

# Depot View CHART LEACON



Class 411 '4CEPs' Nos 1596 and 1571 stand on Roads 15 and 16 respectively in the Repair Shop at Chart Leacon, with DMSs Nos 61807 and 61716 nearest the camera. Both units were undergoing General Overhaul.

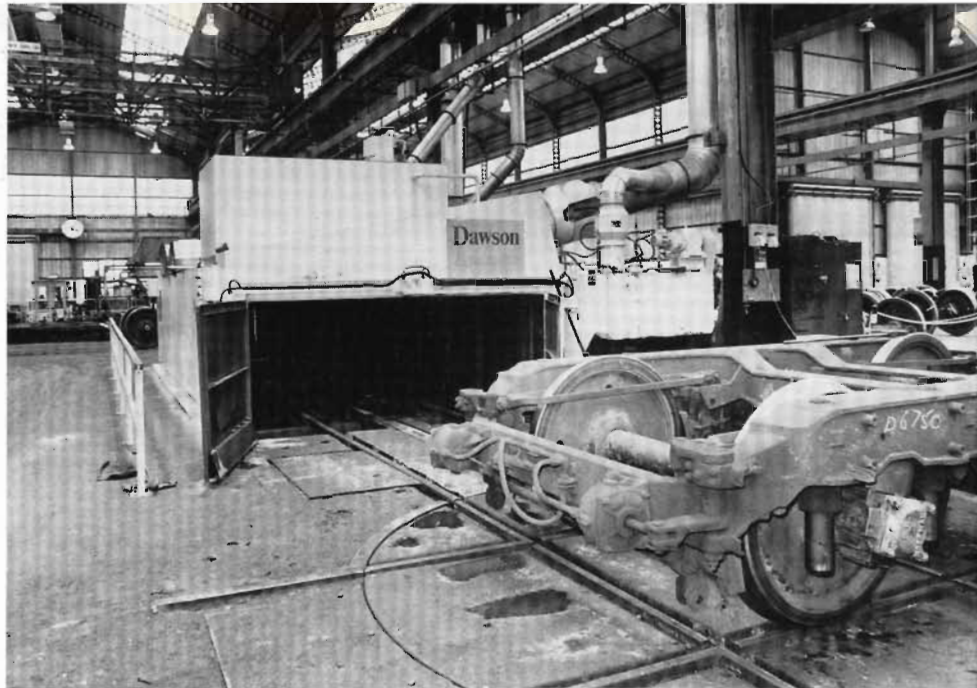


No 73119 stands on No 6 road outside the Inspection Shed, awaiting a tyre exam.

### Chart Leacon

Opened three decades ago as part of the Kent Coast Electrification Scheme, Chart Leacon Traction & Rolling Stock Maintenance Depot has a vital role in ensuring that the trains of the old Southern Region run efficiently and reliably. Motive Power Monthly visited the depot on 29 April, when the accompanying photographs were taken by Brian Morrison.

Chart Leacon is part of British Rail's Level 5 group, which has existed as a self-financing entity since April 1989. Now entering its third year under the new regime, the depot is the largest Level 5 site and performs C4 overhauls (traditionally known as a GO or General Overhaul) for its principal customer, Network SouthEast and occasionally will undertake a C5 unclassified repair. A CEM test location, when the component



