

Second tunnel boring machine for Metro-3 to arrive in city this week

Work On 2 Stretches To Begin Next Month

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Mumbai: A week after the first tunnel boring machine (TBM) for the underground Colaba-Bandra-Seepz Metro-3 corridor reached Mumbai, the second one is expected to arrive by Friday.

“The first TBM shaft was recently built in Naya Nagar in Mahim and the boring work for the 6.08km twin tunnels from Siddhivinayak to Dharavi will begin in October;” said SK Gupta, Mumbai Metro Rail Corporation (MMRC) project director. “The second TBM shaft will be built at Azad Maidan for the boring work from CST to Mumbai Central,” he added. MMRC has set a deadline of September 2019 to complete the tunnelling work.

Contractors on the seven civil packages of the 33.5km Colaba-Bandra-Seepz alignment of the Metro-3 corridor will procure 17 TBMs from leading international manufacturers, including Robbins Company, TERRATEC, Herrenknecht and STEC. Of the 17 tunnel boring machines, 10 will be brand new and seven refurbished.

The machines will take at least a year to dig a tunnel on each of the seven ci-

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➤ A tunnel boring machine (TBM) is used as an alternative to drilling and blasting method to construct tunnels with circular cross section

➤ The first machine had arrived in Mumbai on Sept 4. From Oct, it will start building 6.08km twin tunnels from Siddhivinayak to Dharavi through TBM launch shafts located at Naya Nagar in Mahim

➤ The second TBM is expected to arrive by Friday. It will be used to dig 4km twin tunnels from CST up to Mumbai Central through a launch shaft located at Azad Maidan



vil packages, said sources.

At Naya Nagar, a 25-m shaft has been built and the TBM will be able to rotate around 1.6-2 rounds per minute. “The machine will be able to cover 8-14m stretch a day. The distance covered every day may vary as the geology is not uniform,” said Gupta.

The TBMs will operate 24x7 and clear around 62 cubic metre of muck for every 1.4m of boring.

Gupta added, “All tunnel-related works, whether it is clearing off the

muck, launching or retrieving of TBM, will done at night as there will be no traffic on roads.”

Once the tunnels are cleared, MMRC will begin laying Metro tracks. Around 30 people will work each shift inside the tunnels, said Gupta.

The entire Metro-3 project has been divided into two phases: Phase I (Aarey-BKC stretch) is expected to be completed by September 2020 and Phase II (BKC-Colaba stretch) is expected to be completed by March 2021.