Integrated trial runs kick off for May opening of Metro 3 Phase 1

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Mumbai: Mumbai Metro Rail Corporation Ltd (MMRCL) has commenced integrated trial runs for Phase I of the Metro 3 corridor (BKC-Aarey) with its commercial run expected to begin in May.

"Integrated trial runs for Metro 3 (Colaba-Bandra-Seepz) has commenced. Various systems like rolling stock (coach), signal telecommunications, tracks traction etc, are being validated during the trial runs which is being carried out between BKC and Aarey," MMRCL posted on X.

It plans to open this stretch in May and the entire corridor till Cuffe Parade by Sept 2024.

Trials play a pivotal role in ensuring the reliability and safety of new metro trains.

Integrated trials focus on ensuring smooth operation of trains by validating their compatibility with signalling, telecommunication, track infrastructure, and traction systems.

Initially, MMRCL conduc-

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Metro Line 3

Colaba-Bandra-Seepz

Length 33.5km

Stations 28

Phase 1 Aarey to BKC

Stations: 10 Trains: 9

7 of the 9 trains will be for passenger service, 1 will be kept on standby and 1 for maintenance > Headway (frequency): 6 minutes 40 seconds

> Operational time: 6am to 11pm (based on passenger response) Trips: 260 round trips a day Aarey to BKC- 130

BKC to Aarey- 130

ted two key trials: Static testing and dynamic testing.

During the static testing phase, which has already been concluded, the train underwent rigorous assessments including movement verification, speed calibration, brake functionality, door operations, AC system performance, and indicator checks.

In the subsequent dynamic testing phase, a wide array of performance and safety parameters were evaluated. These included braking and acceleration capabilities, operational systems integrity, passenger comfort level, energy efficiency, and seamless integration with signalling and communication systems.

Prototype trains are subjected to a comprehensive trial period covering a minimum distance of 10,000km while subsequent trains undergo trials spanning 2,000km.

Following the completion of dynamic tests and design-proven trials at a maximum permissible speed of 95kmph, internal oscillation trials are conducted on the mainline by Research Design and Standards Organisation (RDSO).

Subsequently, the trains will undergo pre-revenue service trials to ascertain their satisfactory performance under operational conditions.

Upon successful completion of integration trials and obtaining safety certifications for various systems, approval is sought from the Independent Safety Assessor for the safe operation of trains.

After obtaining the relevant certifications, MMRCL will approach the Commissioner of Metro Rail Safety for necessary statutory permissions required to commence passenger services.