**Above:**  
A bogie stands outside the Repair Shop's washplant, years of grime cleaned away.

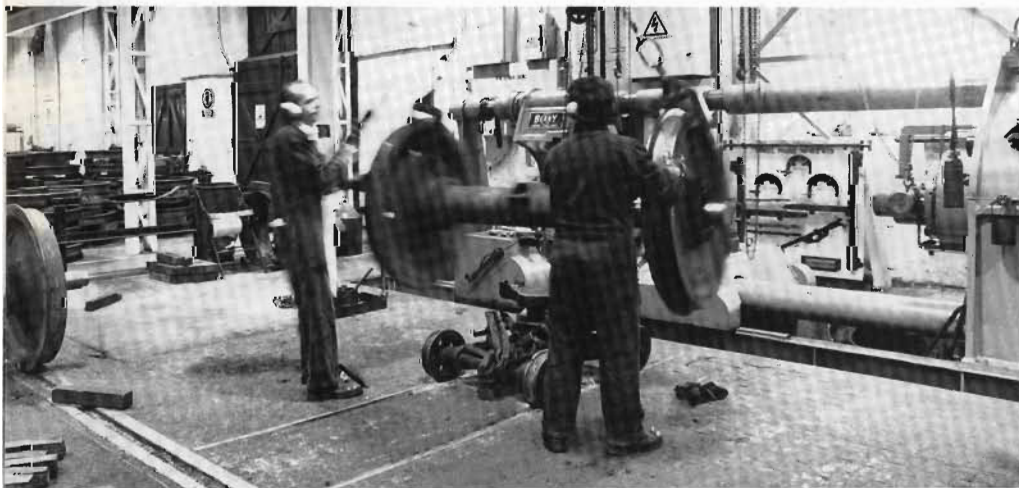


**Left:**  
Ready for service, No 319047 awaits its return to Thameslink duties on No 17 road.

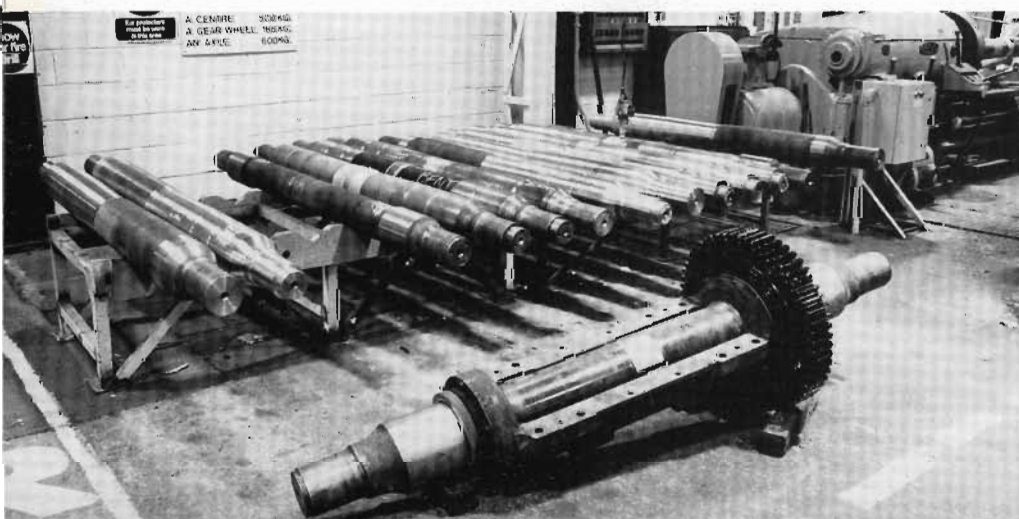
exchange philosophy was first examined, Chart Leacon is very much a high-volume quick-turnaround repair centre. Today the depot turns round units per repair category faster than any other.

There are two main work areas at Chart Leacon; the Repair Shop and the Inspection Shed. The layout of the Repair Shop, where the Level 5 work is carried out facilitates rapid progress. EMUs arrive on the outer roads (Nos 7 and 8 or 15 and 16, see map) where they are uncoupled. Then after 9¼hr if on roads 7 or 8, or 8hr if on roads 15 or 16, the vehicles are lifted straight on to a refurbished set of bogies. The old bogies are taken to the eastern end of the Repair Shop where they pass through the washplant, their wheels being visually and ultrasonically inspected and then either turned on the Repair Shop's wheel lathe or retired at Ashford wheelshop.

