

Providing design and CAD support for building industrial power transmission products

Industrial

Service provider: Geometric Ltd.

Customer: Leading global supplier of quality power transmission products to most major industrial chains across globe

Vertical: Industrial Machinery

Project profile:

- i. New Product Design, Analyses, Manufacturing Validation, Engineering Support and Technical Publication for key transmission assemblies
- ii. Modifications to existing products by benchmarking with other competitors in the market

Business objective:

- i. To benchmark, design and develop key transmission assemblies with better features, functionalities, cost effectiveness and longer life than those manufactured by competitors
- ii. Prepare simplified dynamic 3D animated Technical Documents to increase product sales and aid in after sales activities

Duration of the project: Ongoing since September 2008

Team : 15 member team of CAD design engineers, validation and project management experts

Tools/Technologies used:

UG-NX, ANSYS, Nastran, eDrawings, Adobe InDesign, PTC Workgroup Manager for Windchill

Results achieved:

- i. Designed and developed the tooling parts and complete assembly with 'First Time Right' results
- ii. Achieved 15% reduction in time to market
- iii. Developed Technical Documents with simplified 3D models, which helped the client prepare more accurate customer quotes for their products and services, leading to increased sales

Innovations:

- i. Customized data models were created in MS-Excel, which helped in the generation of CAD models of over 200 gear options, in a short span of time
- ii. Similar spreadsheets were created for calculating bearing life and bearing sizes, compatible for different assemblies