

100th GTR Electrostar upgraded and back in service

April 19, 2023



The 100th Class 377 Electrostar operated by [Govia Thameslink Railway \(GTR\)](#) has completed the £100 million Project Aurora upgrade programme, returning to passenger service with a host of new features that significantly improve reliability and passenger experience.

The project is funded by [Porterbrook](#) with Alstom providing technical specification, design work and materials and GTR carrying out the installation and testing. In total, 270 trains consisting of 1086 carriages will go through Project Aurora, with the final train due to be completed in 2025.

A streamlined process means that two trains are fully upgraded every week at GTR's depot in Selhurst and returned to passenger service. Once completed, all 270 trains combined will have required 250kms of wiring, 35,000 lighting tubes, 32,000 power/dual USB sockets and 2,500,000 fixings and fasteners.

GTR's engineering director Steve Lammin said: "We're delighted to celebrate this 'ton-up' milestone with Porterbrook and Alstom. We've achieved it by giving these great trains a broad-ranging upgrade, including features our passengers have asked for, at a rate of two per week. I'm really pleased we're working together to provide our customers with an even better on-board experience and more reliability over the

coming years.”

Porterbrook’s chief operating officer Ben Ackroyd said: “It’s been a remarkable effort by everyone involved to reach 100 upgraded Electrostars. We’re all working together to deliver these improvements at pace because passengers told us it would make their journeys better. With two trains being worked on side-by-side in Selhurst every week and returned to service, even more rail users are going to benefit from the new modern and sustainable on-board features.”

Peter Broadley, Alstom managing director services, said: “This project continues to successfully deliver upgrades to the Electrostar fleets for GTR customers. The works are on-time and on budget, and shows the huge benefits of working closely with our partners at GTR and Porterbrook. I’m looking forward to successfully completing the project and showcasing the benefits of upgrading trains, like these, that have been in service for a few years now.”

The upgraded trains feature plug and dual USB sockets at every seat, enhanced passenger information services with new digital screens, energy saving LED lighting throughout the train and automatic passenger counting to help GTR analyse services and manage timetables effectively.

Smart on-board data recorders and updates to the Train Data Network allow for improved remote monitoring of the trains operational systems, which helps reliability and reduces the time trains spend out of service for maintenance or repair. Forward-facing and track debris CCTV has also been installed on every train with the ability to remotely live-stream and download images.

GTR has the UK’s biggest fleet of Electrostars, operating between London, Surrey, Sussex and the south coast. The trains also run on Great Northern and Gatwick Express routes.

Photo credit: Porterbrook