

ASSEMBLE. AUTOMATE. ACCELERATE.

THE ASSEMBLY SHOW

TOUR GUIDE

OCTOBER 24-26
2023 ROSEMONT, IL
DONALD E. STEPHENS CONVENTION CENTER

THEASSEMBLYSHOW.COM

PRODUCED BY: **ASSEMBLY**

GOLD SPONSOR



SILVER SPONSORS



BRONZE SPONSORS



THE 2023 ASSEMBLY SHOW



JOHN SPROVIERI
Chief Editor
ASSEMBLY Magazine

ASSEMBLY

THE
ASSEMBLY
SHOW



As chief editor of ASSEMBLY, I spend a lot of time on the phone with engineers, chatting about the latest assembly technologies. I'll look at websites, too, of course, and I might watch a video or two of a robot or some other automated equipment. If I'm lucky, I might even get to visit an assembly plant. (Alas, those opportunities are few and far between.)

That's why trade shows are so important. There's nothing like seeing a new technology in person to get a true sense of how it works, why it's important, and what its capabilities are. So, I'm beyond excited that the ASSEMBLY Show is returning to the Donald E. Stephens Convention Center in Rosemont, IL, this October as a live, in-person event. More than 220 exhibitors will be showcasing their newest assembly-related products and services. See for yourself just how fast and precise a high-speed SCARA can be. Of course an advertisement for a new fastening tool will say it's lightweight and ergonomic. Don't take the supplier's word for it! Hold it in your hand, get a feel for it, ask questions. Does it pass the sniff test? That's the value of a trade show.

Even if you've been to the show in the past, you still need to come this year. Some 60 exhibitors at this year's show were not at last year's event.

The exhibits are just part of the reason to attend the ASSEMBLY Show. It's a great learning opportunity, as well. We have greatly expanded our conference program this year. We are offering almost 40 hours of educational sessions at the show this year. There are sessions on lean manufacturing, fastening, robotics, Industry 4.0, artificial intelligence, assembling plastic parts. Our keynote speaker is Roger Koenigsnecht, the vice president of North American connection systems at Lear Corp. Everyone is talking about smart factories today. Connected factories. Data analytics. What does all that mean? Why is it important? How can you implement at your factory? What are the pitfalls? What are the secrets to success? Roger is going to talk about all that.

Finally, trade shows are a great chance to network and catch up with industry colleagues. Thousands of assembly professionals will be attending over the three-day event. Got a problem on the line? Chances are good someone else has experienced the same problem. Chat up your fellow professionals on the show floor or at our networking receptions.

This Tour Guide is designed to provide you with a preview of the exhibit hall and what types of products and technologies you will find at the 2023 show. We encourage you to use this guide to plan your booth visits before the event and also as a tool on-site at the show as you are walking the exhibit hall. See you there!

John Sprovieri
Chief Editor
ASSEMBLY Magazine



▶ KEYNOTE PRESENTATION

Leveraging Machine Data and Business Intelligence to Position Your People for Future Success

WEDNESDAY, OCTOBER 25 | 9:10 - 10:00AM CT



ROGER KOENIGSKNECHT

Vice President of
North American
Connection Systems

Lear Corp

People are inherently susceptible to want to skew data. Whether its to impress the boss or shape the future of a project, there is the tendency to choose or manipulate the figures to support the outcome. The problem is these adjustments can ripple through a company creating higher costs, masking inefficiencies, and eventually impacting your most critical resource - your workforce. Now what would happen if machine data and business intelligence databases provided your organization with real-time unfiltered information? During this presentation, Roger will examine how drilling down to collect and share unbiased data can position manufacturing companies and their workers for future success.

Sponsored by



Don't miss this keynote and other presentations at The ASSEMBLY Show
REGISTER TODAY @ THEASSEMBLYSHOW.COM

Take a Critical Look at the Latest Assembly Trends

On Tuesday, October 24, The ASSEMBLY Show will feature three tracks of valuable educational sessions on various assembly and manufacturing topics. This includes access to over 24 sessions, plus Tuesday lunch and breaks along with full access to the exhibit hall. Sharpen your skills, expand your knowledge and ensure your business strategies are future-proof.

CONFERENCE PROGRAM - TUESDAY, OCTOBER 24, 2023

	▶ TRACK 1	▶ TRACK 2	▶ TRACK 3
▶ 9:00am - 9:40am CT	Influencing the Design – Design for Automation Andy Saemann, Hypertherm Inc.	Don't Automate Waste: Know How to Develop and Execute Your Automation Plan Greg Tomek, Merkur	Lean Manufacturing – The Culture of Kaizen Sammy Obara, Honsha <i>This session runs from 9:00am - 11:55pm</i>
▶ 9:45am - 10:25am CT	Developing A Roadmap from Current State to Lean to Automation to Digitalization David Devore, nVent	AI Copilots for Manufacturing Engineers Cyrus Shaoul, Leela AI	
▶ 10:40am - 11:20am CT	Four Key Elements to Get Enthusiastic Buy-In to Change in One Day or Less Paul Vragel, 4aBetterBusiness Inc.	Digitize and Automate Your First Steps Towards AI Ed Goffin, Pleora Technologies	
▶ 11:25am - 11:55am CT	Attracting and Retaining a Great Workforce Via Pay Per Performance Vince Sassano, Strategic Performance Company, Inc.	Automated Assembly in the Age of Industry 4.0 Brian Romano, The Arthur G. Russell Co. Inc.	
▶ 1:05pm - 1:45pm CT	Building an Effective Talent Strategy Alex Chausovsky, Miller Resource Group	Pitfalls and Approaches for Project Integrations that Include Multiple Technology Classes Jeff Chu, Invio Automation	
▶ 1:50pm - 2:20pm CT	Designing for the Frontline Worker: Strategies for Creating Effective Manufacturing Operations Platforms Kimberly Andersson, Tulip Interfaces	Advantage of the Smart Factory: How Location Technology Can Improve Efficiency and Sustainability Mehdi Ben Tanfous, Kinexon Inc	Conference Session TBA
▶ 2:35pm - 3:00pm CT	How Pressure-Sensitive Adhesives Enable Advanced EV Battery Designs Max VanRaaphorst, Avery Dennison Performance Tapes	Augmented Reality: A Game-Changer for Manufacturing and Assembly Workflows Paul Ryznar, LightGuide Inc.	Five Robotics Safety Rules for Industrial Enclosure Design Tom Hershberger, AngleLock by Controlled Dynamics
▶ 3:05pm - 3:30pm CT	Li-ion Battery Recycling: Challenges and New Processes Albert Lipson, Argonne National Laboratory	Practical Examples of AI on the Shop Floor Yanesh Naidoo, Jendamark Automation Ltd.	Dieless Forming of Sheet Metal With Robots Edward Mehr, Machina Labs
▶ 3:35pm - 4:00pm CT	Robotic Digital Twin for Electrical Vehicle Battery Recycling Young Soo Park, Argonne National Laboratory	Assembly Automation for Plastics Processors Guy O'Gara, Automated Machine Systems Inc.	How to Use Autonomous Mobile Robots to Transform Material Flow Cory Weber, Bosch Rexroth Corp.

Prepare Your Business for the Future With the Latest Innovations

The ASSEMBLY Show's Learning Theater Presentations, presented by exhibiting companies right on the exhibit hall floor, will cover various topics and demonstrate expertise on some of the latest technological advances in assembly.

