Handling high passenger numbers in a demanding environment

The new trains will receive their traction power via an overhead catenary system. In the case of a main power failure, the onboard batteries will play an essential role in ensuring passenger safety and comfort. They will support the operation of vital systems including lighting and automatic doors. The lightweight trainsets have been designed for high passenger numbers in a hot and wet tropical climate.

Hyundai Rotem’s trains are being equipped with Saft MRX batteries to ensure passenger safety and comfort on the brand new Hyderabad Metro Rail system.

Hyundai Rotem, the leading manufacturer of railway vehicles, is delivering a total of 57 trains, each made up of three cars, for the new metro system that will ease traffic congestion and pollution in Hyderabad in India. The city is set to reach a population approaching 14 million people by 2021. The new Hyderabad Metro Rail system will have three lines covering 72 km and 64 stations.

Saft batteries deliver reliable back-up power for Hyderabad’s new Metro Rail system
MRX: a tough battery for harsh conditions

Saft supplies a total of 76 of its MRX145 batteries with an energy storage capacity of 145 Ah. Based on nickel-cadmium (Ni-Cd) technology, the MRX is designed specifically for onboard rail back-up power applications. MRX is an ultra-lightweight and compact battery, enabling rail operators to free up significant space for passengers. MRX resists the shock and vibration found in rail applications and performs reliably in harsh conditions.

Designed for rail

Saft MRX batteries are fully adaptable to suit the diversity of the latest railway designs and configurations.

- Available in 18 steps ranging from 70 to 520 Ah
- Compact design is 30% smaller and lighter than an ordinary Ni-Cd battery
- Field proven to last over 15 years
- Reliable operation from -20°C to +50°C
- Resistant to temperature extremes of -50°C to +70°C
- Integrated water filling system for simple topping up

Ensuring long life and optimized TCO

Saft MRX 145 batteries are purpose built to deliver a long service life. Their compact and lightweight form has enabled Hyundai Rotem to free up onboard space and weight for the Hyderabad Metro Rail trainsets, enabling the rail operator to transporting more passengers.

- Reliable battery performance delivers consistent service over a long life
- Capability to operate over a wide temperature range and in hot and humid conditions
- Compact and lightweight battery frees up space for passengers
- Long life and low maintenance leads to low total cost of ownership

Outstanding track record makes Saft the natural choice

“At peak hours, the new metro trains will have a frequency of 3 to 5 minutes, so reliability of all the onboard systems is absolutely essential. We were impressed with the outstanding track record that Saft MRX batteries have established in metro projects for both reliability and long life, so with the added advantage of the high level of local service and support provided by Saft’s new facility in Bangalore they were the natural choice for our Hyderabad project.”

Sejin Park working in the overseas procurement team of Hyundai Rotem.