#### **Technical Service**

Call our toll free line to speak with a skilled technician or engineer for any troubleshooting or installation question. We also provide an online forum on our website. Click on SAS University and join our EOAT Forum. This forum is for any EOAT question and is an excellent EOAT resource.

# On-site Installation and Crisis Recovery

Our skilled technicians can re-stock your spare parts, train your personnel or solve automation problems on your production floor. Our vehicles are stocked with modular end-of-arm tooling components to prevent downtime and keep your operation up-and-running.

### **Automation Training Center**

Learn how to build tools at training sessions offered at our headquarters in any of our facilities. You may select a standard tool building session or a custom tooling session specific to your application.

### Spare Parts – Next Day

The SAS shopping cart makes getting replacement parts that much easier. Most parts ship from inventory next day. Our modular components are manufactured in-house at our locations. Therefore, custom machined parts are also available with quick turnaround!

#### **SAS** Automation

SAS Automation is one of the world's largest suppliers of modular component-based robotic End-of-Arm Tooling (EOAT) and gripper systems. Our tooling systems and automation equipment are installed throughout the world in a wide variety of packaging and palletizing applications.

#### MECHANICAL GRIPPERS





#### SAS Automation LLC

1200 South Patton Street • Xenia, OH 45385 • USA Tel: +1 937-372-5255 • Fax: +1 937-372-5555 Toll Free: 1-888-SAS-EOAT (1-888-727-3628)

#### SAS Automation Asia Ltd.

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#### SAS Automation Robotergreifsysteme GmbH

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#### SAS Automation China - AMT

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ISO 9001 Quality System Certified

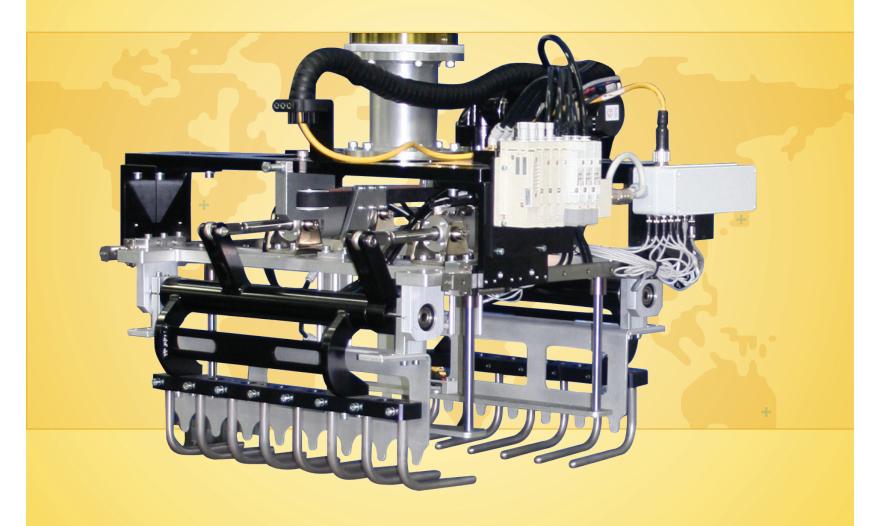








**ROBOTIC END-OF-ARM TOOLING** 

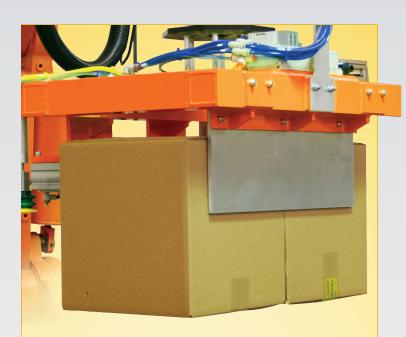


## PALLETIZING SOLUTIONS

Solutions for all your custom and standard Robotic End-of-Arm Tooling

**EXPERTISE + PRECISION + INNOVATION** 

### PALLETIZING **SOLUTIONS**



### Complete Palletizing Robotic **End-of-Arm Tooling Solutions**

If your automation cell requires a palletizing End-of-Arm Tool, our custom robotic solutions allow your robot to do more. Our EOATs are available in 4 styles: Bag Gripping, Vacuum Plate, Carton Clamping and Fork-style for open top cartons and large bags.

SAS Automation is a robotic End-of-Arm Tooling manufacturer as well as a custom automation machine builder. Our EOATs are designed with modular and custom-machined components and will operate on any style or make of robot. SAS has also partnered with most leading automation companies.

SAS is ISO 9001 Quality System Certified for quality assurance. EOAT components are proudly engineered and built in one of our world class, state-of-art production facilities.

+ SAS-AUTOMATION.COM

### Bag Grippers – Adjustable!

The SAS ABG Adjustable Bag Gripper is ideal for palletizing plastic, woven cloth, or paper bags containing grains, chemicals, dog food, minerals, etc. A hand-wheel driven lead screw quickly changes the ABG for different bag widths while the optional servo-drive adjusts the width on the fly to accommodate mixed loads. The FBG Fixed Bag Gripper is also available for a set range of widths.

ABG-50 BAG GRIPPER



15.86 mm (5/8 inches) diameter solid stainless steel gripper fingers secure the bag while independent decking plates square-up and align the bag for accurate placement. For example, the ABG-50 is designed to handle weights of 2.27 - 49.9 kg (5-110 lbs), widths of 304.8 - 533.4 mm (12-21 inches) and to pick from standard conveyors. An optional slip sheet system is also available.



# BAG GRIPPERS, VACUUM TECHNOLOGY,



# **CLAMPING AND FORK-STYLE EOATS**

#### Clamping EOATs

Side clamp EOATs work particularly well for slip top cartons as well as heavyweight applications where a topside pick is not possible; such as 18.14 kg (40 lb.) blocks of cheese in glued-up corrugated cartons. The clamping cylinders are programmable for the amount of force applied to the carton. This also allows for multiple sizes of cartons to be palletized with the same EOAT. An optional slip sheet system is also available.

### Fork-Style EOATs

Retracting Fork-style EOATs are particularly suited for open-top containers and over-sized bags that must be picked from the bottom. The stroking forks are designed to pick product from a roller conveyor. The forks retract through a stationary stripper plate and the product is placed on the pallet. A slip sheet option is available and the forks can also be used to pick and place a shipping pallet.

#### Vacuum Technology

SAS provides Vacuum Plate End-of-Arm Tools to palletize single containers and even complete pallet layers. These EOATs are powered by vacuum turbines or venturi generators and provide superior gripping capabilities by using high-vacuum flow. Valved vacuum ports automatically close when there are gaps between the products or the product is not present. The vacuum plates can also be zoned for multiple pick and place.

SAS also designs and builds vacuum cup EOATs for cartons, pails and bags. High speed and corrugated carton applications are designed around a system which can provide a high vacuum level for heavy containers or high vacuum flow for corrugated cartons.

### Clamping, Fork-Style and Vacuum End-of-Arm Tools

**CARTON GRIPPER** 





PALLETIZING VACUUM PLATE