LEARNING THEATER #1 - WEDNESDAY, OCTOBER 25, 2023

▶ 10:45 - 11:15am CT

Reliable Robotic Leak Detection Enabling Smart Manufacturing of Refrigeration and Airconditioning Systems

Daniel Hoffman, Inc.

Sponsored by
 INFICON

▶ 11:45am - 12:15pm CT

Introduction to Parts Feeding - Parts Singulation for Robot Automation

Scott Marsic, Epson Robots

Sponsored by
 EPSON
EXCEED YOUR VISION

▶ 12:45 - 1:15pm CT

Tracer Gas Leak Testing vs Air Leak Testing – Improving Speed and Reliability

Paul Chamberlain, LACO Technologies

Sponsored by
 LACO TECHNOLOGIES
CREATING VIBRATIONAL AND LEAK TESTING SOLUTIONS

▶ 1:45 - 2:15pm CT

Predictive Quality is the Key to EV Production Scaling

Greta Cutulenco, Acerta Analytics

Sponsored by
 Acerta

▶ 2:45 - 3:15pm CT

How to Transform Your Workforce into a Competitive Advantage with AR

Jake Hall, The Manufacturing Millennial

Paul Ryznar, LightGuide

Sponsored by
 LightGuide

▶ 3:45 - 4:15pm CT

Demystifying the Impact of Recent Changes to Section 174 and the Procedures for Claiming R&D Tax Credits: Bringing Clarity and Good News

Rick Kleban, Sycamore Growth Group

Sponsored by
 SYCAMORE

LEARNING THEATER #2 - WEDNESDAY, OCTOBER 25, 2023

▶ 11:15 - 11:45am CT

What is Your Connected Environment Strategy? A Framework for Implementation.

Matt Shorts, Cox 2M

Sponsored by
 COX 2M™

▶ 12:15 - 12:45pm CT

Learning Theater Presentation #4

Sponsored by
 PICO
MES

▶ 1:15 - 1:45pm CT

Learning Theater Presentation #6

Sponsored by
 Starline
A brand of  Eaton

▶ 2:15 - 2:45pm CT

How Friction Impacts Torque and the Fastening Process

David Cash, Mountz Torque

Sponsored by
 mountz™
THE TORQUE TEST SPECIALIST

▶ 3:15 - 3:45pm CT

Learning Theater Presentation #10

Sponsored by
 Kelly

▶ 4:15 - 4:45pm CT

Learning Theater Presentation #12

LEARNING THEATER #1 - THURSDAY, OCTOBER 26, 2023

▶ 10:00 - 10:30am CT

Learning Theater Presentation #13

Paul Schwanbeck, Pro-Active Engineering, Inc

Sponsored by
 SMTA
SMTA International Association of Soldering & Brazing Technicians

▶ 11:00 - 11:30am CT

Learning Theater Presentation #14

Sponsored by
 dori™

▶ 12:00 - 12:30pm CT

Learning Theater Presentation #15

▶ 1:00pm - 1:30pm

Learning Theater Presentation #16

Take Your Assembly Operation to the NEXT LEVEL with Innovative Equipment and Technology!

EXHIBIT HALL HOURS

Tuesday, October 24

4:00pm – 7:00pm CT

Wednesday, October 25

10:00am – 5:00pm CT

Thursday, October 26

9:00am – 2:00pm CT

GUIDED EXHIBIT HALL TOURS



Held on **Wednesday, October 25** and **Thursday, October 26**, six free guided tours of the exhibit floor will feature notable exhibits within select categories. Tour participants will gather in the 'Community Hub' in the exhibit hall (booth #1113) at designated tour times where ASSEMBLY editors will then lead them to 5 participating exhibits to examine the equipment offered at each stop and discuss potential applications.

► TOUR 1: LEAN MANUFACTURING AND MANUAL ASSEMBLY

OCTOBER 25 @ 12:00 – 1:00pm

Tour Stops Include:

- All Metal Designs
- Creform Corp.
- Indeva
- SUS America Inc.
- UNEX Manufacturing

► TOUR 4: FASTENING TOOLS

OCTOBER 26 @ 10:00 – 11:00am

Tour Stops Include:

- ASG, Division of Jergens Inc.
- Delta Regis Tools
- Desoutter
- Ingersoll Rand
- Nitto Kohki USA Inc.

► TOUR 2: ROBOTICS

OCTOBER 25 @ 1:30 – 2:30pm

Tour Stops Include:

- Epson Robots
- FANUC America Corp.
- IAI America Inc.
- SCHUNK
- MTA Automation Inc.

► TOUR 5: PLASTICS ASSEMBLY

OCTOBER 26 @ 11:15am – 12:15pm

Tour Stops Include:

- Dukane
- MS Ultrasonic Technology LLC
- Rinco Ultrasonics/Forward Technology Industries
- U.S. Heatstake
- Telsonic Ultrasonics

► TOUR 3: CONVEYORS AND MATERIAL HANDLING

OCTOBER 25 @ 3:30 – 4:30pm

Tour Stops Include:

- Automation & Modular Components Inc.
- Bosch Rexroth Corp.
- FlexLink Systems Inc.
- Glide-Line
- Quickdraw Conveyor Systems

► TOUR 6: MANUFACTURING SOFTWARE

OCTOBER 26 @ 12:30 – 1:30pm

Tour Stops Include:

- Automation Intellect
- Cetec ERP
- Tulip
- Ujigami
- VKS

Form Lasting Business Connections and Unlock New Opportunities

The ASSEMBLY Show features exciting networking opportunities for you to meet with peers, make new industry contacts and solidify existing business relationships. Make powerful connections with industry elite and solution providers from automotive, consumer products, medical and many other industry sectors. With a total of three networking functions - one each day - along with various other opportunities to interact throughout the event, you'll have a chance to connect with thousands of participants that attend The ASSEMBLY Show.

TUESDAY, OCTOBER 24 | 4:00-7:00PM CT

► Taste of Rosemont Welcome Reception

Networking is one of the top reasons for attending The ASSEMBLY Show, so what better way to kick off the event than with a Welcome Reception right on the show floor. Our Tuesday evening welcome reception, aptly named the 'Taste of Rosemont', has become a staple to this annual trade show. Participants get to sample local fare and get a sneak peek of the various exhibits, tools and displays.



Sponsored by



WEDNESDAY, OCTOBER 25 | 5:00-7:00PM CT

► Pub Night Networking Reception

The ASSEMBLY Show is excited to bring back 'Pub Night' for our Wednesday evening networking reception. Attendees and exhibitors will gather in the adjoining ballroom to kick back and relax over a pint, chat over sliders and make new connections while playing fun backyard games! This social environment will allow participants to meet new manufacturing professionals and continue to build relationships with existing business partners in a fun and exciting atmosphere.



Sponsored by



PLUS — *The Quality Show participants will be joining us for 'Pub Night' in 2023 for additional networking and comradery!*

THURSDAY, OCTOBER 26 | 9:00-10:00AM CT

► Morning Mingle Breakfast

Looking for a productive networking experience that will kick off your day? Join us on the final morning of The ASSEMBLY Show for complimentary continental breakfast and coffee right on the exhibit floor. This is one of your last chances to network and make some final business connections!



