



Automation Alley has four lines of business that help nurture Southeast Michigan's technology cluster:

Automation Alley® TECHNOLOGY CENTER

The Automation Alley Technology Center leverages businesses, educators and government to help entrepreneurs bring new technologies to market quicker and more efficiently.

Automation Alley® INTERNATIONAL BUSINESS CENTER

The Automation Alley International Business Center provides businesses and educators an opportunity to learn about and secure global expansion opportunities.

Automation Alley® GLIMANETWORK

The GLIMA Network provides significant life-long learning opportunities for individuals within Michigan's technology community.

Automation Alley® MEMBER CONSORTIUM

The Automation Alley Member Consortium is a membership of technologically diverse, progressive business, governmental and educational visionaries working in concert to attract world-class talent and businesses to Southeast Michigan.

Industries include:

- Computer software/hardware and information systems
- Telecommunications
- Robotics
- Alternative energy
- Consumer product development
- Industrial processes
- Automotive suppliers
- Automotive R & D
- Design and Engineering
- Software development & more

Automation Alley competes head-to-head and brain-to-brain with other technology centers such as California's Silicon Valley and Boston's Route 128 for the world's best high-tech employment prospects.

Membership Benefits

Membership in the Automation Alley Member Consortium is an investment. Members benefit not only from increased advertising and marketing but also by helping shape the future of the organization. In the process, they help define Automation Alley's long-range plans for attracting high-tech talent and new business entities to the area. Members have the opportunity to say and do something about the Consortium, the region and ultimately their own prosperity.

