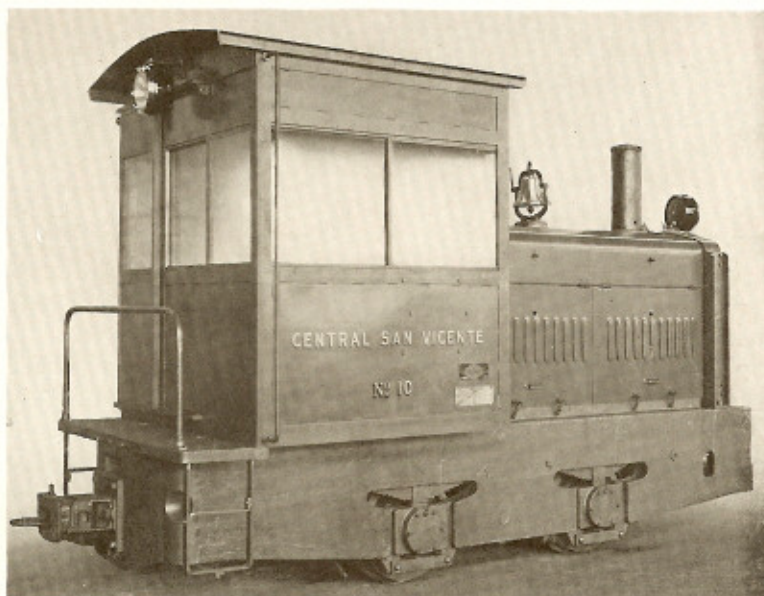
The Whitcomb series of Diesel-powered locomotives ranges from 8 tons to 30 tons



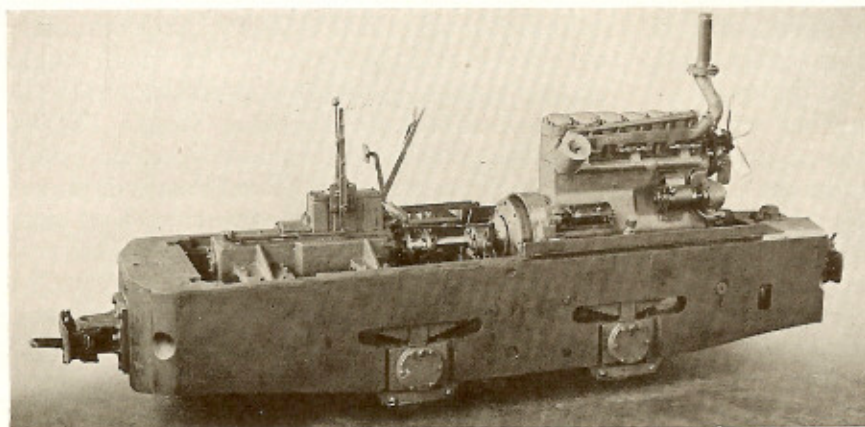
A Station Along the Lines of the American Railroad Company of Puerto Rico Showing a Baldwin Steam Passenger Car Hauling a Trailer

with mechanical drive, and from 30 tons to 60 tons with electric drive. In the larger sizes, designed for railroad and heavy industrial service, two engines are used per locomotive, each engine driving a generator. Swivel trucks each carry two motors, directly geared to the axles.

The Whitcomb Locomotive Company, which became a part of the Baldwin group in 1931, grew from a company established in 1878 for the manufacture of coal mining machinery. A demand developed for mine haulage equipment and in 1906 Whitcomb produced the first successful gasoline locomotive built in this country.

