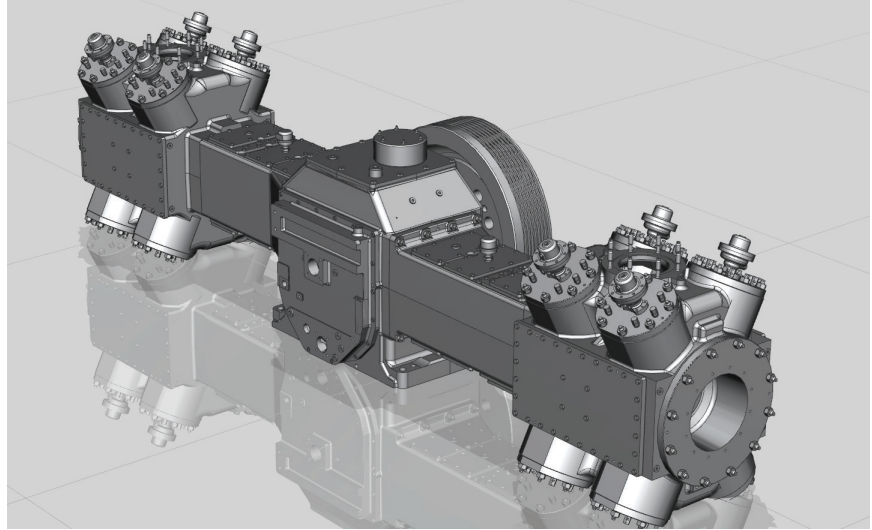


'First-time-right' products possible with Siemens

By leveraging the PLM solutions Teamcenter and NX provided by Siemens, Burckhard Compression's Indian counterpart can produce optimised products the first time round.

Burckhardt Compression (India) Pvt Ltd (BCIN), a wholly owned subsidiary of Burckhardt Compression AG, Switzerland, is one of the leading manufacturers of reciprocating compressors in India. Its compressors have a proven track record in the field of oil and gas industries with various process applications. The company's principals have vast experience with more than 170 years in the field of manufacturing reciprocating compressors for different industrial applications. Almost all have gas duties. These systems are employed in a range of industries or sectors, including as oil and gas, gas transport and storage, refinery, chemical, petrochemical and industrial gas. The company's products enjoy the reputation of high quality with minimal life cycle costs and are supported by a full range of services. BCIN is one of the few compressor manufacturers in the world with a complete range of reciprocating compressors. It specialises in refineries, petrochemicals, gas bottling plants, air separation plants, gas transport and storage,



CNG/NGV refueling stations as well as public utilities. Distribution also includes compressors for various refineries and petrochemical plants, including in Taiwan, Thailand, China, Japan, Surinam, Saudi Arabia, Jordan, Russia, the Netherlands, Malaysia, Nigeria, Bolivia, USA, Serbia, Oman and other countries.

BCIN incorporates an advanced manufacturing facility, spread over

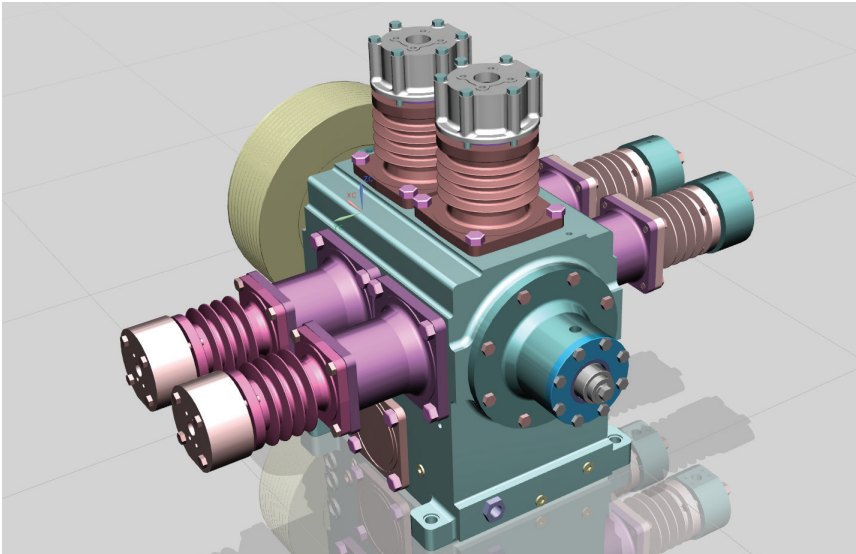
6,000 sq m in Kondhapuri, Pune, India. Its local design and sizing teams carry out pulsation and vibration studies, and thermal analysis for creating premium compressor products. Its in-house plant engineering and project management play a vital role in offering solutions that carry the famous Swiss quality benchmarks.