Sponsored by  envision canvas



JOIN US BACK
IN
Nashville

THE
**ASSEMBLY
SHOW**
SOUTH

SAVE *the* DATE
APRIL 30 – MAY 2


2024
MUSIC CITY CENTER
NASHVILLE, TN

ASSEMBLYShowSouth.com



The SCHUNK booth (105) at the ASSEMBLY Show will showcase a new field of application in handling. Using a principle inspired by nature for developing various fields of handling applications with its new gripping technology, ADHESO.

The advantages are clear: Components can be gripped in a sensitive way, without leaving any residues or requiring additional energy. The solutions are always individually developed and are as diverse as the applications themselves. Glass fibers as light as feathers, smallest SMD components or micro-mechanical parts can be handled, but also sensitive battery components, plastic films, paper and glass, as well as automotive or mechanical engineering components of a weight of 15 kg and more. Automated separation of breathable components is also feasible.

The bionic inspired gripper technology ADHESO is based on the principle of adhesion, using the intermolecularly acting Van der Waals forces for handling. The patented surface architecture is made of special polymers and is optimized by numerical simulation. The result is a structure of extremely finely structured hairs, which adheres to different materials and objects. The structure is gently pressed onto the workpiece during the gripping process, thus increasing the contact surface, and the Van der Waals forces can start acting on the workpiece. This effect can be reversed by applying a slight pressure/rotary movement so that the gripper can be loosened residue-free from the handling object. The alternative use of a wiper ensures that the object is gently put down.

Large variety of variants due to individual design

The adhesive structures can be adapted application-specific to the required size and the loading condition (horizontal/vertical), and can be designed transparent, translucent or opaque. This is the big advantage: the high degree of

individualization ensures that components with dimensions of a few hundred micrometers can be handled as reliably as those measuring several meters

Gentle handling also in cleanrooms and vacuum environments

Effort and costs for installation and commissioning are minimal, since the adhesive technology is gentle on components, low-noise, and doesn't require compressed air, vacuum or current. An external energy supply is not necessary for gripping or for maintaining the gripping force. In case of a power failure in the handling system, the holding forces of the gripper are reliably maintained. SCHUNK ADHESO allows gripping times of < 100 ms: It can be used in conventional industrial environments, but also in cleanrooms and vacuum environments.

We look forward to showing you more about what this technology can do for your application in booth 105 at the ASSEMBLY Show.



SCHUNK
 211 Kitty Hawk Drive • Morrisville, NC 27560
 919-572-2705 • info@us.schunk.com
www.schunk.com



VISIT WEISS AND INDUSTRIAL PROFILE SYSTEMS (IPS)

WEISS North America is pleased to be a sponsor of the 2023 Assembly Show where you can learn more about our complete range of automation solutions. This year we will be showcasing updated demonstrations of our rotary and linear automation platforms, as well as featuring new demos for the first time.

ALL NEW for the Assembly Show this year is our trunnion positioning demo. WEISS Trunnion Solutions are individual positioning systems or drum systems that are primarily based on WEISS heavy duty indexing rings and rotary indexing tables. Our trunnion platforms can perform highly precise and dynamic positioning tasks of very heavy loads with low backlash within tool changing systems. These platforms can be designed according to customer specifications and range from simple, single axis drum systems to complex rotation systems, such as rotational H-frames for simultaneous machining, loading, unloading, and buffering.

Our LS Hybrid will also be returning to Assembly this year. Whether cam drive, direct drive, freely programmable redirection, or belt system – the WEISS LS Hybrid is based on a modular design principle that allows you to adapt the system precisely to the needs of your application.

The LS Hybrid allows you to achieve up to 40% shorter cycle times and perform more processes in less space. In addition, our e-Cam Module allows you to achieve absolute locking without the need and added expense of a locking unit, providing an optimized motion profile and up to 60 cycles per minute. The Plug & Produce design of the LS Hybrid also allows for fast installation and startup with WEISS Application Software (W.A.S.).

Alongside WEISS will be Industrial Profile Systems (IPS), provider of custom-engineered mechanical hardware solutions for industrial applications. IPS specializes in dynamic applications, designing belt-driven linear actuators with travel from a few inches to over 100 feet and is the industry leader in engineering & mechanical design support, utilizing t-slotted aluminum framing. Beyond linear solutions, the IPS team designs and assembles machine bases, material handling applications, machine safety guarding, ergonomic industrial workbenches, factory stairways and platforms, and custom enclosures.

To learn more about WEISS North America, visit us at www.weiss-world.com or give one of our automation professionals a call today.



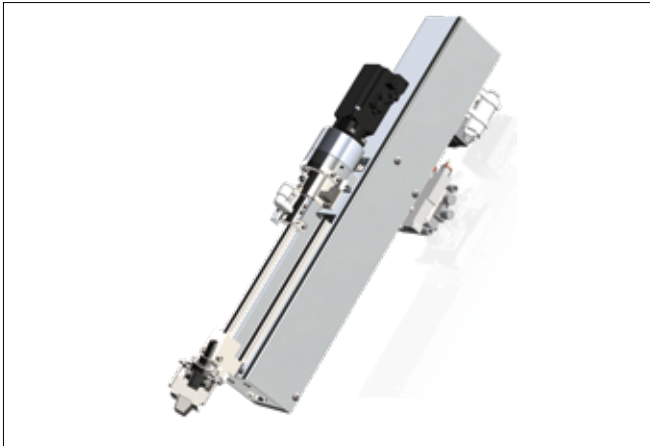
WEISS North America, Inc.

3860 Ben Hur Ave. • Willoughby, OH 44094

Phone: (440) 269-8031 • Fax: (440) 269-8036

Toll Free: 1-888-WEISSNA (934-7762)

info.us@weiss-world.com • www.weiss-world.com



WE ARE PROVIDING TOTAL FASTENING SOLUTIONS FROM BLOW FEEDING TO SCREW DRIVING SYSTEM ROBOTS. QUALITY STARTS AT THE FIRST TURN.

High Quality Screw Driving Products and Advanced Fastening

Nitto Seiko America is the North American branch of Nitto Seiko, Ltd. and a provider of industry leading screw driving equipment. We offer a full range of screw driving equipment. Proprietary motors and controllers, hand-held drivers, single-spindle drivers, multi-spindle drivers, feeders and robots are all available. This allows us to provide any and all of the equipment you need from a single source, from stand-alone motors and controllers, all the way up to turn-key robotic screw driving systems, can provide assistance to meet the customers requirement.

- **Single Spindle Screw Driving Machines**
High-quality screw driving results with thrust control system.
- **Multi Spindle Screw Driving Machines**
Capabilities include fastening two or more screws at a time.
- **Screw Driving Robots (NEJIROBO)**
Small footprint means broader capabilities
- **Screw Feeders**
Multiple field applications with horizontal feeding and a universal power supply system.
- **Screw Driving Motors**
New Torque Sensor Drivers provide high precision ability.

Nitto Seiko continues to lead in the market as a screw driving machine and total factory automation supplier. By providing the best possible conditions to meet your fastening needs while optimizing processes beyond the customers expectations.

We are eager to learn about your fastening challenges to help you develop "something new"!



NITTO SEIKO AMERICA
1301 Rankin Dr. • Troy, MI 48083
Tel: 248-588-0133
e-mail: info@nittoseikoamerica.com
Web: <http://nittoseikoamerica.com>



DISCOVER NEW PRODUCTS FROM ATI AT THE 2023 ASSEMBLY SHOW

ATI Industrial Automation is the world-leading developer of engineered products that enhance the flexibility of robotic and automated processes. The company showcases a variety of new products and demonstrations at their ASSEMBLY Show booth (239) this year. ATI's robotic end-effector products maximize productivity in a variety of industries and applications all over the world.

