

Profile 24

MEA/MFA Box Wagons



Build Details:
Numbering:
Bogies / Suspension:
Dimensions:
Published Drawings:
Areas of operation:
Main liveries:

1990-2004
 391000-391082, 391101-391160, 391201-391698

Main-lines throughout UK
 grey, blue, black and red

Summary:

The MEA wagons were produced by rebodging redundant HEA coal hoppers with new box bodies. Intended originally for coal, the type has found use carrying a variety of bulk loads. A total of 641 wagons were converted, although before this was completed, 135 were cut-down for use as infrastructure wagons recoded MFA.

History:

One of several types not addressed in the air-braked wagon construction programme of the 1960s and 1970s was the general-purpose open mineral wagon. Terminals that were not equipped to unload hopper wagons had to continue with vacuum-braked types such as the MDV into the early 1990s. A steady increase in the number of such terminals and short-term traffic flows, coupled with the availability of a large number of under-utilised air-braked coal hoppers in the late 1980s made the idea of conversions practicable.



MEA 391013 still in Trainload Coal livery. Rugby, 21st April 2005. *Martyn Read*

The first such conversions took place in early 1989 when three HEAs were modified as MEBs by the fitting of a solid floor and the addition of a vacuum through-pipe. Although this was an economical conversion it was not entirely successful and the wagons were soon transferred to non-revenue duties. At about the same time, a number of HAA coal hoppers had been given new box bodies, and it was decided to convert some HEAs in the same way. A contract was awarded to RFS Industries to make and fit new bodies to 46 HEAs in late 1989. These appeared in service in 1990, recoded as MEAs (MEA-A) to design code ME003B and with new numbers in a series starting at 391000. The tall box bodies had fourteen unevenly spaced ribs per side, and six on each end. Livery was Railfreight sector grey with yellow ends and small coal sector transfers were applied to the bodysides. The first batch entered service on workings between Taff Merthyr colliery and Newport Docks coal blending site.



MEA 391154 in Mainline blue, Washwood Heath, 25th March 2005. *Martyn Read*

The MDV fleet, which had numbered over 3,500 in 1986, was cut back to 244 examples by June 1990, and all were out of service by the end of 1991.



MEA 391207 in Loadhaul black, Rugby, 26th September 2004.

In 1993 a second batch of 37 MEA conversions was undertaken, this time at ABB, Crewe. These were given numbers 391046 to 391082 and were again to design code ME003B.

Railfreight was divided into three regional companies in 1994 and soon afterwards, Mainline, the newly renamed southeast company, placed an

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MEA 391580 in EWS maroon, Washwood Heath, 25th March 2005.

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MFA 391530 at Westbury, 2nd September 2005.

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order for 60 further MEA conversions. Work on these started at RFS Doncaster (not Toton C&W as published elsewhere) in late 1994 and the entire batch was delivered in early 1995 as M391101 to M391160. The wagons differed from earlier conversions in not having the end mounted access ladder and, more notably, in the all over blue livery worn. The batch was used on coal sludge services from Daw Mill colliery on the line between Birmingham and Nuneaton.

Loadhaul also ordered a batch of MEA wagons totalling 40, these being converted by RFS Doncaster in early 1996. Although Loadhaul had been taken over by EWS that spring, the wagons were delivered in the former company's black livery, albeit without the usual orange ends. The only relief on the livery was a white strip on the top capping. Numbers were 391201 to 391240 (design code still ME003B) and the wagons were used conveying coal from Killoch to Ketton, and charged chrome from Immingham to Tinsley Park. As EWS undertook a review of the fleets it had inherited, it ordered another 120 MEA rebuilds. The first 100 of these were converted by Marcroft Engineering at Stoke (391241 to 391340), the remaining 20 at EWS's wagon works at Barry, Thornaby and Toton. The wagons were painted in the new EWS livery of red with yellow top stripe, and deliveries ran into 1997. Almost immediately, a follow on order for 270 MEAs was placed with Marcroft and wagons numbered from 391361 started appearing from mid-1997. The last of this batch (391630) was delivered in late 1998, by which time Marcroft was also carrying out overhauls on earlier MEAs.

MEAs are suitable for almost any bulk-loaded material but the majority were employed on coal-related duties. Delivery of MBA 'mega-box' bogie wagons from 1999 onwards displaced some of the MEAs and it was decided to modify them for infrastructure use. This entailed reducing the height of the bodywork to just over 1 metre, about half the original. Wabtec at Doncaster undertook the first conversions, the wagons retaining their numbers but being recoded to MFA (MFA-A to design code MF001A). Marcroft at Stoke also performed similar conversions, though achieved the height reduction by cutting a section from the bottom of the body rather than the top! Many of the conversions were not repainted and retained the earlier grey, blue or black liveries. By the end of 2000, 135 MEAs had been modified to MFAs, and the type was in general infrastructure use alongside a growing number of similarly rebodied MHAs.

In a peculiar development, EWS then placed an order for 100 more MEA conversions in early 2004. These started delivery from Wabtec at Doncaster in May, taking the numbers from 391631 upwards. The order was evidently cut back before completion, and only 68 were produced (numbers to 391698).

By early 2008, just six MEAs had been withdrawn, leaving 635 wagons in stock (500 MEA plus 135 MFA). Of the MEAs, 218 were allocated to EWS Construction, 120 to EWS Energy and 130 to EWS Network, the remainder being in store. All 135 MFAs were active with EWS Network. The entire programme had used almost a third of the 1999 HEA hopper wagons built and, despite involving several contractors, resulted in a highly uniform fleet with just two design codes assigned.

Updates