

“Getting it Sorted” – How Autodesk and Micro Concepts Helped Deliver Top Quality Design at SDI Greenstone

Rugby-based logistics systems integrator, SDI Greenstone provides materials handling solutions to clients working in the retail, wholesale and fulfilment sectors. These range from simple conveyor systems, automated storage and retrieval systems (ASRS) and cranes to complex picking and sortation solutions for flat and hanging garments, accessories, footwear, jewellery, books and multimedia products.

The company, which employs more than 300 highly-skilled and trained craftsmen at its UK, European and US manufacturing facilities, also offers complete solutions for warehouse layout, design and installation, including racking, garment rails, shelving and mezzanines.

For the past five years leading Autodesk manufacturing reseller, Micro Concepts has provided the best CAD design software available to help SDIGreenstone to develop these solutions for customers.

With long and successful experience of Autodesk's AutoCAD design tool behind it, SDIGreenstone recently decided to migrate to Autodesk Inventor Series 11, the latest version of the world's best-selling 3D mechanical design software.



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Partnership Based on Trust

One of the key factors in SDIGreenstone's choice was the opportunity to extend its close business relationship with Micro Concepts. As design engineer, Victor Fernandez explains: “Having worked with us for several years, Micro Concepts has a detailed awareness of our solutions and business strategy as well as an in-depth understanding of Autodesk software. We value their advice on which solutions will best suit our requirements and their ability to customise those solutions to meet our precise needs”.

According to Micro Concepts sales manager, Mark Mills, “It was clear that, by implementing Inventor, SDIGreenstone would achieve a broad range of benefits. The company manufactures a large number of components which are shipped directly to customer premises for on-site assembly. Using Inventor 11 would enable it to minimise rework on site and make significant savings in time, resources and direct financial costs.”

Rich Functionality

Equally key to SDIGreenstone's decision was the fact that Inventor was from Autodesk and could therefore be easily integrated with its existing Autodesk software. SDIGreenstone was also impressed with several other key features offered by Inventor. It welcomed the fact that the product's sheet metal capability would enable it to send flat pattern .dxf files for laser cutting immediately, thus speeding supplier turn-around times.

It also appreciated the benefits of the product's mechanical features. SDIGreenstone frequently works with complex, large assemblies, which are difficult to integrate seamlessly. In this context, it is a critical benefit that Inventor's detailed 3D capabilities provide a detailed insight into the moving components within any assembly and the relationships between those components.

SDIGreenstone also realised that Inventor's visualisation capability would be invaluable. Creating 3D images of a project plan would help customers and installation engineers to understand what it was being proposed much more quickly than using a technical specification or a 2D schematic. Also being able to animate complex assemblies would help the SDIGreenstone installation engineers to assemble products faster and more effectively than would otherwise be possible.



Training and Support

As soon as the decision to implement Inventor was taken, Micro Concepts organised a comprehensive training programme to ensure the SDIGreenstone design team had as broad an understanding as possible of the capabilities of the Autodesk Inventor Series solution.

Reaping the Benefits

As SDIGreenstone had hoped, the benefits achieved from implementing Autodesk Inventor 11 were immediate and wide-ranging. First, it has enabled the company to halve design and manufacturing time across its whole portfolio of systems and solutions.

The rapid detailing of parts facilitated by Inventor, coupled with its ability to support quick supplier turn-around times, and has dramatically reduced SDIGreenstone's manufacturing lead times. And the ability to minimise on-site rework, ensure that modelling and assembly drawing processes are right first time and that data is transferred efficiently has reduced the installation time by an estimated 10-25 per cent.

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In addition, largely by helping to ensure a fully integrated solution, it has helped improve the quality of the company's designs. Using Inventor in conjunction with Autodesk Vault also allows SDIGreenstone to manage drawing files more effectively and create a workflow protocol, covering the whole process from sales to design to installation. This helps all the individuals involved to understand the right steps to follow at each stage.

In addition, Inventor helps the company to generate bill of materials (BOMs). The number of components used can be double-checked in Inventor Assembly. Also, Inventor's Studio feature fully renders images, providing a realistic 3D finish of any image and therefore making a major contribution towards selling effectively to customers

An Integrated Solution

Inventor is now an integral part of SDIGreenstone's design process. In addition to Autodesk Vault, the company also uses Autodesk VIZ software for 3D visualisation and is currently considering implementing Autodesk Productstream.

As Victor Fernandez explains, "They have been proactive in alerting us to changes in the software and have also reacted very quickly to any technical questions or queries that we have had. We are now looking forward to a positive future, in which by extending our use of Inventor and the scope of our relationship with Micro Concepts, we can enhance our use of design even further and provide even better quality materials handling systems and solutions to our customers."

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To learn how Micro Concepts, together with Autodesk Inventor, can help make your company become Number 1 in your market – call 01223 716200 or visit www.microconcepts.co.uk