

Designed key aspects of Chandrayaan 3 mission: Tata Consulting Engineers

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Tata Consulting Engineers Limited (TCE) has revealed that the critical systems and sub-systems engineered by the firm played a pivotal role in the launch of India's third moon mission (Chandrayaan-3) by the Indian Space Research Organisation (ISRO). As the largest Indian private-sector engineering and project management consultancy, TCE has created unique and indigenously built essential systems and sub-systems, tailor-made for space mission launches.

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fourth nation in the world to achieve a successful lunar landing. India also marked a milestone by becoming the first country to land near the South Pole, an area believed to harbour significant amounts of water ice. Experts suggest that if this ice is accessible, it could potentially be mined for rocket fuel and life support in future crewed missions.

"With India's recent achievement of becoming the fourth nation to land on the moon, we feel honoured to have played a role in our nation's success," commented Amit Sharma, Managing Director and Chief Executive Officer of Tata Consulting Engineers. "This mission not only showcases India's capabilities but also highlights her pioneering spirit towards scientific discoveries. I believe that the success of this mission will inspire young scientific minds and future scientists and engineers, enabling India to innovate across various sectors and elevate the 'Make in India' mission to new heights."

Since 2005, TCE has been collaborating with ISRO, contributing substantially to the design of vital components and facilities necessary for launching Satellite Launch Vehicles (SLVs). The firm's engineering efforts include the solid propellant plant, vehicle assembly building, and mobile launch pedestal. The solid propellant plant produces the propellant that powers the SLV, and various special-purpose equipment are required within the propellant plant. The vehicle assembly building and other specific facilities are used to assemble the space vehicle, while the mobile launch pedestal transports the launch vehicle to its launch location.

"TCE is a valuable partner in our space programme and has provided numerous innovative and indigenous designs," said Sudheer Kumar N, Director of Capacity Building and Public Outreach (CBPO), ISRO. "As we plan to expand our missions in the future, TCE is expected to continue playing a crucial role in our upcoming projects."

TCE's contributions to Indian space missions stretch back several decades, even before 2005. In 1971, TCE engineered the world's first and largest equatorially mounted cylindrical radio telescope, ORT, in Ooty. In 1986, the firm undertook the challenge of designing and engineering India's first domestically produced 2.3m optical telescope for the Indian Institute of Astrophysics at Kavalur. In 1994, TCE assisted in the installation of the giant metre wave radio telescope, widely known as GMRT, comprised of 30 colossal parabolic dishes.