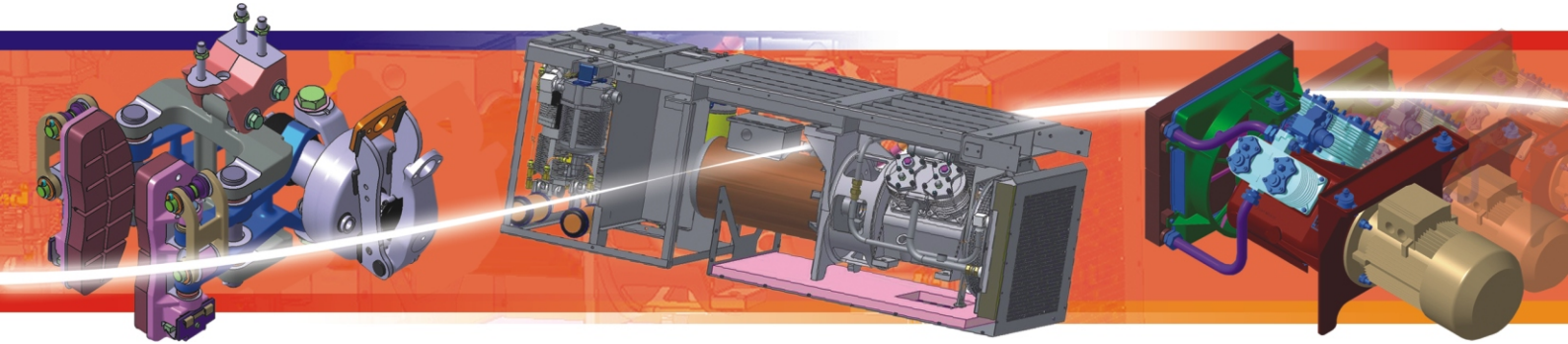


Faiveley Transport India

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

FITL 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."



"CATIA is a widely accepted PLM solution for the manufacturing industry because it offers the most flexible and powerful design environment."

V Chandrasekar
DGM - Engineering
Faiveley Transport India



Dassault Systèmes
10, rue Marcel Dassault
78140 Vélizy Villacoublay – France
+33 (0)1 61 62 61 62

SolidWorks®, CATIA®, DELMIA®, ENOVIA®, SIMULIA® and 3D VIA® are registered trademarks of Dassault Systèmes or its subsidiaries in the US and/or other countries.

Images courtesy - Faiveley Transport India
© Copy right Dassault Systèmes 2009
All rights reserved.

For more information or to contact a sales representative, visit www.3ds.com/contact