Within the manufacturing industry, there are boundless opportunities for improvement through automation. As automated assembly processes become the norm, ATI's renowned tool changers, force/torque sensors, and other innovations help manufacturers capitalize on benefits like lower operations costs, minimized labor requirements, and increased safety. ATI supports the ever-changing challenges and requirements of their customers by developing new and innovative products.

MC-50 Manual Tool Changer - Unmatched Performance, Reliability, and Quality for Manual Exchange of Robotic Tooling

With intuitive and ergonomic lever operation, the patent-pending MC-50 Manual Robot Tool Changer provides a simple solution for quickly changing robotic end-of-arm tooling by hand. This compact and robust Tool Changer is designed for applications on collaborative robots that support payloads up to 25 kg and small industrial robots supporting payloads up to 10 kg.

Featuring an ISO 50 mm mounting interface on the Master-side and Tool-side, the low-profile MC-50 mounts directly to most cobots and seamlessly integrates with many common cobot marketplace grippers and end-effectors.

The MC-50 also includes a safety latch button on the lever to provide secondary locking for increased safety and prevention of involuntary uncoupling. A variety of electrical and pneumatic utilities for downstream end-effectors are supported through four (4) M5 integrated pneumatic pass-through ports and a mounting flat for optional ATI Utility Modules. More information at www.ati-ia.com/MC50.

Stop by booth 239 to view this and other ground-breaking ATI products during your visit to the ASSEMBLY show. Discuss the unique challenges and requirements of your project with ATI's knowledgeable account managers, applications, and engineering staff. Whether you seek to improve an existing process or create a brand-new system, the ATI Team is here to help! To learn more about ATI's full line of end-effector products, visit www.ati-ia.com.



ATI Industrial Automation

1031 Goodworth Drive • Apex, NC 27539
919-772-0115 • www.ati-ia.com



RGV/RGR.....SERVO DRIVEN ZERO-BACKLASH ROTARY POSITIONER WITH SANKYO ROLLERDRIVE™ TECHNOLOGY

The RollerDrive is a zero-backlash reducer that utilizes a rolling transmission method with preload adjustment for high-dimensional accuracy, responsiveness, and rigidity with stable performance over long periods. The large-diameter hole construction with a direct input/output shaft layout enables a compact design with zero backlash. Meanwhile, the rolling transmission method of the RollerDrive provides a characteristic long service life.

FEATURES

- Larger output bore for wiring, plumbing, inspection tooling, or a robot platform.
- Optional inline reducer yields large output torque capacity & optimal speed with economical, smaller compact servo motor.
- Designed for small to heavy loads, and a larger bending moment capacity for unbalanced or side loading.
- Repetitive angular accuracy of ± 5 arc sec (± 7 for RGR063/ ± 10 for RGV040)
- Lightweight aluminum housing.
- Corrosion/Rustproof proof option.
- Corrosion/Dustproof/Waterproof option (IP67 equivalent).
- Available total system gear ratio 30:1 to 300:1
- RGV comes in 5 available sizes.
- RGR comes in 3 available sizes.



Sankyo Automation, Inc.

10655 State Route 47 West ▪ Sidney, OH 45365
 937-498-4901 ▪ sales@sankyoautomation.com
 www.sankyoautomation.com



PROMESS TO SHOWCASE THE LATEST TECHNOLOGY IN ASSEMBLY AND TEST SYSTEMS

Visit Booth 305 at the Assembly Show! Our fully electric product line combines precise linear and/or rotary motion control, real time process feedback and intelligent programmable controllers to let you build extremely productive and almost infinitely flexible assembly and test cells.

Robot Press The newly updated Robot Press incorporates a quick connect / disconnect, allowing one robot to handle multiple operations. The Robot Press is a lightweight press system intended for use as end effectors in robotic assembly applications and is available in sizes up to 50 kN offering a 200 mm stroke and 300 mm/sec speed. The Robot Press also features a lubrication system that allows automatic greasing of the ball nut. The press design reduces system downtime for lubrication from minutes to seconds and facilitating completely automatic greasing cycles.

Gantry Work Station A multi-axis workstation with built in XY controls. Rather than adjusting the part several times underneath the press, this workstation allows you to position the press anywhere over the part. The gantry workstation also eliminates the need to supply a gantry system for your part that is also capable of withstanding the high forces the Promess EMAP can produce. This allows for more simple tooling and fixture design.

Index Table with Work Station the Promess Index table allows for faster thruput for those more demanding applications. While one part is in the station being assembled an operator can be setting up the next components to be assembled. The indexer is servo controlled meaning you can add or subtract the number of index points available based out your current needs. With Promess' software you get full programmability and can switch between programs based off your current part.

Benchtop Press Work Station The Promess Benchtop Press Work Station is a light-weight simplified work station that includes the safety and benefits of a full-size station. The compact package allows the station to be set up in a lab environment or a production work area. Promess' highly adaptable software enables quick and easy press assembly validation. The Benchtop Press Work Station is perfect for lab environments where a component assembly can be optimized by physical testing. This testing throughout the design phase can help to design a process that results in increased throughput, less failed parts, and decreased machine footprint.



PROMESS INC.
810-229-9334
Promessinc.com
promess@promessinc.com



MS AUTOMATION: EXPERTS IN ADVANCED MANUFACTURING

MS Automation delivers award-winning manufacturing automation equipment with a focus on high-speed assembly, test, and inspection of precision components.

As a full-service automation provider, we partner with precision manufacturers to design, build, debug, and install custom equipment that infuses safety, efficiency, flexibility, and quality into production manufacturing.

With decades of experience, hundreds of high-performing systems in operation, and a reputation for providing tremendous value to our customers, consider partnering with MS Automation to ensure the success of your next assembly automation project.

MS Automation wins Best in Show at the 2023 ASSEMBLY Show South.

A global supplier of automotive electric components needed a custom machine capable of assembling nearly 5 million connectors annually. Each 4-component connector required validation after every assembly step, detailed final dimensional inspection, and laser marking before final pack-out. The system needed a compact footprint and simple changeout capabilities to accommodate over 100 connector variations.

A servo ring indexer with two independent sets of 16 nests provided a fast, accurate, and flexible transport system. Four vibratory bowl hopper/feeders, four SCARA robots, and quick-change EOAT allowed for rapid part feeding and assembly with automatic changeout capabilities. A combination of tactile probes and 2D vision cameras validated assembly at each step, and fiber laser was employed for marking. A fifth SCARA robot segregated rejects from finished product at final pack-out.

MS Automation met all system requirements, delivering a flexible and robust machine that assembled two finished connectors every 1.6 seconds at better than 90% efficiency – over 10% faster than the target cycle time of 1.8 seconds.

