TASMANIAN GOVERNMENT RAILWAYS



<image>

Engine H.P. at 750 R.P.M.	3000	Tractive Effort (Maximum)	31,000 lb.
Traction Motors	4	Maximum Axleload	13.8 tons
Tractive Effort (Continuous) at 13.7 m.p.h.	12,700 lb.	Weight in Working Order	54.7 "

In July 1950 the first of 32 660 H.P. Bo-Bo type diesel electric locomotives for the Tasmanian Government Railways was shipped fully erected from Liverpool.

The contract for these locomotives had been obtained by Messrs. English Electric Co. Ltd., and -the mechanical parts were designed by The Vulcan.Foundry Limited. Vulcan also built the mechanical parts for the first 20 locomotives, which were erected at their Works.

Built for general service on the heavily graded 3 ft. 6in, gauge lines in Tasmania, these locomotives may be operated either singly or in multiple unit, up to three being coupled together when necessary.

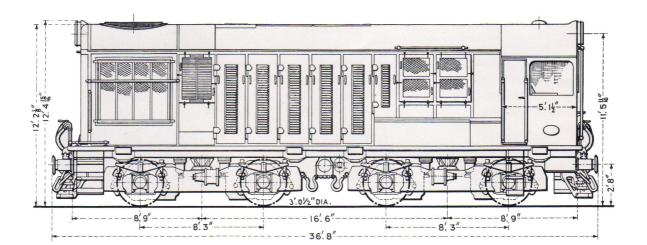
VULCAN LOCOMOTIVES

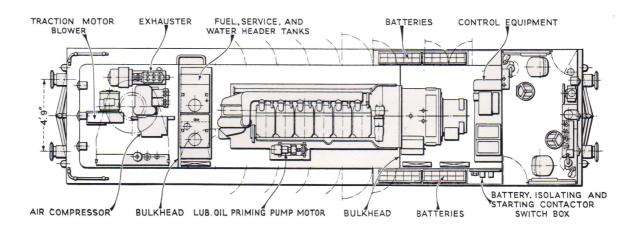
3 ft. 6 in. Gauge

1950

Bo-Bo







Arrangement and dimensions of 660 b.h.p. Diesel Electric Locomotive, Tasmanian Government Railways

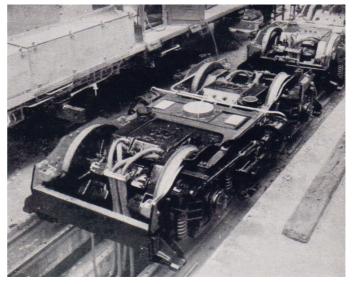
The underframe and superstructure are of welded steel channel and plate construction and the body framework is built up to form an integral part of the main frame.

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.

VULCAN LOCOMOTIVES



The body is divided into four compartments separated by sealed bulkheads. At the front end is the driving cab, designed to give maximum visibility and provided with separate controls for forward and backward running. Immediately behind the cab is the compartment containing the main equipment frame and generator. Next comes the engine room, housing the English Electric Company's six-cylinder supercharged engine which has a rating of 660 H.P. at 750 r.p.m. Fuel tanks -340 gallons (1,545 litres) - and water tanks are also located in



Bogie of 660 H.P. Locomotive



Unloading at the South Bank Exhibition, Festival of Britain

the engine room. Finally, the rear compartment carries the water and oil cooling systems, traction motor blower, exhauster, and compressor.

Detachable roof panels are provided over both fuel tanks and engine, and side access to the latter is also obtained by means of hinged lateral aluminium doors with louvres.

The two four-wheeled bogies are of the swing bolster

VULCAN LOCOMOTIVES





Two Locomotives hauling Special Train of Tractors near Hobart

type, of fabricated construction, the frames being of 1 in, plate. All four axles are motored and are equipped with S.K.F. roller-bearings; manganese steel liners are fitted to the axleboxes and horn guides. All eight S.C.O.A.-P wheels are provided with clasp brakes, these being operated by Westinghouse straight air equipment. The train brakes are operated by a driver's vacuum valve synchronised with the engine brakes.

With a total weight of 54.7 tons and an axleload of 13.8 tons, these locomotives were finish painted in the standard Tasmanian green livery with vermilion buffer beams, and contribute materially to simpler train operation between Hobart and Launceston, and on the other island lines. One of the locomotives was exhibited at the South Bank Exhibition of the Festival of Britain in 1951.

VULCAN LOCOMOTIVES