

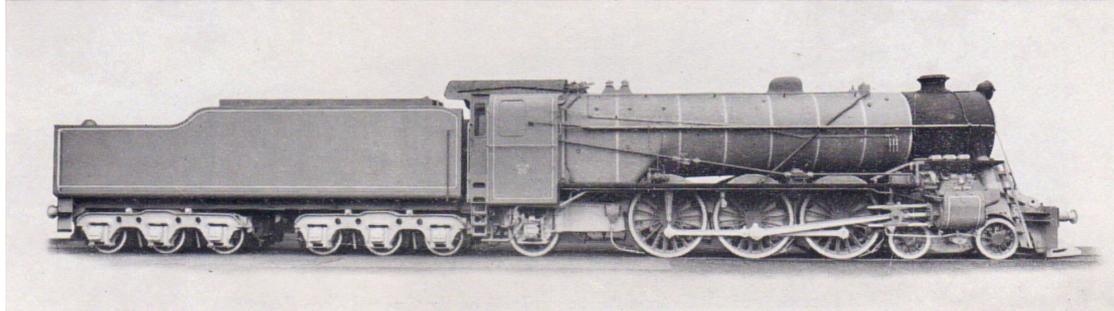
ARGENTINE RAILWAYS



5 ft. 6 in. Gauge

1950 and 1953

4-6-2 (PS.11)



Cylinders.....	(3) 19½ in. Diam. x 26 in. Stroke	Maximum Axleload.....	18 tons
Diameter Coupled Wheels.....	6 ft. 2½ in.	Weight :	
Working Pressure.....	225 lb.	Engine in Working Order.....	99.7 "
Tractive Effort at 85% Pressure.....	38,068lb.	Tender " "	102 "
		Total " "	201.7 "

The original PS.11 4-6-2 Pacific was the standard express passenger locomotive of the late Central Argentine Railway, now the Bartolome Mitre Railway. So successful was it that upon nationalisation of the Argentine Railways, the Authorities decided to standardise this class for express passenger service on three railways, the Roca, the Bartolome Mitre, and the San Martin, where very heavy trains and continuous high speeds are a daily occurrence, and in consequence an order for 50 additional units, duly modified and modernised, was placed with The Vulcan Foundry.

As a result these locomotives-among the most powerful in the world on a power for adhesive weight basis-are operating express trains of up to 750 tons weight on all three above mentioned railways, including the seaside expresses between Buenos Aires and Mar del Plata, the " Cuyano " and " Internacional " between Buenos Aires and Mendoza en route for Chile, the sleeping car traffic from the Cordoba hills, and the business expresses between Buenos Aires and Rosario.

One of the original locomotives created a South American speed record in 1939 by averaging 65.7 m.p.h. with 500 tons on the non-stop run of 188 miles between Rosario and Buenos Aires, during which a maximum speed of nearly. 100 m.p.h. was attained.

The engines have a tractive effort at 85% pressure of 38,068 lb., and are of the three-cylinder simple type. They are oil fired and are equipped with British-Caprotti rotary cam poppet valve gear; and double six-wheel bogie tenders:

The large boiler, with 2,208 sq. ft. of evaporative heating surface and grate area of 43 sq. ft., has a wide round-topped firebox with steel inner shell, the throat and backplates being welded to the wrapper and the tubeplate riveted.

Plate frames are provided and the cylinders are of cast steel with nickel alloy iron liners in the barrels.

The crank axle is of the built-up type, and the connecting and coupling rods are of Vibrac steel, arranged for grease lubrication.



PS.11 Locomotive with Express Passenger Train on the General Roca Railway

Compensation is provided between all the underslung coupled springs, and the cast steel coupled axleboxes with bronze bearings are oil lubricated.

The Caprotti valve gear is of the latest type with valves actuated by steam pressure.

The leading bogie has spring side control and the hind truck is provided with radial axleboxes.

Accessories include a Davies & Metcalfe H.J, exhaust steam injector, a No. 11 live steam injector, Clyde sandgun, water gauges with prismatic indicator glasses, Detroit sight-feed lubricator, Teloc speed indicator, Stone's electric lighting, and steam brake for engine and tender in conjunction with vacuum equipment for the train brakes.

The tenders are the largest ever built at Vulcan and in fact, when fully loaded, their weight is greater than that of the engine. The two six-wheeled Commonwealth bogies are of the swing bolster type, both frames and bolsters being of cast steel.

Both water and fuel tanks are all-welded; in some cases the capacities are 9,000 gallons of water and 11.6 tons of oil fuel respectively, and in others 10,000 gallons and eight tons, this being according to the particular services for which they were destined.



PS.11 Locomotive at R. de Escalada, General Roca Railway