The company is therefore constantly engaged in improving its processes, expanding geographical reach and offering superior solutions. BCIN also offers a strong network of after-sales service and spare parts.

NEW GOALS FOR PRODUCTION

In 2011, BCIN embarked on new initiatives to address a host of issues such as new product development, communication and re-use, production efficiency and regulatory compliance. Internally, it wished to reduce lead time for project execution, achieve "first-time-right" for new products,

reduce time and cost spent in design verifications and validation, and employ flow analysis for casting processes. It also sought to reduce manufacturing





defects and bring its global centers on the same computer-aided design (CAD) platform. Earlier, the company faced several restrictions that came with 2D design platforms. The design process was time-consuming, with limitations on reusing existing project data and drawings. It thus depended on external sources for analysis and design. It could also not meet customer demands for 3D data.

BCIN thus formulated some concrete goals to bring its production and processes up to speed. These were: reduce lead time, create high quality products through advanced design and development solutions, reduce design verification and validation times and costs, and create a global CAD platform to connect all global organisational peers.

To upgrade its design and collaboration platform, BCIN needed to address several issues. These included the financials of PLM implementation, the switch-over time, creation of databases and standards, a standard parts library and training and rollout of the new system. There were also challenges of integration with internal systems like the SAP solution, and company-specific customisations for the drawing database.

SIEMENS' INVOLVEMENT IN PRODUCT INNOVATION

BCIN adopted NX software and Teamcenter software from product lifecycle management (PLM) specialist Siemens PLM Software to meet the above objectives. The core solution was implemented in 2011, followed by

integration, a similar CAD platform for the headquarters database and internal standardisation. Calling attention to the advantages of using NX, Atul Prabhune, senior manager, Design and Development, BCIN, notes, "NX is an excellent platform for product development enabling a safe landing for innovation, order execution with speed and accuracy, the best runway for analysis of components and advanced manufacturing techniques."

The combination of NX and Teamcenter is formidable in realising productivity gains, but offers so much more. "By using Teamcenter and NX, you can not only increase your company's productivity, but also enhance your gravitas in the market," says Tanmay Vaidya, Coordinator, Global Engineering Systems, BCIN. "These Siemens PLM Software solutions represent the best PLM platform available."

POWERFUL, MEASURABLE RESULTS

BCIN has seen project execution time drop by 20 per cent. It can execute a maximum number of projects with smaller teams, and rejection rates during assembly and manufacturing have dropped with the help of 3D models. It has also gained in productivity with easy access, standardisation and re-use of data, better revision controls, systemic approval processes, Teamcenter interface with the SAP system and use of standard part libraries.

With NX and Teamcenter, BCIN can now deliver more accurate components and reduce development time through collaboration between design and analysis.

By using Teamcenter and NX, you can not only increase your company's productivity, but also enhance your gravitas in the market."

Representation of assembly components is now easier for actual compressor assembly and assembly at the client end. The goal of first-time-right is now achievable, with improved quality and minimum potential for errors. On a global scale, the company can now exchange data and communicate with suppliers and customers through Siemens PLM Software solutions.

"Teamcenter and NX are the fastest tools that we use to develop new products," says Kiran Pandit, a key user of the technology at BCIN. "They are easy to work with and allow the efficient re-use of data across global teams."

"By implementing Teamcenter and NX, we have achieved globally benchmarked design processes, apart from being able to optimise resources and achieve collaboration across teams and locations of our global subsidiaries," notes Vaidya.

R S Gunaji, General Manager, Design and Manufacturing, Burckhardt Compression (India) Pvt Ltd, concludes, "Teamcenter ensures data security and NX provides a very good platform to serve as input for various additional analysis software. Our next mission is to use these tools for CAE in our manufacturing." 