Turnkey Solutions:

- High-Speed Full-Automatic Assembly
- Standard & Custom Designs
- Lean & Semi-Automatic Assembly

Assembly, Test, and Inspection Systems:

- Feed, form, press, weld, torque, rivet, nut-run, screw-drive, dispense, and more!
- Dedicated & flexible part feeding, bin picking
- High speed dial / ring tables, palletized assembly lines – free & powered
- Integrated machine vision, gauging, error proofing, defect detection
- Functional testing – mechanical, electrical, leak
- Data collection, RFID, barcoding, part marking & tracking

Full-Service Provider:

- Mechanical & Electrical Design
- Industrial Controls
- Equipment Integration
- Robot Programming
- Machine Building
- Installation & Support

Facilities:

- Cookeville, TN - New 60,000 sq ft facility for equipment design & build
- Cookeville, TN – 20,000 sq ft for sub-contract production manufacturing (MS Solutions)
- Saltillo, Coahuila, Mexico – 6,000 sq ft for equipment design & build



MS Automation

2295 W Broad St. • Cookeville, TN 38501
931-526-6742 • sales@msautomation.com
www.msautomation.com



GAGE BILT CONTINUES TO PROVE THEY ARE THE BLIND RIVET AND LOCKBOLT TOOLING LEADERS

Gage Bilt has been the leader in innovative blind rivet and lockbolt installation tools since 1956. Our world class manufacturing facility, outside of Detroit, MI, has raised the bar in quality installation tools. We provide a one stop shop for your entire blind rivet and lockbolt tooling needs with the absolute best lead times and prices.

Since the inauguration of our first GB704 installation tool, we have expanded our product line significantly. Gage Bilt now offers over 100 different types of Hydraulic, Pneudraulic , Pneumatic and now Battery installation tools and thousands of different types of straight, right angle and offset nose assemblies while guaranteeing the installation of anyone's fastener. Many of our products are completely interchangeable with our competitors, making it a smooth and economical transition into our equipment.

Benefits of using Gage Bilt:

- Best lead times in the market
- Best prices in the market
- Over six decades of Industry knowledge
- Problem solvers
- Innovators
- Made in the USA
- Process Monitoring
- Interchangeability
- Longevity
- Low maintenance
- Automation equipment
- Quick to respond to customer needs

Our over 67 plus years of knowledge in the Aerospace and Commercial industries allows us to support and service even the most difficult applications. Our one-on-one interaction with our customers and distributors helps us to create new and innovative ways to improve their ever growing production needs. In fact, in the last five years, Gage Bilt has acquired six new patents for our innovative products that have increased productivity, adding up to big cost savings for our customers. We are revolutionizing the installation of blind rivets & lockbolts.

New Innovations:

- Full line of Battery installation tools for installing any blind rivet or lockbolt through 1/4"
- Full line of Rivnut installation tools, including the latest GB116RN rivet nut 20V battery tool
- Process monitoring for battery installation tools
- Ergonomic Split Handle and Backpack with FOD controlled vacuum system
- Collar feeders for safe, accurate and fast installation of lockbolts
- Full line of equivalent Huck® Bobtail® installation tools and nose assemblies.
- Feed-n-Swage semi-automatic collar feed for automatically installing lockbolts
- GB808 power unit for fastest installation of structural blind rivets and lockbolts
- Hydraulic installation tools for installing any lockbolt through 7/8" diameter

Visit Gage Bilt to test our tools right at the booth and see why we are known for having the toughest, yet light weight and ergonomic installation tools on the market.

Gage Bilt - Tough Tools for Tough Jobs!



GAGE BILT

44766 Centre Ct. • Clinton Twp. MI 48038

Ph: (586) 226-1500 • Fax: (586) 226-1505

solutions@gagebilt.com • www.gagebilt.com



DuPas...Durability Passed

Looking for improved Durability in your power tools?

TorqTec presents...**Du-Pas** Assembly Tools...
"Durability Passed"!

Identifying the best torque tooling solution for your individual needs is paramount in your assembly process.

In evaluating power tools, there are five key factors that engineers consider most influencing in their selection process: Ergonomics, Productivity, Accessibility, Accuracy and Durability.

- Ergonomics...measuring the safety and ease of use between the operator and tool during the assembly process.
- Productivity...measuring the tool's speed relative to takt time constraints.
- Accessibility...measuring the tool's ability to access the fastener with operator ease and takt time constraints.
- Accuracy...measuring the tools capability to meet your defined engineering specifications.
- Durability...measuring the overall performance, uptime and maintenance costs of a tool.

At TORQTEC, we have proven with our customer base that the Du-Pas brand achieves the five key factors in selecting a best power tool for their application. We have demonstrated that DuPas offers a line of robust, low Total Cost of Ownership power tooling.

Durability Passed

New Product Launch... Within our line of industrial power tools, the TorqTec – DuPas Cordless Product offering is evolving into the next generation of features. At the ASSEMBLY Show, we will unveil our New DWL & NPRT Series.

New DWL Series

The DWL Series will build upon our entire cordless torque control tool offering by incorporating Error Proofing & Poke Yoke features via WiFi & Bluetooth communication with I/O interface capabilities. Our current cordless torque tool series will evolve into the New – Next Generation DWL Series; thus our torque control clutch tools; our torque control hydraulic pulse tools; and our torque control impact tools will all offer the DWL features.

New NPT-NRT Series

The NPT-NRT Series will offer Error Proofing & Poke Yoke features via WiFi & Bluetooth communication with I/O interface capabilities much like the DWL Series. The difference in the NPT-NRT offering will be the Data Collection & Traceability features via our integrated Torque & Angle measuring capabilities.

✓ The NPT Series is our pistol configuration offering the following torque range models:

- o 3NM – 8NM – 12NM – 18NM

✓ The NRT Series is our right angle configuration offering the following torque range models:

- o 10NM – 16NM – 30NM – 50NM – 70NM

Our traditional pneumatic & cordless non-critical fastening tool series will remain a foundation to our **Durability Passed** product offering.



TorqTec

100 Jeffrey Way – Suite D • Youngsville, NC 27596
Phone: 919-561-5536 • www.torqtec.net
info@torqtec.net



EXPERIENCE INNOVATION WITH SCHLEUNIGER WIRE PROCESSING AND TESTING SOLUTIONS

As a global technology company and innovative solutions supplier to the wire processing and testing industry, Schleuniger offers an expansive portfolio of solutions to meet the industry's evolving demands.

If you process wire or cable, Schleuniger has a solution that will help you reduce costs, increase efficiency, and improve productivity. And with an extensive range of services, Schleuniger will assist you in achieving precision results throughout the entire life cycle of your equipment.

Schleuniger will be exhibiting at The ASSEMBLY Show, providing hands-on demonstrations of innovative solutions for processing and testing all types of wire and cable.

Stop by booth #419 to see select equipment from Schleuniger's new line of stripping machines, including the award-winning Strip Series B300. The portable, high-performance stripping machines open new possibilities for fast and reliable stripping of wires. Repeat accuracy, mechanical precision, and short process cycles ensure high productivity in common stripping applications. And the new ergonomic machine design and reimagined user interface offer unrivaled ease of use.

Additional machines from Schleuniger's various product lines will also be demonstrated, including the new UniCrimp 208 and StripCrimp 208 benchtop crimping machines.

The UniCrimp 208 features a modern design with intuitive operation and provides the high-quality performance one would expect from a Schleuniger product. With 33 kN (3.3 tons) of crimping force, the UniCrimp 208 can process wires up to 10 mm² (8 AWG) and accepts most industry-standard mini-style applicators for crimping rear-feed and side-feed terminals.

The StripCrimp 208 combines high-precision stripping and crimping of rear-feed and side-feed terminals with a cross-section range of 30 to 10 AWG in a single operation. It features an intuitive touchscreen display, job memory, ample stripping power, new gripper assembly, short breakout lengths, and optional crimp force monitoring.

