

L&T's Mumbai Coastal Road Project sets a world record in Tunnel Boring

TBM 'Mavala' completes 456.72 m in a single month

Mumbai, August 3, 2022: Larsen & Toubro, an Indian multinational engaged in EPC Projects, Hi-Tech Manufacturing and Services, today announced that their 12.19 m dia Slurry TBM (Tunnel Boring Machine), named 'Mavala', had achieved a world record for monthly lengths by excavating 456.72 m at the prestigious Mumbai Coastal Road Project, Package 4. Deployed from Girgaon Chowpatty, the TBM, presently the largest deployed in the country, broke the previous global record of 455.4 m for monthly tunnelling done by a 13m single shield EPB (Earth Pressure Balance) TBM.

"This is a huge achievement for the entire construction industry worldwide and truly an engineering feat to be proud of," enthused Mr. S.V. Desai, Whole Time Director & Senior Executive Vice President (Civil Infrastructure), L&T, describing the achievement. "We achieved this speed of tunnelling thanks to our experienced and qualified team. It had given us a huge boost to speed up construction to deliver this iconic and extremely complex project in time and with quality. I take this opportunity to thank our customer, the Municipal Corporation of Greater Mumbai (MCGM), for reposing faith in us and supporting us through this whole process, as well as our employees without whom this could not have been achieved." he added.

For the project team, TBM 'Mavala' faced several challenges. To begin with, TBM 'Mavala', named after infantry warriors in Shivaji's army, was delivered during the height of the pandemic and since external experts could not travel, the team took it upon themselves to assemble the TBM with only some 'virtual' help. Weighing approximately 2,500 tonnes, the TBM was then lowered into the launching shaft in a fully assembled form. Another innovative method they adopted was to 'rotate' the TBM inside the shaft to start the second tunnel construction which saved them several months to dis-assemble, lift, transport, re-assemble & lower the TBM at a new location.

About the Mumbai Coastal Road Project (MCRP): Phase-1 of MCRP is a 9.98 km section from Princess Street Flyover at Marine Lines to the Worli end of the Bandra-Worli Sea Link (BWSL) involving sea front development and is a first-of-its-kind in India. The project is divided in

3.82 km long section over reclaimed lan