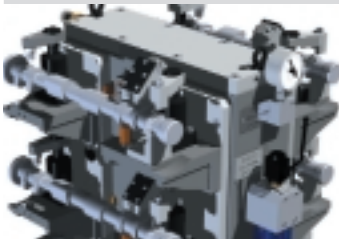


## Toolmaker seeks increased profits through 3D CAD

Steelcraft's workholding division challenged to streamline design procedures

[www.solidedge.com](http://www.solidedge.com)



### STEELCRAFT PRECISION TOOLS

- Frustrated with a poorly supported 2D package, Steelcraft turned to Solid Edge as part of an integrated 3D modeling system.

*"The nature of our business is that each workholding design is unique to the component being machined. So we can't have a generic design from which to derive variations, and we have to be sure each one is right before it goes to production."*

**Mick Waller**  
CAD/CAM Manager  
Steelcraft Precision Tools

#### The business issue

Cumbersome 2D CAD a direct factor in low profits  
Faltering support for 2D package  
Each workholding design unique to the component being machined

#### The approach

Solid Edge's powerful 3D modeling and integrated drafting  
Solid Edge's ease of implementation – easy to learn and easy to use  
Solid Edge's full compatibility with Unigraphics®

#### How it worked

Substantial reduction in errors  
Workholding division now a highly profitable part of overall business  
20 percent increase on hourly rate within two years

**TECHNOLOGY**

Solid Edge®

**PRIMARY BUSINESS**

Steelcraft provides workholding assemblies and high-precision components for the machine tool, aerospace, defense, power generation equipment and marine industries.

**LOCATION**

Barrow-upon-Soar,  
Loughborough, England

*“The main benefit is a reduction in errors. If the Solid Edge model goes together then so will the manufactured parts, because we build the assembly in Solid Edge the same way the fitter will build the physical fixture.”*

**Mick Waller**  
CAD/CAM Manager  
Steelcraft Precision Tools

**Design challenge – every job unique**

Steelcraft specializes in workholding assemblies and high precision components in the machine tool, aerospace, defense, power generation equipment and marine industries. Two years ago, the workholding division sought ways to improve its profitability through new design processes. Since most of Steelcraft's jobs are one-offs, it didn't need a "master mode" approach, where a change to the CAD model would automatically be reflected in the CAM environment. Mick Waller, Steelcraft's CAD/CAM manager, explains, "The nature of our business is that each workholding design is unique to the component being machined. So we can't have a generic design from which to derive variations, and we have to be sure each one is right before it goes to production."

**3D, drafting, ease of use, and software compatibility key in selection**

Steelcraft examined the division's design capabilities and found its existing 2D CAD was holding it back. Furthermore, getting support for the package was becoming more and more difficult. After evaluating a number of modeling packages, Steelcraft decided on six seats of Solid Edge for several reasons. First, Solid Edge provides powerful 3D modeling and integrated drafting facilities. Solid Edge is also easy to learn and use. Finally, Solid Edge is fully compatible with Steelcraft's existing seats of Unigraphics, EDS' Total Product Engineering package.

**The big benefit – reduction in errors**

By modeling parts in the context of the assembly, Solid Edge allows designers to visually check that machining tools can reach the component being made. "The main benefit is a reduction in errors," says Waller. "If the Solid Edge model goes together then so will the manufactured parts, because we build the assembly in Solid Edge the same way the fitter will build the physical fixture." The overall effect is that the workholding division, in two years' time, has significantly improved its profit margin and Steelcraft's bottom line. Waller also notes, "Solid Edge was a major contributing factor in turning design and manufacture around, giving an increase of 20 percent on the hourly rate over the first two years of use."



For more information, contact your local Solid Edge reseller:



**PLM Solutions**  
**Solid Edge**

**Americas**  
**800-807-2200**

[eds.com](http://eds.com)

**Europe**  
**31-7936-35515**

**Asia Pacific**  
**852-2230-3333**



EDS and the EDS logo, Unigraphics, Parasolid, Solid Edge, Femap and I-deas are registered trademarks; Experteam is a service mark; and Teamcenter, E-vis and Imageware are trademarks of Electronic Data Systems Corporation or its subsidiaries. All other logos, trademarks or service marks used herein are the property of their respective owners. EDS is an equal opportunity employer, m/f/v/d and values the diversity of its people. Copyright © 2002 Electronic Data Systems Corporation. All rights reserved. 8/2002