SIEMENS

Solid Edge

Cybernetik

3D modeling wins new customers by better illustrating innovative design concepts

Industry

Industrial machinery

Business challenges

Every project is unique Complicated machinery with complex geometries Shorter cycle times

Keys to success

Upgrade to Solid Edge with synchronous technology

User friendliness; short learning curve

Prospective customers see 3D concept designs

Early identification of errors using Solid Edge simulation

Direct editing of customers' CAD models

Training and support from Pentacle Technologies

Results

New product development time reduced by 15 to 20 percent

Improved design accuracy lowers costs by 20 percent

Solid Edge with synchronous technology reduces development time for new products by 15 to 20 percent; cuts costs by 20 percent

Innovative manufacturing solutions

Cybernetik Technologies Pvt. Ltd. (Cybernetik) began 18 years ago as a consultancy and soon evolved into a turnkey provider of manufacturing automation and material handling solutions. The company operates in the chemical, food, pharmaceutical, automation and agro processing industries. Cybernetik's range of end-to-end solutions includes robotic manufacturing cells, assembly sequence technologies, material handling systems, storage and retrieval products, component washing systems, and marking and identification equipment.

Cybernetik has established a reputation for providing innovative and comprehensive solutions. Because every project the company takes on is unique, the ability to communicate project concepts, both internally and with customers, is critical. So is the ability to turn jobs around quickly, as customers require shorter and shorter cycle times. These requirements, along with the desire to continue the strong tradition of innovation, led to a decision to upgrade the company's 2D computer-aided design (CAD) system to a 3D, solid modeling solution.



Complex machinery requires 3D

"We wanted improved visualization so that customers and prospective customers could better understand how we were going to address their needs," explains Nitin Jituri, head of Business Development at Cybernetik. "Internally, we knew that 3D designs would be more useful in our marketing efforts, and would provide better information for manufacturing as well."

Because Cybernetik's systems involve a great deal of complexity, other selection criteria for the new CAD system included the ability to model complicated geometries and to assemble components onscreen in virtual assemblies. User friendliness and a short learning curve were also critical, as was the ability to

Results (continued)

Design errors down by nearly 30 percent

Better ability to convey design concepts wins new customers

More knowledge re-use



"Solid Edge helps us present design concepts very effectively which, prior to this, was very difficult to do."

Lalit Chaudhari Head, Automation Design Cybernetik Technologies import and work with customers' CAD data, regardless of format.

A demonstration of Solid Edge® software with synchronous technology convinced the selection committee that this solution would meet the company's requirements for improved design visualization, advanced modeling functionality and ease of use. In addition, synchronous technology offered a much better approach to working with customers' CAD files. By making it possible to modify the faces of a model directly, synchronous technology eliminates the need to know how a model was constructed. This makes it as easy to work with imported CAD data as working with native geometry.

Solid Edge is a product of Siemens PLM Software, which teamed up with the local

Solid Edge reseller, Pentacle Technologies, to demonstrate the software's functionality and provide references from Solid Edge users in similar industries. The availability of ongoing support from these companies was another factor in favor of Solid Edge. "The support from Siemens PLM Software and Pentacle Technologies is excellent," says Lalit Chaudhari, head of Automation Design at Cybernetik. "Pentacle provided training that was customized to our needs, which helped us implement the solution very effectively. The tips and tricks they taught us have been very effective at reducing our design cycle."

External and internal benefits

Since implementing Solid Edge, Cybernetik now presents its ideas to prospective customers in the form of 3D Solid Edge models. "Solid Edge helps us present design concepts very effectively which, prior to this, was very difficult to do," says Chaudhari. "This ability has helped us in gaining new customers. Also Solid Edge 3D models include actual weight, volume, surface area and other related technical information, which in turn help us calculate more accurate cost estimations."

The use of Solid Edge also helps support the company's manufacturing efforts. "Manufacturing now has a better understating of new projects due to 3D visualization," Jituri adds. "And drawings, which are created from solid models, are error-free." In addition, manufacturing





Solutions/Services

Solid Edge www.siemens.com/solidedge

Customer's primary business

Cybernetik Technologies Pvt. Ltd. provides manufacturing automation and material handling systems. www.cybernetik.co.in

Customer location

Pune India

Partner

Pentacle Technologies

"Overall, the transition to Solid Edge has helped Cybernetik reduce new product development time by 15 to 20 percent. The increased accuracy of the new approach has reduced design errors by nearly 30 percent, which has helped lower development costs by 20 percent."

Nitin Jituri Head, Business Development Cybernetik Technologies



problems can be easily identified and resolved during the design stage by using Solid Edge interference checking and motion analysis. Jituri notes, "We have been able to simulate an entire manufacturing line using Solid Edge."

Jituri concludes, "Overall, the transition to Solid Edge has helped Cybernetik reduce new product development time by 15 to 20 percent. The increased accuracy of the new approach has reduced design errors by nearly 30 percent, which has helped lower development costs by 20 percent." These results have encouraged Cybernetik to further streamline its design process. The company plans to implement the Teamcenter Express product data management (PDM) solution from Siemens PLM Software, and to integrate that solution with the company's enterprise resource planning (ERP) system.



Siemens PLM Software

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