Become a Member

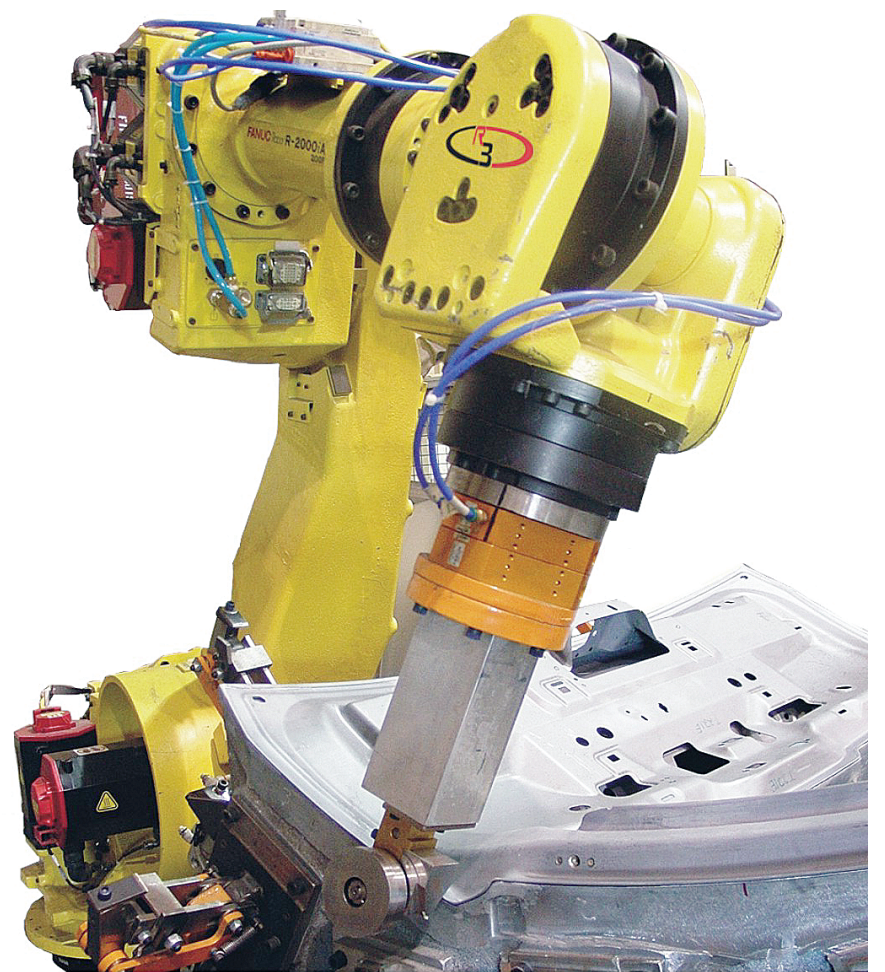
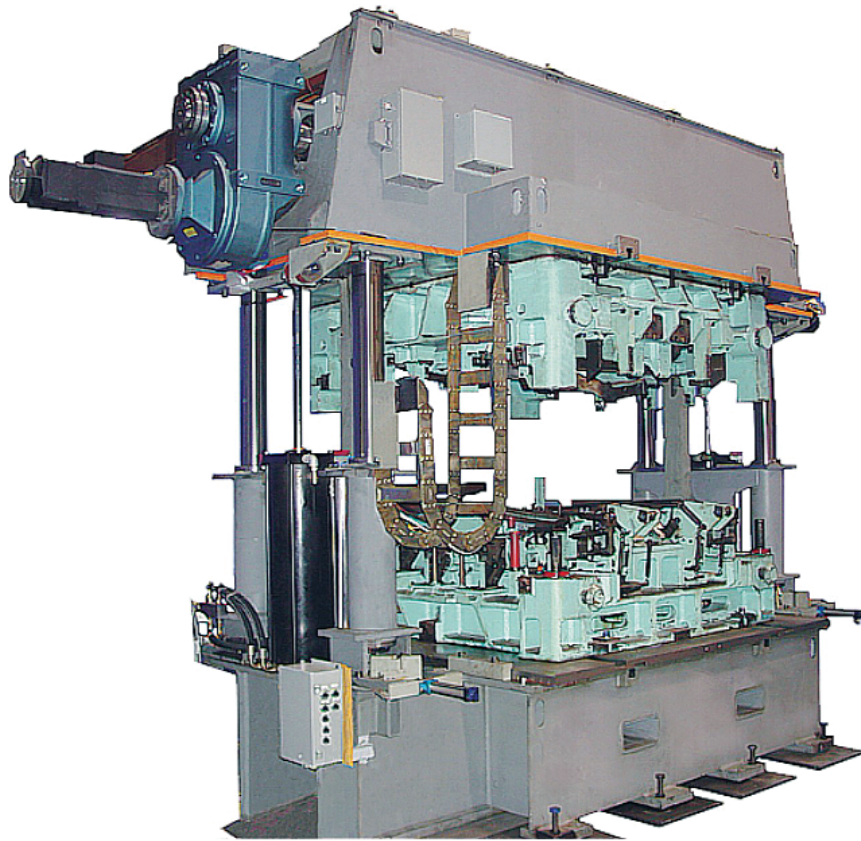
To learn more about Automation Alley or to apply for membership, contact the Resource Center at 1-800-427-5100 or visit the Web site at www.automationalley.com. A calendar of upcoming Automation Alley events is also available on the site.

Automation Alley is Southeast Michigan's regional technology cluster, attracting the creators and consumers of diverse technologies from a variety of industries around the world.

AUTOMATIONALLEY

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Automation Alley® MEMBER PROFILES



TESCO Engineering

Introducing the Next Generation of Hemming and Measurement Tools

TESCO Engineering, the world leader in automotive closure manufacturing tooling and technology, has just raised the bar another notch.

After two years of research and development, TESCO Engineering a member of Hirotec Worldwide, is set to unveil its next generation of hemming and assembly equipment tools and technologies: the E3 electric hemming press; the R3 robotic roller hemming cell; and the I3 vision-based robotic dimensional measurement tool.

Their impact on the automotive industry will be nothing short of revolutionary.

