

Automation strategy starts in this Philadelphia story

Conveyor-based machining system offers action and profits.

In 1940, *The Philadelphia Story* was about high society and starred a very jaunty Cary Grant battling a sassy Kate Hepburn. Today, the Philadelphia story is about high productivity rates and stars lathes, honing machines, and lapping units—all working in harmony.

At least as far as Everite Machine Products Co is concerned.

The 75-employee manufacturer has fashioned a flexible automation strategy and linked it to super-precision high production machining. This strategy, featuring nine Wasino LG-7 gang-tooled lathes, is used for the machining of four different types of parts, which can be loaded in random order onto the line. The result of this flexibility: a five-year contract for Everite to produce 1.2 million compressor pump components per year for a major air-conditioner manufacturer.

On a broader scale, this story points to the state of automation on the production floor. The Wayne, NJ-based Wasino says preengineered automation systems like this are attracting a growing interest. They set up faster, simplify the job of integrating the line, and cost less than completely custom-engineered automation. According to Wasino, a lot of automated machining systems are headed in this direction.

Precision is everything

For the 49-year-old Everite, winning the air-conditioning parts

By Joseph F McKenna,
Senior Editor



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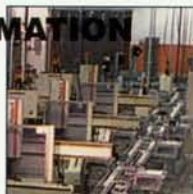
contract was a particularly happy ending, says CEO Daniel Stern. Although Everite enjoyed a deserved reputation in electrochemical machining, he says, it still needed to compete not only with US companies but with lower-wage foreign operations as well.

"Quite a few years ago," Mr Stern tells *Tooling & Production*, "we were approached by the air-conditioner company and asked for a proposal to renovate its line that manufactures compressor pump components. They eventually decided that helping the customer to integrate inside production was not the best way to go. Since we had a lot of

knowledge about the project already, and since we were in the machining business, we bid on it."

The timing was right. Recognizing the challenge in machining powdered metal parts, the air-conditioner manufacturer wanted to concentrate on assembly rather than component manufacturing. Everite decided it had a genuine advantage over other bidders: Tarcon Control Systems, an Everite division, would provide the systems integration for the project.

Still, in terms of highly precise machining, this job proved to be a challenge writ large. According to Everite, it requires the removal of



metal with tolerances as close as 50 millionths. "We have CpKs [capability performance indexing] of two or better at every opera-



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tion," Mr Stern says. "But because we had the integration experience, it gave us a leg up."

Moreover, the company fash-

ioned a remarkable turnaround performance. Everite inked the contract in January 1998 and was delivering product that March.

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What makes this economy of scale successful is the use of machine/loader modules in a sophisticated, flexible automation scheme. Everite engineered and built the two-track, sensor-equipped, and computer-controlled conveyor.

The conveyor delivers parts to, and picks up from, nine Wasino LG-7 gang-tooled lathes, which have built-in gantry-type robotic loaders/unloaders; two Engis honing machines; two lapping machines; and four deburring stations. In the past, the workholding would have been engineered as part of the line. But the gantry-loader-equipped machine

like the Wasino create a new kind of flexibility: the engineers need to concentrate only on the between-machine parts transfer.

"There are four different components we can machine on the line," Mr Stern tells *Tooling & Production*. "The line is smart enough to know which part is on a pallet at any time.

In the future, this Philadelphia story might be billed as a double feature with *It's A Wonderful Life*. "This system has been synergistic to the growth of our business," says Mr Stern, whose company is now working on two other similar projects. "You see, we're not trying to make chips, but provide ingenuity."

Wasino Corp USA, <http://www.wasino.org> for Everite Machine Products Co, Philadelphia, PA, on the web at <http://www.everite.net>