



Clamping Global Confidence in Indian Manufacturing

Sometimes it is not the magnitude of work, but the confidence to do it right, that makes all the difference. Chennai based fixture builder, Forms and Gears, proved it when it commissioned India's largest set of hydraulic fixtures to Toshiba, Japan. Debarati Basu finds out more about this project and how it became a landmark in itself in the Indian heavy engineering segment.

Designing the first ever five meter long fixture could itself have been a challenge, but not for the Forms and Gears team, who chose to put in action their four decades of experience in building numerous large high precision hydraulic fixtures. It also comes as a surprise when Japanese giant Toshiba, approached an Indian company entrusting them with a job of such magnitude.

The giant fixture will be a part of floor type milling and boring CNC

machining centres, built by Toshiba, for a global earthmoving equipment manufacturer. While the complexity of the project was high, having the right fixture to load and clamp large earth moving equipment parts with precision adds to the criticality of the job.

How It Began

The project kickstarted in India in April 2011. As designing forms the most critical part of the entire process, getting the foundation right was the target of the team. A team of five Indian

designers were put to work.

Designing a five meter long hydraulic fixture weighing 15 tonnes was in itself the biggest challenge. "We had earlier done 3.3 metre large hydraulic fixtures for Mazak machines in the Ashok Leyland-John Deere project, but 5 meters was something which was challenging to fathom. So, considering all the aspects of manufacturing and shipping such a huge fixture, we took the decision to split the base into three parts," says Reji Varghese, MD, Forms and Gears.