

NZR's Dsa CLASS

20 locomotives. NZR service 1953-1986.

Drewry Works numbers 2414-2433.

Original NZR numbers 216-235. TMS number range 209-401.



Built by the Vulcan Foundry on behalf of the Drewry Car Company.

Wheel arrangement: 0-6-ODM.

Weight: 29.4 tons.

Length: 29' 1". Wheelbase" 10'.

Engine: 204 bhp Gardner 8L3 8-cylinder diesel.

Transmission: Vulcan-Sinclair type 23 fluid coupling. SCG-made Wilson-Drewry CA5 five-speed epicyclic gearbox. SCG RF11 final drive and reverse unit.

The Drewry-built Dsa, was a development of the Ds class (see pages 22-24), The Ds had quickly proved effective at reducing shunting costs and at freeing up labour at a time of significant labour shortages. In 1950, the government therefore granted NZR funding to purchase 35 additional 0-6-0 diesel shunters. NZR decided that the new locomotives should be heavier and longer than the Ds. Some would also be more powerful, to meet the requirements of larger yards such as Frankton and Palmerston North.

Quotes were called internationally for 0-6-0 diesel

shunters in the power ranges 200-250 bhp, 250-300 bhp and 300-350 bhp. For the lowest of these power ranges, a weight of 30 tons was stipulated, i.e. 4.2 tons heavier than that of the Ds. The wheelbase was to be increased by a foot, to 10', and the overhang beyond the wheels was to be increased at each end to accommodate NZR's preferred American Janney Yoke drawgear, for which there had been insufficient overhang in the Ds.

When the quotes came in, it became apparent that the approved funding would purchase only 27 locomotives in the lowest specified power range, or a lesser total if some or all of the order included more powerful alternatives. NZR decided to spend all the approved funding on the lowest power category, and go back to the government for additional funding for higher-powered locomotives. The lowest compliant quote was for what was later became the Drewry Dsa, 20 of which were ordered. The remaining funding was spent buying

Above. Dsa 217 pictured new at Wellington. Note the off-set position of the cab steps and the small size of the protector plate, features NZR insisted must be changed. NZR Photo AC Bellamy collection.