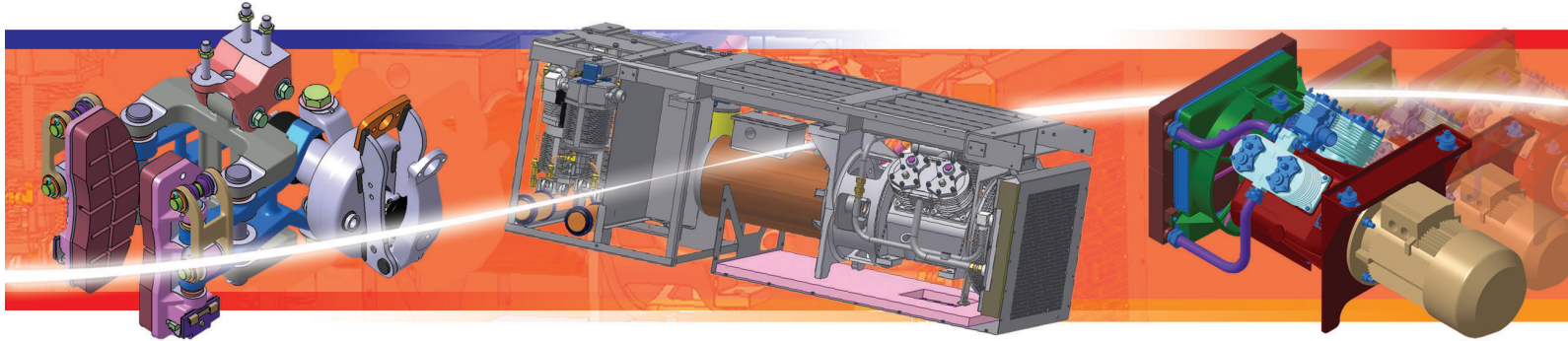


# Faiveley Transport India

Using CATIA to create world-class products for the railway industry



## Overview



### ■ Challenge

To collaborate with other development centers to design and manufacture products tailored for India's harsh operating environment.

### ■ Solution

Faiveley Transport India chose CATIA for its ability to deliver high-quality, collaborative 3D design and manufacturing solutions for complex engineering projects.

### ■ Benefits

Using CATIA, Faiveley Transport India has improved manufacturing and design efficiency, and now works together with other design centers to deliver products that meet global standards and customer expectations.



"There are no limitations to using CATIA at Faiveley Transport India. We are using CATIA extensively and it has met all our expectations."

A. Elayappan  
Manager - Product Engineering  
Faiveley Transport India

### Providing rail engineering systems across the globe

Faiveley Transport India Ltd. (FTIL) is a world leader in the design and manufacture of rail industry components such as advanced braking systems, coupling systems, HVAC systems, doors and door controls, pantographs, and other electro-mechanical and electronic systems. FTIL is part of the Faiveley Group, which is headquartered in France and has operations in 13 countries.

In India, FTIL supplies brake control systems, air generation products, and couplers for the country's rail network. It has acquired orders for these systems from Delhi Metro Rail Corporation and is also in negotiations with many other metro projects across India. In addition to designing complex systems for the Indian rail market, the highly trained team of engineers at FTIL also support their five global centers of competence for various design and development works.

### Higher efficiency between design and manufacturing processes

FTIL was quick to realize that clients had greater expectations of reliability, fault tolerance and robustness from products meant for use in India. Faiveley turned to CATIA, Dassault Systèmes' leading virtual product design solution, to deliver highly advanced products that meet global standards, can withstand the rigours of the Indian operating environment, and require little maintenance.

In India, the company has a team of 30 engineers using CATIA, which has now replaced the multiple software suites in use earlier. CATIA proved to be far more powerful, allowing Faiveley engineers to create complex geometry and process-centric, mathematically precise 3D designs far more easily.

With Faiveley's products characterized by complex assemblies and large Bills of Material, it was essential that any



solution support associative design, and seamlessly link the design and manufacturing processes. "CATIA has met all these requirements with its excellent management of 3D modelling hierarchies and support for macros. Engineers are now able to deliver flexible designs, making customization, future changes and edits easier," said V Chandrasekar, DGM - Engineering, Faiveley Transport India.

Manufacturing efficiency has also been greatly improved by CATIA's linking of casting and machining processes - vendors and suppliers are now provided with 3D or 2D models as required. All this has led to FTIL being able to provide greater robustness at the design stage itself, which is invaluable since the company's low volumes of production cannot provide economies of scale. "There are no limitations to using CATIA at Faiveley Transport India. We are using CATIA extensively and it has met all our expectations," said A Elayappan, Manager - Product Engineering. FTIL engineers also use CATIA to check for errors, enhancing productivity by ensuring that any issues are resolved at the design stage itself.

### CATIA enables delivery of world-class products

FTIL has improved efficiency by increasing collaboration with suppliers and allowing flexibility in design "We're working with different people in different countries and CATIA is known and used by all," said R. Prabhakaran, AGM - ISD. FTIL is also in the process of introducing new products such as passenger car HVAC systems into the Indian market, for which it is in the process of transferring technology from its other Centers of Excellence to its Hosur works. "The next one and a half years are crucial in terms of future investments," explained V Chandrasekar. "We fully expect that CATIA will help us to achieve our goals."



"Team FTIL believes in providing high-quality Engineering support to its high-tech Centres of Competence by participating in core design activities to provide end-to-end technical solutions. In this, CATIA has leveraged the potential of the team by leaps and bounds."

Seshadri Srinivasan  
Managing Director  
Faiveley Transport India Limited

### Focus on EDST

With over 115 skilled professionals on its rolls in India, EDST provides Indian industry with complete assistance in implementing Dassault Systèmes' PLM solutions. It played a critical role in helping Faiveley Transport India transition to CATIA. "EDS Technologies team has been responsive and has good understanding of our applications. The services extended have been highly professional," R. Prabhakaran, AGM - ISD, Faiveley Transport India.



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