

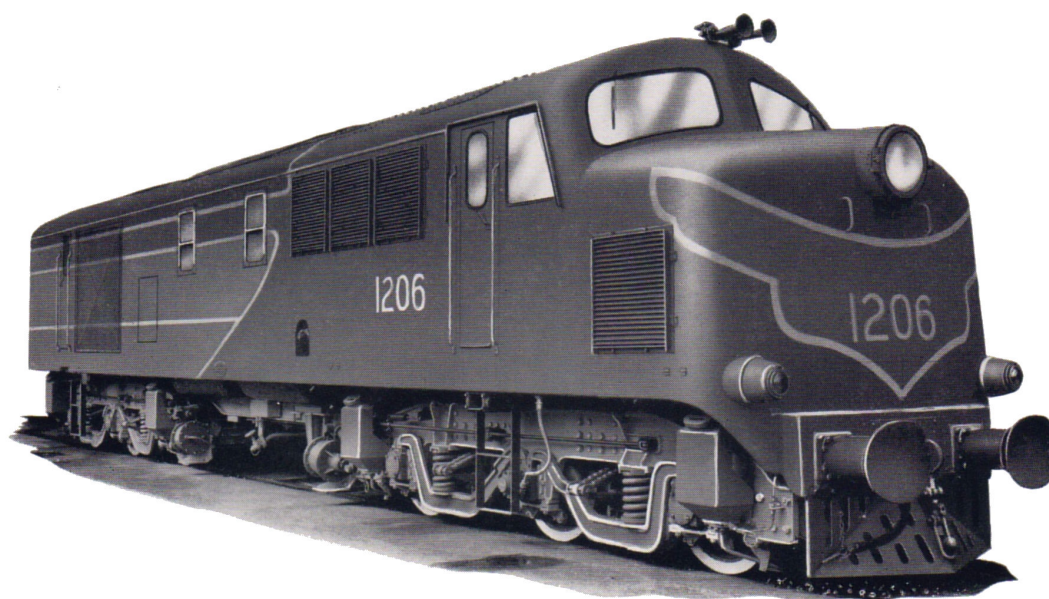
QUEENSLAND GOVERNMENT RAILWAYS



3 ft. 6 in. Gauge

1953

Co-Co



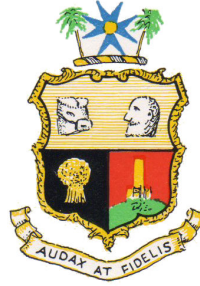
Engine H.P. at 850 R.P.M.	1500	Tractive Effort (Maximum).....	50,000 lb.
Traction Motors	6	Maximum Axleload	15 tons
Tractive Effort (Continuous) at 12.4 m.p.h.	30,000 lb.	Weight in Working Order	87.5 "

In 1953 ten Co-Co type 1,500 H.P. diesel electric locomotives were shipped to the Queensland Government Railways to operate accelerated services on the 1,043 mile long coastal line between Brisbane and Cairns, and between Brisbane and Toowoomba, including the air-conditioned expresses known as the Sunlander and Inlander.

These locomotives were supplied by the English Electric Co. Ltd. as main contractors, in conjunction with The Vulcan Foundry who designed and built the mechanical parts at Newton-le-Willows where the locomotives were erected.

The maximum output of the E.E. Co. 12-cylinder V-type engine is 1,500 B.H.P., but is derated under Queensland temperature and humidity conditions to 1,295 B.H.P.

V U L C A N L O C O M O T I V E S



The "Sunlander" in typical Queensland countryside

The underframe and superstructure are of welded steel channel and plate construction and the body framework is built up to form an integral part of the main frame.

The main ventilating duct to the traction motors is incorporated in the centre sill of the structure and the upper plates form the flooring which carries the main equipment.



The body is divided into four compartments separated by bulkheads and the whole is welded to the underframe, thus forming an integral unit.

The nose compartment houses the traction motor blower for the leading bogie and part of the brake equipment, and access to it is provided from the cab.

The cab is arranged to give the maximum comfort and convenience to the crew and its bulkheads are insulated against sound and heat. The driver's controls are all conveniently grouped on the right hand side and the instruments are in an enclosed casing with a panel provided with indirect lighting. Cab fittings include swivelling upholstered seats, sun visors, windscreen wipers, electric fan, adjustable ventilation duct, toolbox, and hotplate.

