BR TYPE 5 DIESEL No. 56049

By the 1970s there was a requirement for an increased number of coal trains as a result of an oil crisis. Around the same time some older diesels were reaching the end of their useful lives and, as a result, BR management took the decision to explore the construction of a new design, specifically for use on heavy freight trains.

However, ambitions to produce such a fleet were somewhat hamstrung by cutbacks at many of Britain's major railway workshops, having lost many skilled staff through multiple restructuring and cost saving drives.

Accordingly, in 1974, BR placed an order for 60 freight locomotives, which were originally intended to be separately constructed in two batches of 30 at BREL's Doncaster Works and Brush Traction, Loughborough respectively. Brush had already reached maximum capacity at their Loughborough site via several unrelated projects, making it unrealistic to perform the work in-house as had been foreseen. To overcome its constraints, the company's managers opted to subcontract its batch to the Romanian locomotive manufacturer Electroputere.

On 29th April 1977, the first Class 56 locomotive to be constructed was handed over to British Rail, having been transported from Romania by ship via the port of Harwich. At one point, it was reportedly planned to deliver 20 locomotives each year. This ambitious schedule did not come to pass without serious consequences.

The 30 Romanian locomotives (Nos. 56 001 – 56 030) were found to have a relatively poor build quality. To address this effectively, the majority had to be withdrawn from service for extensive rebuilding within their first few years of operation. After which they were re-introduced to service with much improved performance.

British Rail's Class 56 diesel locomotive is designed for heavy freight work. It was built as a BR Type 5 loco, fitted with a Ruston-Paxman power unit developing 3,250 bhp, and has a Co-Co wheel arrangement. Enthusiasts quickly nicknamed them "Grids", due to the grid-like horn cover on both cab ends.

The Class 56 fleet was introduced steadily between 1976 and 1984, with a total of 135 examples manufactured. The first 30 locomotives (56001 - 56030) were built by Electroputere in Romania. The remaining 105 locomotives were built by British Rail Engineering Limited (BREL) at Doncaster Works (56031 to 56115) and Crewe Works (56116 to 56135).

Doncaster Works were in heavy demand at this time, however, and its resources would have been stretched to meet BR's targets. This was due to a lack of skilled personnel to manufacture specialist mechanical components. Instead BR's works at Ashford, Eastleigh and Swindon produced sub-assemblies. Roofs, fuel tanks and cab frames were produced at Ashford; cab desks were built at Eastleigh; and radiator housings were supplied from Swindon. Final assembly was transferred from Doncaster Works to Crewe Works, allowing Doncaster to commence work on the new Class 58 heavy freight locomotive.

As a consequence of poor experiences with the first 30 Romanian-built members of the class, subsequent locomotives featured significant modifications. It had been due largely to

the negative experiences with the initial Class 56 locos, which had caused dissatisfaction amongst several of British Rail's important freight customers, that BR officials were forced to also initiate work on the Class 58 and Class 60 fleets.

Upon its introduction, the Class 56 was argued by some to represent the first of the "second generation" of British diesel locomotives. When specifying its requirements for the Class 56, BR stipulated that the bodyshell design and many mechanical parts would be from Brush Traction's existing Class 47 design. Accordingly, they featured a stress-skin body construction that was paired with an all-welded monocoque superstructure assembly.

The engine and electrical systems were new. The power unit was a single Ruston-Paxman built engine - final development of the English Electric 16CSVT used in BR's Class 50. Changes included significantly uprated turbochargers, gear-driven camshafts in place of a timing chain, together with uprated cylinder heads, fuel pumps and injectors. The engine was nominally rated at 3,520 bhp but was set at 3,250 bhp for rail use.

One key advance in the Class 56 was the use of self-exciting alternators rather than direct current (DC) generators for both traction current and auxiliary supplies. This change reportedly resulted in the power unit being considerably more robust, as well as greatly reducing the risk of flash-overs and other earth-related faults whilst in service.

Traction supply had to be rectified as the Class 56 used DC traction motors. Much of the auxiliary apparatus, such as compressors and traction motor blowers, were powered via the unrectified 3-phase AC output of the auxiliary alternator, and therefore run at a speed proportional to engine rpm.

Another key design change started on the Class 56 was its braking system. Although earlier locos had been air braked the Class 56 was the type operated by British Rail to be built with only train air brakes, using the Davies and Metcalfe E70 system. Earlier locomotives had variously been fitted with vacuum train brakes or the more complex dual-braking arrangement.

