SIEMENS

Industrial machinery and heavy equipment

Sysmetric

Material handling systems maker eliminates prototypes

Product

Solid Edge

Business challenges

Produce thinner sheet metal with higher accuracy

Quickly adapt to customers' demands and remain highly customer-oriented

Enable more flexibility in manufacturing and collaboration

Keys to success

Implement platform for creating flat pattern sheet metal components

Move to fully computerized engineering and planning

Enable customers to easily visualize designs

Results

Eliminated physical prototypes

Learned to use Solid Edge four times faster than previous system

Sped up design from 3 to 4 weeks to 2 to 3 days

Enabled engineers to solve design problems on-site for customers

Batch-type gravimetric dosing for injection molding and extrusion machines designed using Solid Edge.

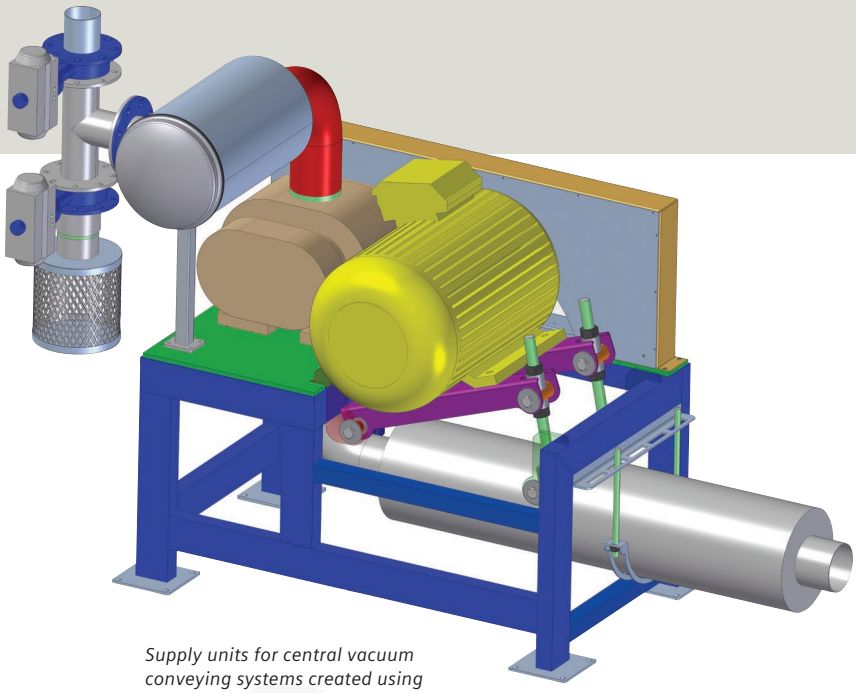
Using Solid Edge helps Sysmetric develop leading-edge, next-generation products

Eliminating physical prototypes

Reducing the need to construct expensive physical prototypes is one of the major benefits of using Solid Edge® software from product lifecycle management (PLM) provider Siemens PLM Software. Material handling systems maker Sysmetric, Ltd. has taken this benefit to its logical conclusion, completely eliminating physical prototypes altogether.

Based in Israel, Sysmetric designs and develops material handling solutions, including conveying systems, gravimetric dosing units, extruder line control systems, as well as management and data acquisition software used in manufacturing plastic products.

Design engineer Yaacov Gozani, one of Sysmetric's founders and owners, had used several commercial computer-aided design and manufacturing (CAD/CAM) systems in the past, but was looking for a better solution. "We needed something more flexible," Gozani says. "We wanted a more robust solution for designing sheet metal parts, which is a major part of our business."



Supply units for central vacuum conveying systems created using Solid Edge.

Enabling fast start

Once Gozani was introduced to Solid Edge by Mckit Systems, Ltd., a Siemens PLM Software partner, he knew he had found the right solution: "They showed me how Solid Edge would help me design my product, instead of just doing a standard demo. They proved how much simpler and how much easier it is to use Solid Edge compared with other systems."

Solid Edge is easy to learn, according to Gozani. "It took me four weeks to learn how to use our previous software system," he says. "It took me less than a week to learn to use Solid Edge. It is just so easy and so straightforward."

Illustrating product functionality

Sysmetric uses Solid Edge at all levels of product planning, from the initial concept through manufacturing. All engineering design is carried out using Solid Edge, including sheet metal flat pattern drawings. The company has found images derived from Solid Edge to be invaluable for enabling customers to visualize products. Visualization capabilities also fuel the production of assembly instructions, user manuals and marketing materials, such as movies, brochures, product catalogs, advertisements and editorial articles.

All design work at Sysmetric is accomplished with one license of Solid Edge. The company's other two Solid Edge licenses are used on laptops that engineers can take with them to customer sites. "Solid Edge is so efficient to use, we have the confidence to take it with us on the road, so that we can do custom design work on-the-spot." Gozani says. "On a recent trip to the USA, I designed a part in front of a customer. The customer was amazed," he says.

> "Using Solid Edge, we've gone from needing three to four weeks to complete a design to two or three days. It's unbelievable. It's a revolution."