"TESCO has chosen to invest in its future by using its worldwide resources and knowledge base," said Jim Toeniskoetter, President of TESCO Group Companies. "We have developed a group of standard tools that every Automaker will need in order to be more flexible and responsive to changing market needs."

TESCO has relationships with other group companies around the world through HIROTEC Worldwide. TESCO leverages these relationships to apply global technologies and methodologies with custom solutions to meet customer requirements.

Its worldwide resources and its 50 years of automotive production experience are what have allowed TESCO to bring the E3, R3 and I3 to market.

Along with its partner companies, TESCO is recognized as a premier supplier to OEMs and the Tier One market and has won numerous OEM honors, most notably the GM Supplier of the Year (several times). Hirotec Worldwide has also recently won the 2005 Ford Excellence Award and the 2005 Mazda Chairman Award. TESCO has been the exclusive single source supplier of hemming systems for GM North America. Additionally, the majority of Chrysler's vehicles are built using TESCO hemming systems.

"We understand how to produce a car," said Robert Davis, Vice President Group Sales for TESCO Group Companies. "We not only know what works and what doesn't, but also why it works and doesn't. When we're finished with the R&D, it's ready for production."

E3

The E3 – which stands for Efficient, Environmentally-Advantageous, Electric – is TESCO's new electric hemming press. The E3 is more efficient than a standard hydraulic press and, because it is a self-contained unit, is

also more environmentally friendly. Its two electric motors allow the press to feature both speed – 180 net jobs per hour – and power – 150 metric tons of hemming force.

Like its R3 and I3 counterparts, the E3 is both "drop-shippable" and "plug-and-playable." What that means is the E3, R3 and I3 can be installed in a very short amount of time and, because as much as 80 percent of the setup can be done prior to delivery, it can be installed and running very rapidly.

R3

The R3 is TESCO's ground-breaking robotic roller cell used for hemming, which is the precision folding of the edges of two pieces of sheet metal. The R3 – which stands for Robust, Reliable, Roll Form – is designed for low to medium production volumes. Traditionally, lower production volumes incur higher costs for both parts production

and validation. The R3 can significantly reduce some of these costs.

Another benefit of the R3 is its patent-pending compliance heads, which guarantees the robotic rollers will apply even hemming pressure throughout the application. Especially in a prototype environment, this level of quality assurance is vital.

The R3 is modular and occupies a relatively small footprint. Being modular, several robots can work in unison for even greater production capability. Each robot can be outfitted with a different roller head, for example, and simultaneously perform the different hems on a particular part.

I3

Using vision technology from Israeli-based CogniTens, TESCO's I3 is a tool that measures and ensures dimensional integrity and repeatability. The I3, which stands for Industrialized,



Image, Information, replaces traditional ring gauge and CMM measurement techniques and technology.

The I3 works like this: cameras with CogniTens technology are mounted on the ends of robotic arms. The part being measured is mounted to another robot arm that features a universal holding apparatus, which itself is yet another TESCO-designed revolutionary cost-saving advancement. The two robotic arms then work in unison, almost as if dancing, as the I3 takes its measurements and compiles its data. Then, the I3 compares the measurement data with the original master product data to produce a color-based, interactive three-dimensional rendering of the results. This exclusive application allows the operator to easily assess the results and make the necessary adjustments.

The I3 can be used anywhere along the production line to quickly and accurately measure a given part's dimensional integrity.

Like the R3, the I3 is a modular robotic tool that can be assembled and outfitted in a variety of configurations within a relatively small footprint. These configurations, or cells, can handle the smallest part detail all the way up to a full body-in-white.

"These three products all increase speed-to-market without compromising cost or quality," said Scott Abbate, General Manager Sales & Marketing, Tesco Group Companies. "With these products you can produce new vehicles faster, for less money, and with better quality."

For additional information on TESCO Group Companies products and services, please contact Scott Abbate, General Manager Sales & Marketing at (248) 836-5100 or scottabbate@tescogroup.com