Don't forget your wire samples! As always, Schleuniger's wire processing and testing experts will be on-site at the show to help you find the right equipment for your specific needs and answer any questions you may have.

Schleuniger

Schleuniger, Inc.

87 Colin Drive • Manchester, NH 03103

P +1 603 668 8117 • F +1 603 668 8119

Toll Free Technical Support: (877) 902-1470

sales@schleuniger.com • schleuniger.com



WHEN PERFORMANCE MATTERS, TRUST ACE CONTROLS WITH YOUR MOTION AND VIBRATION CONTROL NEEDS.

ACE Controls Inc., headquartered in Farmington Hills, Michigan, is a leading motion and vibration control technology innovator. We engineer shock absorbers, gas springs, and vibration solutions for automation, robotics, material handling, packaging, steel, machine tool, automotive, medical, and other industries. From up in the air to under the sea, ACE products can slow down moving loads, increase efficiency and throughput, reduce vibration and noise, protect against wear and tear, reduce downtime, and increase safety. Our quality and performance make us the first choice for the industry. Outstanding service, short development times, reliability, and fast on-site availability make the difference to keep things running. The highest performance without compromise is our promise you can rely on.

Our portfolio consists of Automation Control, Motion Control, Vibration Control, and Safety Products.

Automation Control: Here you will find the perfect selection of machine elements, which turn damaging forces into harmless heat. These solutions from ACE smoothly decelerate moving loads. This involves the lowest possible stress on machines, which makes the damping products from ACE so valuable.

Motion Control: The ACE products in this segment enhance the quality of any type of movement. Anyone who wants to raise or lower loads, regulate the feed of an object to a precise millimeter, or gently decelerate rotating or linear movements will find the right solution here.

Vibration Control: This ACE product group includes innovative solutions to provide customers with the best assistance in isolation technology and vibration isolation. These machine elements are also distinguished by their light design and wide variety.

Safety Products: This ACE product group provides emergency braking to safely slow down moving loads and reduce damaging forces. Although the safety shock absorbers, TUBUS elastomer bumpers, and clamping elements differ so much in design, every single ACE component provides the best protection for your machine.

Most of our standard product lines can be modified to suit your needs. Customizations can be as simple as filling a stainless-steel gas spring with FDA-approved oil to safely use in a food or beverage production facility or building shock absorbers with a longer piston rod to increase stroke length and compensate for low G-forces. We go the extra mile to make sure our products exceed your expectations.

For more information, visit us at booth #1005 or get more information by contacting ACE Controls at 800-521-3320 or shocks@acecontrols.com



ACE Controls Inc.
 800-521-3320 • shocks@acecontrols.com
www.acecontrols.com



THE TOUGHEST AND SMARTEST GRIPPERS

Zimmer Group's portfolio of handling technology is one of the largest available on the market and ranges from simple suction cups, to tool changers, robot accessories, swivel units, robust grippers, intelligent industry 4.0 grippers, collaborative grippers and more. Here are some of the highlights that will be on show at Assembly.

Universal Electric, Pneumatic and Hybrid 5000 Series

Do you need a single gripper series that gives you superior flexibility, accuracy and robustness for your applications? A gripper that you can always rely on to provide higher gripping forces, withstand greater moments, give you a longer service life and is sealed from the elements? In pneumatic form, Zimmer Group's flagship grippers are available as 2-jaw parallel, 3-jaw concentric and 2-jaw angular variants from 3mm to 45mm stroke per jaw. These robust grippers provide 30 million maintenance free cycles. They are corrosion protected and are IP64 and IP67 sealed out of the box, so they can even be used fully submerged. With our unique steel on steel linear guides, we provide up to 30% more gripping force than competitors and up to 10% higher moments so you can utilize longer gripper fingers, making this robust series suitable for more tasks, cutting the inventory you need to manage. If you require an intelligent gripper, our IO-Link versions come both in pneumatic (hybrid) form or electric to perfectly meet the requirements of Industry 4.0. All this is available, whilst still providing superior gripping, corrosion protection, 30 million cycles maintenance free, and an IP64 rating as standard.

Industry 4.0 Intelligent grippers for increased flexibility and reduced downtime

If you need intelligent grippers that offer high gripping forces or superior gripping accuracy, come by our booth for a demonstration of our IO-Link grippers. These grippers can connect to any bus system, offer full position, status and maintenance feedback. By use of workpiece "recipes," forces, jaw pre-position, sensor feedback, workpiece tolerance and more can be adjusted on the fly direct from your top-level bus for all your different workpieces. These are grippers which do not need to be setup, don't require additional sensors, will tell you when there is problem with your workpiece and will let you know how many cycles they have performed for guess free maintenance and reduced downtime. With over 100 IO-Link grippers in our portfolio from servo to pneumatic, come and visit to learn more.



Zimmer Group US, Inc.

1095 6th Street Ct SE • Hickory, NC 28602
(828) 855-9722 • sales.us@zimmer-group.com
www.zimmer-group.com



THE VACUUM YOU NEED. WHERE YOU NEED IT, WHEN YOU NEED IT.

Established in the south of France, COVAL designs, produces and markets high-performance vacuum components and systems throughout the entire world for industrial applications in all lines of business.

COVAL's CMS HD Vacuum Pump Series

COVAL is pleased to offer its full CMS HD series of multi-stage heavy duty communicating vacuum pumps for industry specific applications. It is the result of many years of listening to and getting feedback from manufacturers, integrators, and end users in the food, packaging, and robotics industries.

The series meets your expectations in terms of power, robustness, ease of use, and modularity, while remaining compact and light for a simplified integration in a smart factory. It is:

- **Robust.** IP65 and 50 million cycles
- **High Performance.** Flow Rate up to 45.91 SCFM
- **Modular.** Configurable, and easy maintenance
- **Controlled.** Available with or without vacuum and blow-off control
- **Communicating.** IO-Link communication interface
- **Smart.** NFC enabled for parameter modification via smart phone

COVAL'S Carbon Vacuum Gripper, A Cobot's Best Friend

The COVAL CVGC carbon vacuum gripper is not just an adaptation of an existing product, but a plug and play product designed 100% for various cobot models. Its design features seamlessly integrate with cobots to take advantage of their greatest strengths:

- **Lightweight,** (< 1 kg for the smallest model) thanks to a carbon fiber construction will conserve the cobot's lifting capacity.

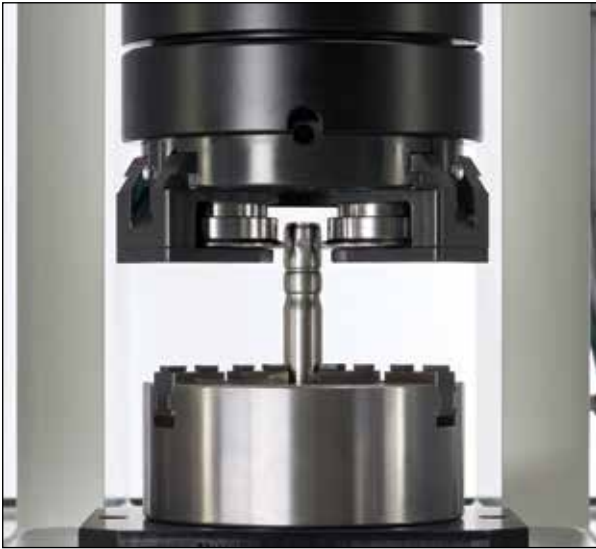
- **Quick assembly and disassembly,** without special tools, to promote the cobot's versatility.
- **Operator protection** via a flexible peripheral foam.
- **Compactness,** with a function block housing the vacuum generator, control cartridge, vacuum switch and silencer.
- **Versatility,** with a foam gripping interface suitable for a range of workpieces and available in three dimensions (150 x 150 mm, 240 x 120 mm, 320 x 160 mm).