Yaacov Gozani
Design Engineer
Sysmetric

“We don’t have to do prototypes any more, we just design the parts using Solid Edge and go right into production.”

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Sysmetric

Another customer, based in Italy, contacted Gozani on a recent Wednesday and sent him hand drawings of a crucial part that was needed immediately. By Monday afternoon, the part had been designed and fabricated and was on its way to the customer. “Using Solid Edge, we’ve gone from needing three to four weeks to complete a design to two or three days,” Gozani says. “It’s unbelievable. It’s a revolution.”

With assistance from Mckit Systems, as well as a local Siemens PLM Software engineer, Sysmetric was able to implement the software in less than two weeks. “The complexity of Sysmetric’s products and systems, along with the need to manage large assemblies, sheet metal, families of parts and assemblies, and sophisticated variations led Sysmetric to examine the CAD market,” says Shimon Imbar, marketing and sales manager, PLM solutions, for Mckit Systems. “After a deep review of software solutions on the market, Solid Edge was the clear choice, because it has the capabilities to meet all the challenges Sysmetric faces today along with the ability to grow and develop along with Sysmetric. Mckit’s service unit, along with Siemens PLM Software, is helping to build a sense of confidence and continuity for Sysmetric as we move forward.”

“Using Solid Edge is fun,” Gozani says. “It’s like a game; it is so easy and so reliable. I have recommended Solid Edge to people I know at other companies. We don’t have to do prototypes any more, we just design the parts using Solid Edge and go right into production.”

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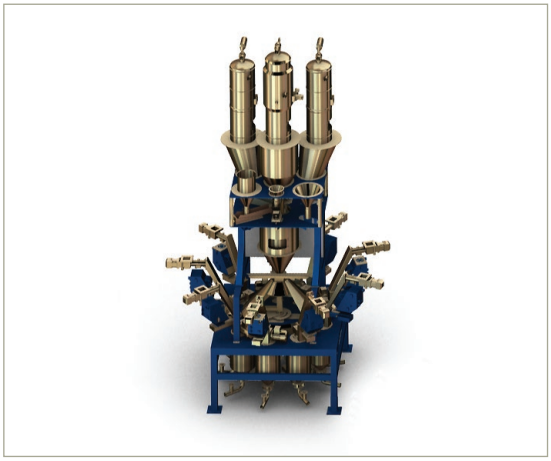

A hybrid central station

The Super CS is a hybrid central station with coloring units. It consists of three layers:

1. *CD unit – batch-type gravimetric dosing system*
2. *Nine BeltColors – loss-in-weight gravimetric dosing systems*
3. *Nine mixers – material containers with screw mixers*

Solutions/Services

Solid Edge
www.siemens.com/solidedge

Customer's primary business

Sysmetric is a leader in the highly specialized field of plastic raw material handling solutions, including conveying systems, gravimetric dosing units, extruder line control systems, as well as management and data acquisition software for manufacturers of plastic products.
www.sysmetric-ltd.com

Customer location

Afula Illit
Israel

Partner

Mckit Systems Ltd.
www.mckit.co.il

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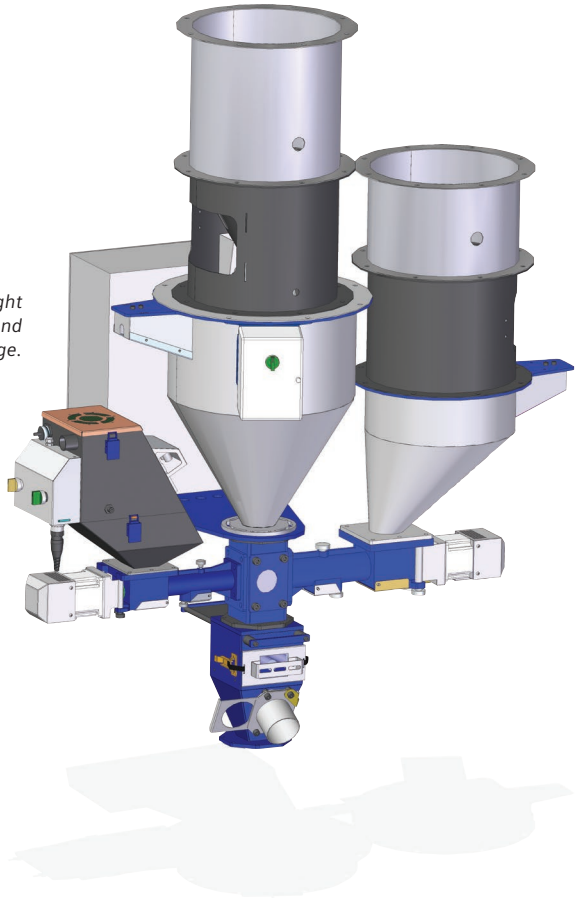

Continuous-type, loss-in-weight gravimetric dosing unit for dosing and line control created using Solid Edge.

Siemens PLM Software

Americas +1 314 264 8287
Europe +44 (0) 1276 413200
Asia-Pacific +852 2230 3308

www.siemens.com/plm

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