

Located in the western region of Singapore, the Singapore Rail Test Centre (SRTC) is a comprehensive facility designed for off-site system integration testing (OSIT) of new MRT/Metro and LRT trains, and rail systems. With the ability to operate 24/7, SRTC enables real-time testing of trains & systems with actual equipment, without affecting ongoing construction of new railway lines, minimising any impact on project timelines.

Additionally, SRTC allows for the testing of new or upgraded trains and railway systems of operational lines, without affecting their regular commuter services or maintenance schedules. The off-site integration testing is critical for the deployment of driverless train systems and provides for greater assurance in the renewal and upgrading of signalling systems. Beyond OSIT and train refurbishment, SRTC is a development platform for innovative land transport solutions. It supports technology trials, test bedding and proof-of-concept initiatives in areas such as fully automated systems and cutting-edge rail technologies.

Key Features

Testing can be done independently on each of the 3 test track.

High Speed Test Track

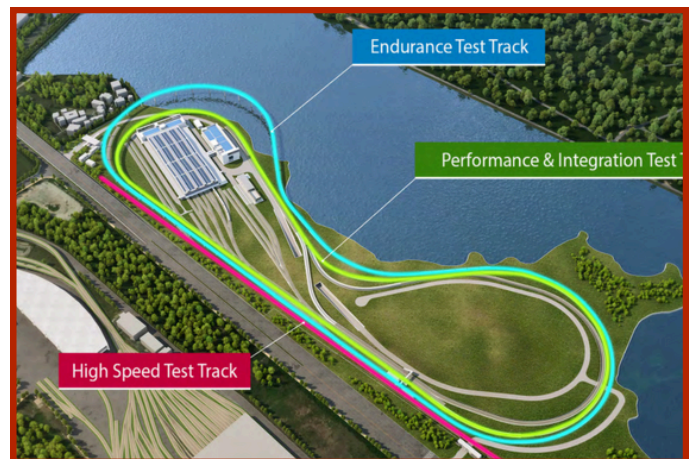
Total loop length: Approximately 3km
 Maximum permissible speed: 100 kph
 Power supply provision: 750/1500VDC via 3rd Rail/ OCR

Performance & Integration Test Track

Total loop length: Approximately 2.8km
 Horizontal curve radius: Minimum R140m
 Maximum permissible speed: 50 kph
 Maximum gradient: 3%
 Power supply provision: 750/1500VDC via OCR except on S-curve section

Endurance Test Track

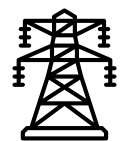
Total loop length: Approximately 3km
 Horizontal curve radius: Minimum R190m
 Maximum permissible speed: 60 kph
 Maximum gradient: 3%
 Power supply provision: 750/1500VDC via OCR



SRTC Common Equipment & Facilities



Trackwork



Traction Power



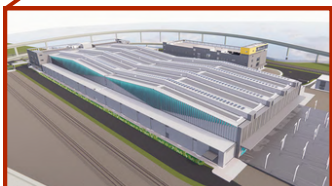
Common Signalling & Communications



Workshop equipment

Key Facility Buildings

Workshop Building



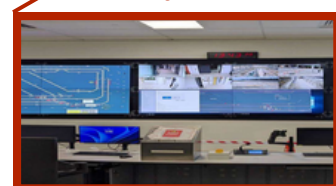
Admin Building



Operation of Control Centre



Test Facility Control Centre





Unleashing the Future of Innovation in Rail Testing

At SRTC, every train and railway systems can be tested to achieve peak performance. From rigorous integration testing of new and refurbished trains with signalling, power, communication and control systems, our facilities ensure that every train can meet the required standards before hitting the tracks. Designed to push the limits of technology, we empower operators to deliver faster, smoother, and more reliable journeys for commuters. Currently, our new Circle Line trains undergo high-speed testing here, while older trains will be rigorously checked post-refurbishment to be assured of the required safety and reliability performance.

SRTC reduces the impact to the engineering and maintenance windows on the main lines, which are required in brownfield projects procurement of additional or replacement trains on our fully automated lines. This facility will provide realistic testing of core systems such as the signalling replacement projects, playing a vital role in enhancing the efficiency and reliability of your railway system.