With this ultra-light vacuum gripper, COVAL transforms each cobot into a tool that boosts the productivity and protects the health of operators in a wide range of industries: food, packaging, plastics, etc. Due to its immense adaptability and the capabilities of COVAL'S design department, the CVGC constitutes a tool available to all manufacturers, integrators and users of cobots for palletizing, gripping boxes or plastic parts, etc..

You deserve more than just vacuum – see why COVAL is the answer when vacuum is the question.



COVAL Vacuum Technology, Inc.
 901 Jones Franklin Road • Raleigh, NC 27606
 919-233-4855 • contact-us@coval.com
www.coval-inc.com



BalTec - JOINING IS OUR BUSINESS - WORLDWIDE

With over 50,000 riveting machines installed worldwide, BalTec is the global solutions provider for riveting equipment. BalTec will feature a full range of riveting equipment for any application at the 2023 Assembly Show highlighting the EA30 servo driven articulating roller head along with the HPP-25 Process Controller, which is available on all BalTec riveters. BalTec is continuing to set new standards in riveting applications, process monitoring and control with the expansion of our ER line of Electrical Riveters by introducing the EA30, 3-axis servo driven articulating roller head, and ER Work Cells which are on display at the 2023 Assembly Show.

Visit the BalTec booth to see a complete demonstration of the EA30, ER riveting and roller forming work cells, BalTec's traditional Radial Riveting work cells along with the HPP-25 process control system to see first-hand how it can maximize your assembly process and production.

Other products and services on display at the BalTec booth:

- EA30 articulating roller head, 3-axis servo control
- Complete line of modular riveting heads for any application in any orientation
- Standardized lean riveting work cell systems
- Custom systems and machine configurations. (X-Y, Bench Top, Roller Forming)
- Application and tooling assistance
- On site full product line demonstrations

BalTec is a global company specializing in riveting technology. Our US headquarters are located in Canonsburg, PA., with global headquarters located in Zurich Switzerland. In addition to our global dealer network, we have direct manufacturing and support facilities in the United Kingdom, France, Germany, China, Brazil, and Italy. All direct support facilities have local manufacturing, application development prototype lab, engineering, and sales support for our expansive customer base.

BalTec

For more information, contact

BalTec Corporation

121 Hillpointe Drive, Suite 900 • Canonsburg, PA, 15317

724-873-5757 • info.us@baltec.com

www.baltec.com



**CUSTOM FEEDING SOLUTIONS
50 YEARS STRONG
PERFORMANCE FEEDERS INC.**

Creating solutions since 1973, Performance Feeders manufactures high performance parts feeding and orienting systems for automatic assembly and packaging operations.

Vibratory Bowl Feeders

Our Vibratory Bowl Feeders, constructed of stainless steel, offer a highly customized solution to orient a wide variety of parts. Outside-tooled straight wall vibratory feeder bowls are capable of feeding complex parts and families of parts. Cascade and Conical bowl feeders feature open, cavity-free designs for easy cleaning and maintenance and are ideal for simple parts.

Centrifugal Feeders

Centrifugal feeding systems, designed for high feed rates, gentle parts handling, and a conservative footprint, can be custom-tooled or stand-alone systems that provide solutions for numerous part varieties. The Performance Feeders Container Unscrambler is a high-speed solution designed to orient 100% of bulk parts put into the feeder.

Step Feeders

Our Step Feeder line includes the PFS1 single-step, the "mini" single-step feeder, and the PFS3 triple-step feeder, available in several configurations, ranging from standalone un-tooled units to completely tooled feeding solutions tailored to each specific application. This space-saving feeding solution is designed to quietly feed and orient small parts.

Flex Feeders

The Flex Feeder offers an alternative feeding solution for complex families of parts not easily fed by conventional feed systems. Designed for vision analysis and robotic pick-up of parts, these systems can be configured using standard feeding equipment, un-tooled or as turnkey custom-tooled systems with vision and robotics. This solution offers a variety of part presentation platforms, quick-change tooling, touchscreen HMI interface and bulk parts storage.

Conveyor Systems

Our line of Conveyor Systems features t-slotted aluminum extrusion construction, stainless steel wear plates and a wide variety of sizes, belt styles, drive packages, side rails and floor stands. Standard conveyors can be configured online with our Conveyor Configurator, which allows users to configure a conveyor and instantly download a working solid model. Our design and build capabilities also allow us to offer customized conveyor systems with full controls packages.

Complete line of Peripheral Components

We offer a complete line of Peripheral Components including Straight-line tracking, Prefeeders, Sound and Dust-Reduction enclosures, Standard and custom controllers, and Part Isolation Devices.

Advanced CNC Technology | Machining & Tooling Capabilities

Our 5-axis milling station and 3-D printer allow for a seamless progression from design to manufacturing of documented, concept-proven tooling. Custom feeder bowl tooling can now be designed and machined with full documentation, maximizing the manufacturing time of a custom parts feeding system and facilitating the easy modification of tooling for future part alterations and duplication of systems.

Join us in the booth! Let us find a parts feeding solution for your application.



Performance Feeders Inc.

P.O. Box 1067 • Oldsmar, FL 34677-1067

TEL: (813) 855-2685 • sales@performancefeeders.com

www.performancefeeders.com

BOOTH # 1323



MAKITA: INDUSTRY LEADER IN CORDLESS ASSEMBLY TOOLS

Located right on Main Street! Visit us at booth #1323 to see the latest we have to offer in cordless tooling for your production facility. Makita is the #1 brand in cordless today, with floor-to-ceiling solutions for every manufacturer, assembler, and OEM.

Why Makita?

We are a vertically integrated manufacturer, with nearly all internal components made by us, including our world class motors. Our advantage in motor technology gives us the opportunity to provide the best-in-class tools, no matter the application. Over the last decade, we have developed the largest tool offering in the world on one battery platform.

- Precision Torque
- Pokayoke systems
- Rivet tools
- Custom production applications
- Maintenance solutions

Come To Our Booth For A Demonstration!

Clutch tools: Makita will be exhibiting our precision torque screwdrivers and right angles. User certified at +/-5% of target torque; these tools give you the reliability and repeatability that you can depend on. With solutions up to 65Nm, Makita can handle a multitude of fastenings and the precision you need.

Shut-off Impacts: Makita will also have one of our newest tool categories on display in our booth. These impacts can replace many of the pneumatic pulse tools that guzzle energy in your facility. Algorithmic, electronic controls allow our impacts to be programmed for the specific joint characteristic of your fastening. 8 different models with 1/4", 3/8", and 1/2" drive offerings, and torque ranges into the hundreds of foot pounds! When you are in the booth, ask us about our wireless Pass/Fail options for these tools to further meet your quality needs.

Rivet Tools: Replace your pneumatic rivet guns today! Makita offers two models for cordless riveting that can pull 1/4" rivets (and smaller). With a 20Kn (4,500 lb-force) pulling capacity, these tools make easy work of most rivet applications.

