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Essentra Components

Leading components manufacturer uses Teamcenter product cost management to reduce quote preparation time by 80 percent

Product

Teamcenter

Business challenges

Manage RFQs in a timely, accurate manner

Improve flexibility and accuracy of customized component costs

Confirm cost drivers and tool specifications

Deliver fast, accurate and well-monitored cost calculations

Keys to success

Use Teamcenter product cost management to harmonize global quote and costing process

Develop an integrated and consistent view of products and tool costs

Develop a better understanding of project profitability and the effects of uncertainty

Results

Reduced quotation preparation time by 80 percent

Used detailed tool specifications to compare quotes and save up to 10 percent in costs

Siemens PLM Software solution enables Essentra Components to compare quotes and save up to 10 percent in costs

Even the smallest components play a big part

Essentra Components is a global leader in manufacturing and distributing plastic injection molded, vinyl dip molded and metal items. The company has operating units in 29 countries and serves a broad industrial base of customers with a rapid supply of products for a variety of applications in industries such as equipment manufacturing, automotive, fabrication, electronics and construction. Essentra Components is organized into four global divisions: components, packaging, filters and specialist components.

Essentra Components has a comprehensive international production and distribution footprint, which can be flexed to respond to customers' needs, whether they are driven by product, service, cost or supply chain issues. The company is focused on being a

Results *(continued)*

Increased number of offers created for customized solutions

Enhanced customer satisfaction with fast response to RFQs

low-cost producer so they can secure revenue growth at attractive margins, and facilitate continuous improvement programs with tight cost controls and productivity gains, serving to reduce conversion costs.

Speed, flexibility and cost accuracy are a must in the quotation phase

Quoting is a critical process for Essentra Components. Every quote has an impact on the future: A favorable, easily understood price and a quick quote submission can decide the contract. Providing a precise and realistic calculation is also a prerequisite for winning a project, so an efficient quotation calculation can ensure today and tomorrow's success.

A big challenge the Essentra Components teams had to deal with globally was the request volume, which could not be dealt with accurately and promptly. The offerings for custom solutions were not standardized and often did not contain any substantial assumptions about cost drivers or clear tool specifications that revealed the business. Component pricing depended on the accuracy of Essentra Components' engineers in capturing all the cost factors that were often derived from poor quality 2D drawings. It was not possible to determine the most cost-effective location for manufacturing components because each plant had developed its own cost structure. The teams relied on the goodwill of external tool

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Manager, Divisional Engineering Solutions
Essentra Components

makers to determine tooling costs. The area had few resources to initiate alternative settlement offers.

Essentra Components' strategic focus on providing more specific customer solutions requires the team to quickly handle an increasing number of requests for quotations to meet customer expectations.

"Increasingly, we receive requests for quotations with a value greater than £1,000,000 that include multiple stock keeping units and require more detailed analysis given the price sensitivity and contract duration, often over five years," says Derek Bean, divisional engineering solutions manager at Essentra Components.

A key goal for Essentra Components was to create a scalable and robust platform to improve efficiency in order to minimize risk and thus reduce the need for additional headcount. Unification and standardization of processes were necessary to position Essentra Components as a best-in-class enterprise in terms of responses to both component and tool quotation requests.

A turning point in product and tool cost calculation

After a trial period at several sites in the United Kingdom, the United States, Spain and Thailand to ensure accurate cost estimates during the quotation phase, Essentra Components implemented the product lifecycle management (PLM) solution for product costing and tool costing from Siemens PLM Software. To deliver custom components that meet precise material, size or color requirements, in-house engineering design teams and the tooling department work closely with customers. First of all, they check exactly what the customer has requested. All information about the request is collected and corresponding parameters for the project are defined.

One of the keys to success for Essentra Components was being able to seamlessly integrate Teamcenter® software with its external systems and data sources. By using Teamcenter product cost management, Essentra Components was able to use customer-supplied 3D computer-aided design (CAD) data to calculate component and tool costs. A connection to the existing business planning and control system (BPCS), an enterprise resource planning (ERP) system, facilitates the automatic import and update of master data (for example, material prices and labor costs), and the bill-of-materials (BOM) can be loaded from the BPCS. The calculations in Teamcenter are based on a variety of benchmark data, such as global labor costs, materials, machinery and manufacturing processes, as well as an integrated cycle time calculator that leads to improved cost transparency in the early stages.

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The development team can quickly create a development BOM. This includes the basic information for their colleagues from purchasing and production. The production costs are determined on the basis of the concepts in the production plants. Production creates the work plan, compares possible production concepts in Teamcenter and determines the plant requirements. This also includes necessary investment in new tools. At the end of the process, the production BOM contains material, tools, routings, etc.

Integrated and consistent view of product and tool costs

Essentra Components expects more than just a tool price from its suppliers. The offers from tool suppliers are presented as cost breakdowns. With Teamcenter Tool Costing, the cost breakdown templates can be easily imported by the purchaser and then immediately compared with their own shadow-cost calculation. Differences in the calculations immediately become transparent and a fact-based discussion between purchasing and supplier is supported. With the capabilities of Teamcenter Tool Costing, Essentra Components has transparency into price composition and relevant cost drivers, and is able to detail the offerings in terms of cost and technology.

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With the integrated calculation system for component and tool costs, an overall cost analysis can be carried out. For Essentra Components, it is now possible to reliably and transparently identify and determine the interactions between component and tool costs for different quantities and tool designs. To do this, Essentra Components uses the interaction between Teamcenter Tool Costing and Teamcenter Product Costing to provide a fully integrated costing solution.

Identify and evaluate opportunities and risks

The cost estimator consolidates and verifies the results in terms of plausibility, competitiveness, opportunities and risks with the help of the Profitability Analysis module in Teamcenter product cost management. This involves a comprehensive overall analysis, which includes which costs are incurred, which revenues are calculated, how the cash flow is structured and what individual key figures look like.

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Solutions/Services

Teamcenter product cost management
www.plm.automation.siemens.com/global/en/products/collaboration/product-cost-management.html

Customer's primary business

Essentra Components is a leading global manufacturer and distributor of plastic injection molded, vinyl dip molded and metal items for a variety of applications in industries such as equipment manufacturing, automotive, fabrication, electronics and construction.
www.essentracomponents.com

Customer location

Kidlington, Oxford
United Kingdom

Company-wide uniform calculation and quotation processes

Using Teamcenter, all stakeholders make calculations based on the same method, standards and data that are defined across the organization and are known to all. The use of a bottom-up cost approach allows for an accurate cost comparison between sites. Relevant cost calculation data is quickly available so it is possible to conduct an interdisciplinary collaboration between cost engineers, purchasing, sales and production. A serial processing that would take a lot of time is a thing of the past. The implementation of standardized proposal templates in Teamcenter allows for accurate assumptions and minimal risks.

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In addition, Essentra Components teams use 3D printing technology to showcase designs that accelerate throughput from offer to delivered product.

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Further plans with Teamcenter product cost management

In order to continue to deliver cost-effective, high-quality products in response to customers' needs, Essentra Components will continue to focus on using the global costing tool from Siemens in the bidding phase to deliver fast and accurate costs worldwide so it can remain an attractive choice for its customers. In order to further increase the benefit for the entire company, a global rollout of Teamcenter product cost management is planned for locations in Australia, the United States, Brazil, China, Malaysia and Turkey.

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