BR Doncaster Works built 56049 and it was first allocated to Toton depot, near Nottingham, on 11th October 1978. It was outshopped in BR plain Blue livery with train air brakes fitted along with Red Diamond multiple working equipment in case double heading was necessary. A Ruston-Paxman 16RK3CT engine, rated at 3,250 hp, was installed to power the Brush TM73-62 traction motors.

Class 56 locos were restricted to 80 mph although they were built primarily for the purpose of moving heavy loads of coal on various 'Merry Go Round' delivery circuits in the East Midlands. Doing these duties would not have involved speeds of that order. During it's time at Toton it underwent a repaint into Railfreight sector Grey and red for the buffer beam and along the length of the sole bar.

Initially, and once accepted into traffic, Class 56s were deployed mainly on coal trains being allocated to depots in Nottinghamshire and Derbyshire. Their sphere of operation later extended to supplying power stations in the West of England as well as the North East.

Once more locomotives became available, 10 were sent to South Wales where they were used on Port Talbot - Llanwern iron ore trains. On 4th October 1987 the loco was transferred to Cardiff Canton depot where it would have been involved in moving trains associated with the steel industry in South Wales.

56049 was constructed with earlier style aluminium cabs having more rounded ends (and

small horn grille) as per the rest of the class 56 fleet up to 56055. 56049 had an argument with a 'Salmon' bogie flat wagon sometime in 1997 at Warrington Arpley Yard. It suffered severe damage to number 2 end cab which was replaced with a more angular, later build, steel cab (with large horn grille) from similarly damaged, and withdrawn, 56122.

During its service life, the Class 56 proved to be a strong and capable loco, being noticeably less prone to wheelslip than the newer Class 58s. However, the type's maintenance requirements were relatively high even when compared with the Class 58.

Notwithstanding bouts of significant investment into the Class 56 during the 1990s, by operators such as Transrail and Loadhaul, it proved to be somewhat uneconomic to operate in comparison to more modern types, such as the Class 66, in terms of availability or maintenance costs. This disadvantage led to the majority of the fleet being withdrawn during the early twenty-first century.

The entire class passed to English Welsh & Scottish (EWS) on privatisation of Britain's railways in 1995, when it purchased Loadhaul, Mainline Freight and Transrail Freight companies from British Rail. Withdrawals commenced in the 1990s, with the last withdrawn on 31st March 2004.

56049 was withdrawn from use by EWS on 1st February 2004 at it's depot in Immingham. It was stored in the WNTR 'tactical reserve' pool. The loco was later one of several selected for export and use with French operator Fertis Rail, so was reallocated to the WZGF pool. Following attention at Bristol Barton Hill depot, it was moved to France in May 2005. There 56049 was used on construction trains connected with the LGV Est in France.

56049 arrived back in the UK during November 2006, but spent another five and a half years in storage at Old Oak Common followed by Crewe Diesel Depot before being sold to European Metal Recycling (EMR) at Kingsbury in April 2012.

Despite the mass sale of Class 56 locos for scrap, 56078, 087, 094, 105 and 113 were sold by EMR to Colas Rail while UK Rail Leasing bought a number of Class 56s, to form a pool of hire locomotives.

In 2012, Colas purchased four Class 56s. By January 2014, Colas had a total of 11 of the type. More recently, Colas Rail Freight now operates 560**49**, 051, 078, 087, 090, 094, 096, 105, 113 and 302, on a rotating basis, for all its freight movements. Many Class 56's needed various amounts of repairs and overhauls before they could be reinstated as working locos on main line workings.

After purchase by Colas Rail, 56049 was moved to their premises at Washwood Heath where work to reinstate the loco started in earnest. Following the closure of this site, to make way for HS2 foundation works, it was then relocated to its most recent home at Boden Rail, Nottingham Eastcroft where its overhaul was completed.

In pristine Colas livery, 56049 was one of the many exhibits on display at Old Oak Common Open Day on Saturday 2nd September 2017.

56049 finally made its return to mainline freight work, on 22nd January 2019, working the 6E32 08.55 Preston Docks (Ribble Rail) – Lindsey Oil Refinery empty Bitumen tanks. This was 049's first outing on a revenue earning freight train in the UK since the end of January 2004.

Some oil tanks were photographed being taken from Sinfin (Derby) to Eastleigh on Wednesday 16th February 2022. 56049 provided the power all the way, running as 6Z73, with a crew change at Landor Street Junction in Birmingham.

Incidentally, 56049 carries the name 'Robin of Templecombe' in honour of former railway driver Robin Gould who died in 2013. He had worked on the railways for 55 years before he retired. The nameplates were formerly carried by Class 47 locomotive 47739.

ACKNOWLEDGEMENTS

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