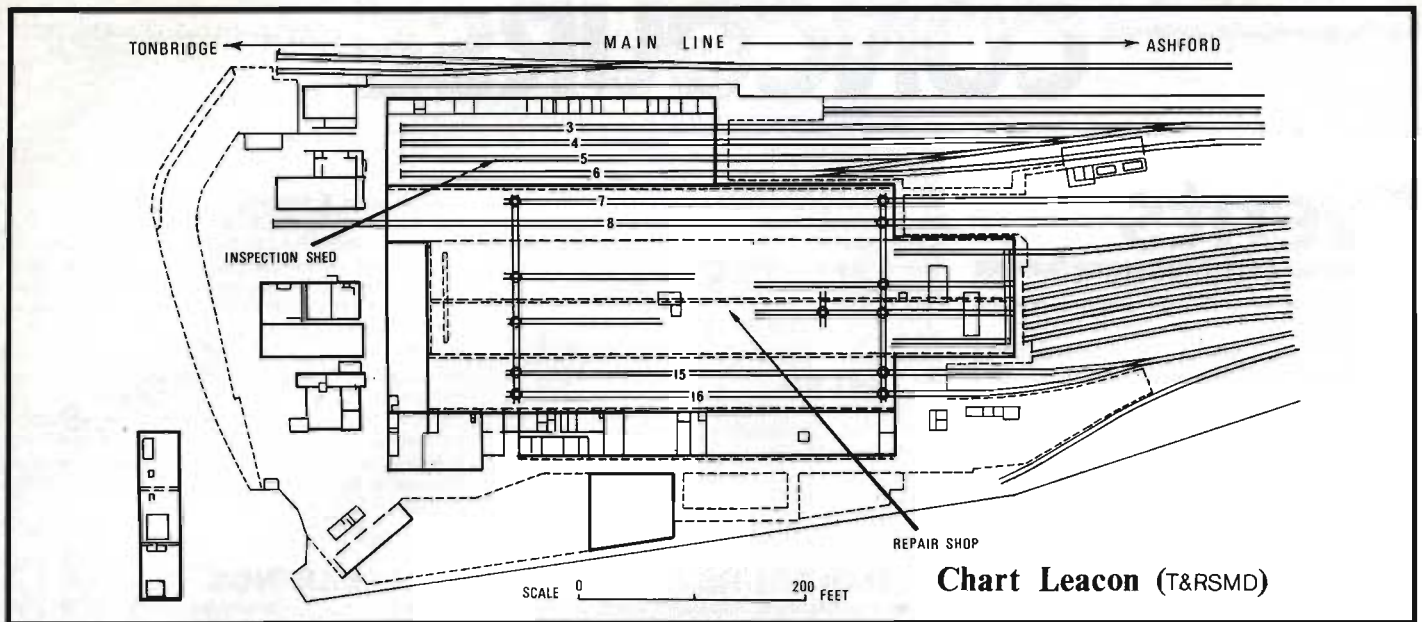
After washing the bogies are overhauled at the West end of the Repair Shop, ready for re-use. Bogies not required for immediate use are stacked in the shop. A policy of maintaining a good 'head' of bogies so that an overhaul is never held up awaiting bogies is followed.



**Above left:**  
At the Ashford wheelshop a wheel-set is lifted on to the wheel press which will separate the wheels from their axle.



**Left:**  
A selection of axles await further attention. The band visible on some of the axles is the earth return. This is sprayed on. In the foreground lies the driving axle from a motor bogie.



Virtually all of the EMU classes working on the Southern have received attention at Chart Leacon, the only exception being the Class 442 '5EWS' units and the Isle of Wight units.

In the year 1990/1 1,662 vehicles passed through for C4 overhaul, the budgeted figure of 1,804 only being missed because of the massive disruption caused by the snow in February. Three years ago the number of C4s undertaken at Chart Leacon had fallen to around 1,500 per year but the closure of Slade Green for Level 5 work led to the transfer of 'EPBs' and '455s' to Chart Leacon and in 1990 the depot commenced work on Class 319s. As work on InterCity's Class 488 'Gatwick Express' sets this year consists of refurbishment, involving major retrimming they have not appeared at Chart Leacon for overhaul this year, but the depot is hopeful of regaining the contract for their overhaul next year.