Maintenance: Don't forget about Makita's many other tools! Whether sawing, cutting, or grinding, Makita has every tool that you would ever need beyond the assembly environment. We will have a limited selection of MRO tooling models in our booth. Ask us why every tool in your building should run off of the same battery and charger!

Our knowledgeable sales team will be available, so visit Makita at booth 1323 for some hands-on demonstrations of the best assembly tools in the market today.



Makita USA, Inc.

Mt. Prospect, Illinois

800-867-8265 ext 3121 • MakitaInfoRequest@makitausa.com

www.makitaassemblytools.com



CONTINUED EXCELLENCE BY AFAG AUTOMATION

Afag Automation continues to deliver exceptional value, precision engineering, and high-quality solutions. From our handling solutions, to feeding some of the toughest parts on the planet, our team of professionals continue to provide products and solutions that impress.

The Afag handling line combines pneumatic and electric actuators that are not only modular but are designed to work together flawlessly. This gives our customers not only tremendous flexibility, but products that work time and time again, in a small and dynamic package. They can be reapplied often or put into active duty in a fraction of the time it takes to commission competitive products. This reduces soft costs and decreases integration time, increasing speed to market. They take up less room, and allow customers to buy per-axes used, instead of buying more than required.

The handling line is full of innovation that is smart and value-driven. We launched a world's first last year in the SREH 50 IOL intelligent rotary actuator. The actuator has the controller built-in, allowing for single-cable control and communications via IO Link technology. Another space, and time-savings product that takes your machine design and performance to the next level. We look forward to more and more IO Link integration throughout our handling line of products.

The Afag Feeding Solutions continue to set a high bar. The milled bowls, patented drives, and CAD-based solutions set them apart from other feeder providers. Our features allow for rapid reproduction, smoother and quieter operation, and easier validation. The Afag feeding line also takes better care of your parts by using materials other than sheet metal. This reduces scratching, wear marks, and improves overall system performance. Noise pollution on the factory floor is a growing concern for all manufacturers and the Afag feeding solutions are turned to in order to help remedy those stress points. Quiet, smooth, reliable – these are the hallmarks of an Afag feeding solution.

And we continue to grow. In 2023 we moved into a brand-new facility, more than doubling our current footprint in the US. This will allow us to grow staff, increase capabilities and add even more value closer to home.

Swiss precision, German engineering, and American know-how – this is Afag!



Afag Automation North America
 883 Seven Oaks Blvd. • Smyrna, TN 37167
 (615) 730-7515 • nashville@afag.com
www.afag.com/en



CREFORM MATERIAL HANDLING SYSTEMS

Creform Corporation, Greer, SC a manufacturer of material handling structures and automated guided vehicles developed a new mobile workstation and a tugger/tunneling style NSI AGV system.

The workstation, built for standing work height, is constructed using Creform's 28 mm pipe and joint system and features plastic work surface across the front. Above the work surface are two flow levels with angled presentation for the parts holding totes.

Flow lanes provide first-in, first-out parts handling while the presentation created by the secondary angle enhances visibility and physical access to the parts.

The workstation has overall dimensions of 65" W x 83" H x 47" D with a 600 lb. load capacity. It is built with plastic-coated steel pipe and metal joints and features industrial-duty stem casters for easy repositioning.

The modular design allows the user to take advantage of the Creform System's flexibility by changing the station's configuration and features to best match the needs of their production process.

Workstations can be custom configurable with the Creform system of pipe and joints and can be built as a stand-up or a sit-down station. They can be available as an assembled structure or kit with pre-cut pipes for quick on-site assembly. Further, the workstation can be mobile or stationary. For heavy duty applications they can be built using Creform's unique 42mm pipe.

The BST AGV Model, CA-A50060-NSI works as an automated tugger awaiting assignments. The customer calls for product from the plant floor and provides the AGV routing information through Creform's traffic control system for the next available unit.

The typical AGV makes 20-30 trips a shift along a 1200 ft. route guided by a surface-mounted magnetic tape guidepath with RFID location tags.

The Creform BST NSI AGV offers a sophisticated control system. It is programmable and can control 50 courses with up to 128 commands on each. Programs can be entered via HMI, USB memory, cable or radio. The AGV unit features a Category 3 safety system with safety equipment that includes an audible warning device, flashing light, non-contact obstacle sensor (Laser Scanner) and E-stops. The unit runs on 24-volt power and can run a full shift prior to recharge or longer with opportunity charging.

The cart shown, with dimensions of 72" L x 36" W x 54" T is built by Creform, utilizing its unique 42mm pipe and joint system. It is rated for a load capacity of 750 lb.

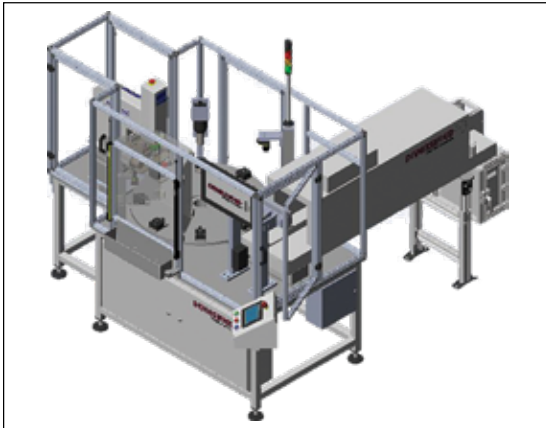
CREFORM® MATERIAL HANDLING SYSTEMS

Creform Corporation

P.O. Box 830, Greer, SC 29652-0830

(800) 839-8823 • www.creform.com

scsales@creform.com



OFFERING COLLABORATIVE ROBOTS IN THE INDUSTRIAL DECORATING SPACE

Diversified Printing Techniques has been offering solutions for printing and decorating products for the past four decades. We have strived to work with our customers for the best solutions which has required us to increase our automation offering drastically. This year we are excited to partner with Rainbow Robots to show simple automation solutions that are quick to implement. Our model of customer care and partnership will be the cornerstone of this new venture. We know manufacturing is a demanding environment where impossible accomplishments have to be met with creative solutions, that knowledge helped us find Rainbow Robots. With a collaborative arm that is robust, an easy to use interface, and a great library of resources; we felt Rainbow was the perfect fit for our reputation in the market.

Come see us at booth number 1813 where we can not only show you robotics and printing, but we can listen to you to learn what you need. Our mission is: "Listen to customers, see the details, create honest solutions, and have passion to advance industrial decoration with a quality team." We feel that trade shows are not just a great place to show what we can do, but we truly want to implement our mission and listen to your needs, frustrations and ideas for automation, product marking/ decorating, and robotics.

At the show we will have a Rainbow Robotics collaborative arm demonstrating some of the solutions it can offer to your frustrating problems. We will also have a pad printer with all the advanced technology that we offer. From our high end servo equipment to our industrial single color machines, we provide advanced features. Every machine comes with tape clean, automatic viscosity controls, icon driven HMI, and ink cups with liners. Come talk to our team about how we can help advance your decorating projects with our innovative technology and unrivaled customer support.



Diversified Printing Techniques
 704-583-9433 • info@diverprint.com
www.diverprint.com

ASSEMBLE. AUTOMATE. ACCELERATE.

THE
ASSEMBLY
SHOW

SAVE
THE DATE

OCTOBER 22 - 24 // 2024

ROSEMONT, IL // DONALD E. STEPHENS CONVENTION CENTER

THEASSEMBLYSHOW.COM

PRODUCED BY:

ASSEMBLY