

# Chiltern Railways celebrates 25th anniversary with launch of greener and quieter HybridFLEX train

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Chiltern Railways will mark 25 years of achievement as a train operator with a celebration event at London Marylebone Station and the launch of HybridFLEX – battery-diesel train. Chiltern is currently an all-diesel operator with an average fleet age of 25 years. A key priority for the operator is to help deliver decarbonisation for the UK by investing in innovation.

Long-serving Chiltern colleagues will be joined at Marylebone Station by regional stakeholders and rail industry executives, prior to the train travelling to Bicester Village on its maiden journey.

The HybridFLEX train will arrive into London Marylebone station at 1000 on 21 July. Following a programme of speeches, the guests will take a closer look at the HybridFLEX train before it departs from the station at 1030. The train will then arrive at Bicester Village at 1120 where there will be further activities to commemorate Chiltern's silver anniversary.

**HybridFLEX train**

HybridFLEX is the product of collaboration between rolling stock owner and asset manager Porterbrook and engineering giant Rolls-Royce. As well as offering zero emissions and near silent operation at stations, the Rolls-Royce Hybrid PowerPack will also reduce fuel consumption and so CO2 emissions by up to 25%, Nitrous Oxide (NOx) emissions by over 70% and particulate emissions by over 90%, compared to the engines it replaces.

Chiltern is delighted to be trialling this new technology to demonstrate that it can contribute to better air quality, decarbonisation and the aim of removing traditional diesel trains from its network. The HybridFLEX aims to enter full passenger service from September this year.

Rail Minister Chris Heaton Harris said: "HybridFLEX trains will make rail travel even greener and the air in our stations cleaner.

"Chiltern Railways have connected people for a quarter of a century and now are helping to prepare for the future as we build back greener. This is a great example of how innovation and enterprise can help us reach our ambitious target of net zero emissions by 2050."

Richard Allan, Managing Director at Chiltern Railways said: "Chiltern has a fantastic track record of innovating and investing in new routes, stations, depots and trains to attract and retain customers. We are proud and privileged to mark our 25th anniversary by introducing colleagues and stakeholders to the HybridFLEX train. We need to modernise Chiltern again and this exciting use of new technology in an older train is a potentially very significant opportunity to help us decarbonise and improve our customer experience."

Mary Grant, CEO of Porterbrook said: "We are delighted to be able to support Chiltern Railways' ambitious plans for the future. Our HybridFLEX, built in partnership with Rolls-Royce, will offer improved air quality and reduced noise at stations and other sensitive locations on the Chiltern network.

"HybridFLEX is part of Porterbrook's growing portfolio of alternative traction systems designed to help Britain's railway accelerate the race to Net Zero."

Warren East, Chief Executive Officer at Rolls-Royce said: "This collaboration demonstrates the pivotal role technology is already playing in the transition towards a net zero future. With 1.7bn passenger rail journeys taking place every year in the UK, the 25% reduction in CO2 emissions offered by HybridFLEX represents a meaningful step forward in the country's journey towards its 2050 net zero target. We're delighted to be part of this ground-breaking team with our hybrid solution alongside Chiltern Railways and Porterbrook."

Ricardo was appointed by Porterbrook in 2019 to provide engineering support for the integration of the mechanical, electrical and critical controls systems of the hybrid powerpack.

Colleagues from its Automotive and Industrial division were brought across for their experience of state-of-the-art hybrid technologies in the commercial vehicle world, whilst our rolling stock experts oversaw the integration aspects.

The company also provided a range of certification and approvals activities ahead of the test run programme in spring 2021.

“We are proud to have supported Porterbrook throughout the development of this innovative and important project for the industry,” said Ian Carmichael, from Ricardo’s Rail Division. “The UK has a large fleet of diesel units with serviceable life of ten years or more. The HybridFLEX programme proves they have a viable future as hybrids, delivering reduced NOx, carbon and noise emissions on routes that may be many years from electrification.”

*Photo credit: Chiltern Railways*