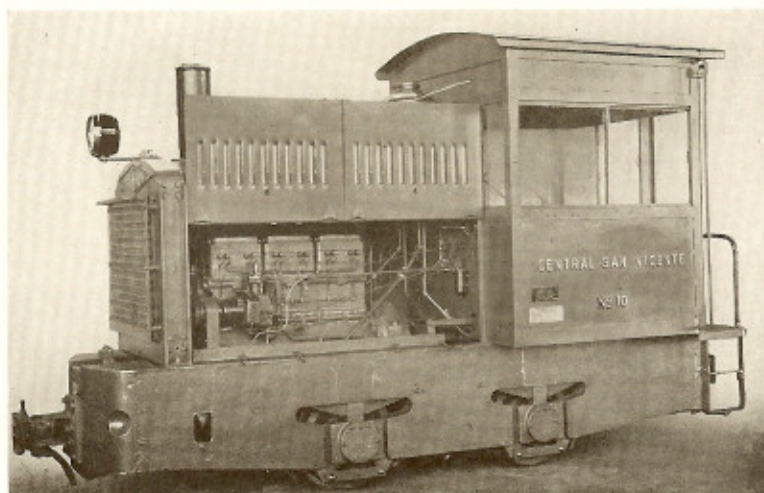


The 12-Ton Whitcomb Diesel Locomotive Built for Central San Vicente, Puerto Rico, in 1933



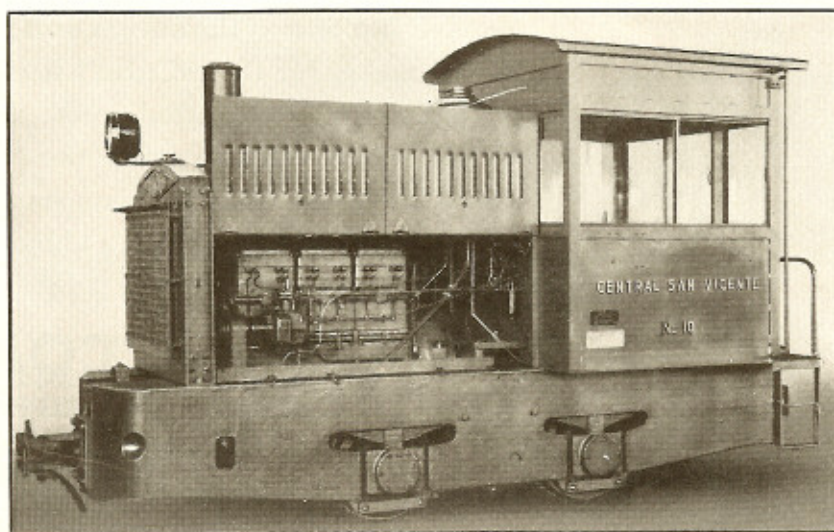
Chassis of the Whitcomb Diesel, Showing the Unit Cast Frame with the Engine, Clutch and Transmission in Place

Left-hand Side of the Completed Locomotive with the Hood Raised to Show the Fuel-Injection Side of the Diesel Engine



WHITCOMB LOCOMOTIVES

Make Good



Twelve-Ton 0-4-0 Whitcomb Diesel Mechanical Locomotive

Speed M. P. H.	Tractive Effort Pounds
4.50	6,000
6.50	4,215
10.82	2,604
16.87	1,625

Engine: 4 cyl. $4\frac{7}{8}$ x 6, 85 net horsepower at 1200 R. P. M.

Springs: Semi-Elliptic, with cross equalization

Clutch: Whitcomb multiple disc cork insert oil type.

Transmission: Whitcomb selective gear. 4 speeds forward and reverse.

• The purchaser of a Whitcomb Diesel locomotive, shipped to Puerto Rico in December 1932, announced a saving of 65% of previous locomotive operating costs. Subsequently Whitcomb shipped two other Diesel locomotives to neighboring sugar factories, one of which is shown here: clean cut—rugged—low center of gravity—conservatively rated—convenient and comfortable to operate—accessible for repairs—active—reliable *AND ECONOMICAL.*

Let Whitcomb help you to make your haulage pay—with internal combustion (Diesel, gasoline, distillate alcohol) mechanical or electric drive, or electric trolley or battery locomotives—as your particular needs may indicate.

THE WHITCOMB LOCOMOTIVE COMPANY

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-

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THE BALDWIN LOCOMOTIVE WORKS

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