



# Saft MSX batteries 'step-up' to the reliability challenge for Hitachi's Class 800 series UK trains



**Saft MSX batteries will deliver three hours of back-up power on new UK fleet of electric and bi-mode trains.**

The Intercity Express Programme is replacing the UK's fleet of diesel-powered InterCity 125 trains with new electric and bi-mode trains. The new trains will operate on the East Coast Main Line and the Great Western Main Line services. The new Class 800 series trains supplied by Hitachi have greater passenger capacity and are significantly lighter in weight than their diesel predecessors, leading to lower energy consumption and better environmental performance.

## **Reliability and a long life**

Hitachi's design for the Class 800 called for battery systems to support passenger safety and comfort systems for up to three hours in the event of an interruption to the main power supply. The key requirement for Hitachi is to achieve exceptional reliability and power continuity over a 15-year service life, which will deliver backup power when it is needed and keep operational costs down.





## Plug and play battery rafts

In a five-year framework contract, Saft is supplying its MSX batteries in compact turnkey 'plug and play' battery rafts to be mounted under the train floor. Every one of the 122 Class 800 and Class 801 train sets will be supplied with at least two battery systems. Some will have three or even four systems depending on their operational mode. The MSX range of batteries is designed to deliver compact high power for railway back-up applications.

### Key features:

- Two, three or four battery systems on each train
- Operating temperature range from - 30°C to + 50°C
- Supplied as a package in easy-to-install trays
- Up to three hours of back-up power
- Low maintenance requirements
- 15 year plus lifetime

## Stringent technical requirements

The Intercity Express Programme has very high technical requirements in terms of train performance and operation, meaning that the fleet's back-up batteries need to offer long-life and operate with total reliability even in the cold winters of northern Scotland.

### Key benefits:

- Engineered by rail battery experts for the Class 800
- Exceptional high power and cycling performance
- Reliable performance even in extreme temperatures
- Robust design will resist shock and vibration
- Compact and lightweight battery minimises wear on traction components
- Low total cost of ownership

## Quality and reliability

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*For the Intercity Express Programme, Hitachi places the highest priority on quality and reliability and we require this from our suppliers as well. Saft is able to provide us with a commercially competitive offer, while meeting our customer's demanding technical requirements regarding temperature conditions and lifecycle. Our collaboration with Saft over the duration of our contract will be very positive, especially as they are a proven, supportive supplier to the Class 395 Javelin™ trains.* ”

Jamie Foster, Procurement Director of Hitachi Rail Europe



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