The compartment behind the cab houses the engine and generator set and here the roof has removable sections to facilitate easy withdrawal of these units.

An independent section houses the cooling water and lubricating oil radiators, together with a 5 ft. 0 in. diam. fan mounted in the roof and driven off the engine; this latter also provides ventilation for the engine and rear compartments.

The rear compartment contains a compressor, the traction motor blower for the rear bogie, resistance frames, etc.

The all-welded underframe is of robust construction and incorporates a 750 gallon fuel tank in its centre section.

The bogies are of the swing bolster type with frames and bolsters of laminated construction, and each bogie is fitted with three-axle-hung, nose-suspended traction motors. Timken rollerbearing axleboxes are provided and both these and the horn-cheeks have manganese steel liners.

Other equipment includes Westinghouse straight and automatic brakes, Stones electric lighting, pneumatic sanding, Elliott electric speed recorder, two pneumatic horns, and buffers and drawgear of the Queensland Railways' own pattern.

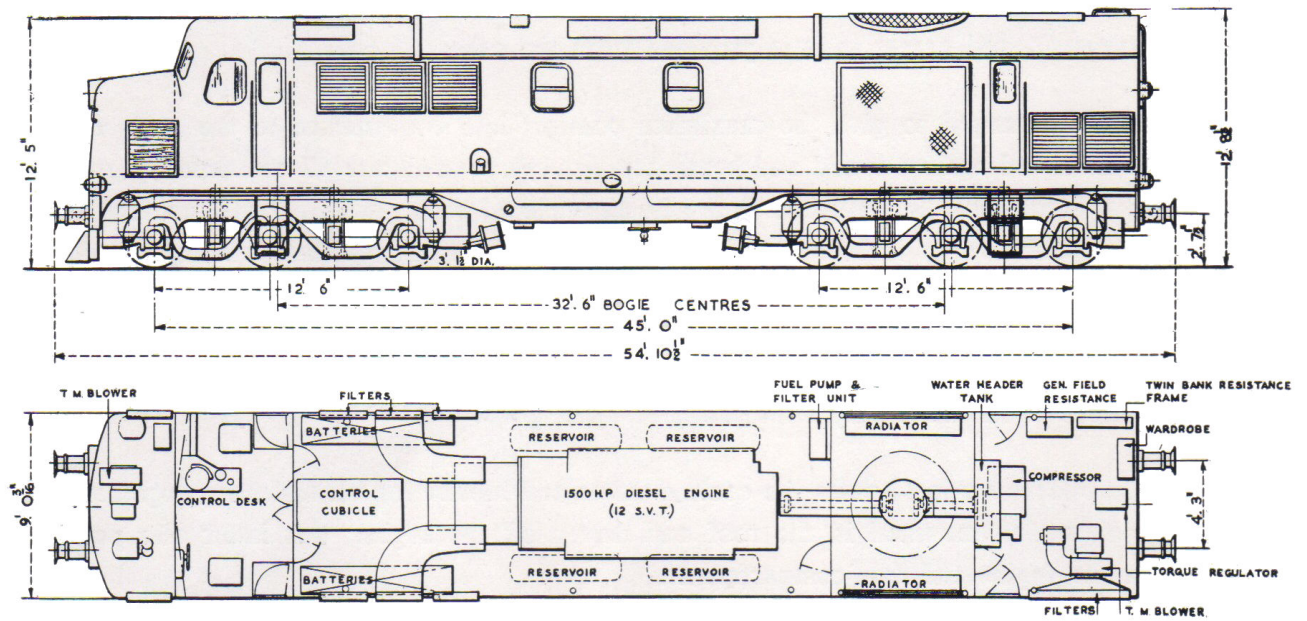
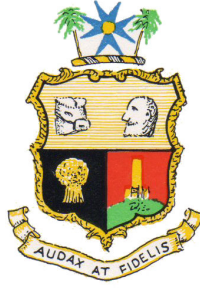


Diagram of 1,500 H.P. D.E. Locomotive for Queensland