On the more modern stock component overhauls are a mixture of in-house and contract work with, for example, brake cylinders for Classes 319 and 455 being completed by contractors. The depot has a history of carrying out small electrical modifications, including the fitting of headlights (in conjunction with electrical overhauls) and double damper modifications for Class 455 bogies.

Allowing for annual leave and the 'flat season', when autumn leaf-fall, despite the best efforts of wheelslip control and Sandite, produces enumerable flats on wheels, the Repair Shop is budgeted for 40 weeks of C4 work per year. Other, unclassified main repair work, termed 'side jobs', is fitted in around the C4 programme. This encompasses wheelset changes, traction motor changes and bogie suspension repairs. A record number of 'side jobs' -982- were completed

during the 1990/1 financial year at the depot.

The through put of wheels at Chart Leacon is one of the highest in the country, the depot dealing with around 9,000 pairs of wheels per year. Wheels from all types of vehicle are handled, in addition to those from EMUs, from Class 59/0 wheelsets to wagon wheels. Most wheels arrive at the depot by road, although some, most notably Freightliner wheels, continue to arrive by rail.

Next to the repair Shop stands the Inspection Shed, where Roads 3 and 4 are used for testing units after they have received attention in the Repair Shop, Road 5 is used for electrical overhauls and testing purposes, and Road 6 is used for locomotive work, with rewiring of EMU vehicles being undertaken at the buffer stop end. A record number of 80 electrical overhauls, consisting of half-life repairs to Class 423 '4VEPs' were carried out in 1990/1.

The Inspection Shed contains a full eth test facility for the Gatwick Express Units and is responsible for a diverse range of work including the servicing and refuelling of DEMUs used on the Ashford-Hastings route and the overnight fuelling of conventional DMUs used on the Tonbridge-Reading services. Chart Leacon staff from the Inspection Shed are provided on an agency basis to go out into the surrounding area, with the examination of Railfreight Construction trains carried out at Hothfield, Ashford West Yard and Sevington. The Inspection Shed staff deal with call outs in an area bounded by Borough Green, Canterbury East, the Lydd branch and Hastings for traction matters, although this is on a declining basis. A small fleet of '08s' and '09s' is maintained by the Inspection Shed, and Parcels locomotives in the area are examined under the

aegis of the Inspection Shed up to 'A' exam level. There is no booked work for Railfreight locomotives but they can find their way to Chart Leacon after failures when on departmental duties. In this way the Inspection Shed sees the occasional Class 56. Departmental wagon exams are undertaken by Inspection Shed staff; these are mainly Ashford Down Yard or Ashford PAD (Pre-Assembly Depot). There is a certain amount of interplay between the Inspection Shed as staff there contribute to Level 5 activity.

A short distance away from the Chart Leacon, at the site of the old Ashford Works is the Ashford Wheelshop which was 'inherited' by Chart Leacon in 1984 on the closure of BREL Ashford, and transferred to Southern Region. Here around 3,000 pairs of wheels are re-tyred and profiled every year.

Although it seems unlikely that Chart Leacon will be involved in the maintenance of the Class 373 TMST trains used through the Channel Tunnel (these will be maintained in France at TML's Cocquelle depot). Chart Leacon's workload looks set to increase. With its main customer, NSE, poised for further expansion, the future for Chart Leacon and its total of 550 staff (including those at Ashford Wheelshop) seems bright indeed.

Present at Chart Leacon on 29 April were EMUs Nos 1214, 1571, 1586, 1596, 1716, 1730, 1762, 1803, 2261, 3003, 3012, 3080, 3432, 3478, 3492, 4305, 5210, 5264, 5840, 8205, 8317, 319047 and 319049.

**MPM would like to thank Mike Corbett, Depot Manager, Chart Leacon, for his considerable assistance in the preparation of this article.**