

# SAS REVOLUTIONIZES THE ADJUSTABLE BAG GRIPPER MARKET WITH LINEAR SLIDES

SAS offers packaging industry a more robust, more accurate bag gripper by replacing typical aluminum profile frames with heavy-duty linear slides



With years of experience in the declining automotive marketplace, SAS Automation in Xenia, OH, did plenty of due diligence before venturing into the consumer products palletizing market. Industry analysis and research among palletizing system integrators soon alerted SAS to the fact that there was a clear need for an adjustable bag gripper that offered durability in the harshest of packaging plant environments.

"There were other bag grippers on the market, but none delivered the kind of durability required in the palletizing industry. And downtime for repair or replacement can be a killer cost when you simply have to get the goods onto pallets and out the door," reports SAS Automation's General Manager, Robert Dalton.

"We set out to create a highly functional, end-of-arm tool designed to handle the largest bag size typically found in Europe (50Kg) while providing the kind of longevity that integrators and packaging companies were crying out for.

The result was the ABG-50, a 78kg bag gripper for palletizing plastic, woven cloth or paper bags which was launched in October of 2009. The ABG-50 eliminates the need for costly and custom tooling with its unique width adjustment system. In less than 30 seconds an operator can change the tool's bag width from 191-533 mm (7.5 to 21 inches) using a hand wheel driven lead screw and 2 shaft lock mechanisms. An optional servo drive can adjust the width on the fly to accommodate mixed loads. The ABG-50 also comes with both slip sheet and pallet hook options for even greater functionality.

John Prater, Technical Sales Specialist at SAS, adds, "Our research showed that many other so-called adjustable grippers in the marketplace used aluminum profile frames which wore very quickly and did not adjust easily. We have years of experience using linear slides in products such as our shuttle tables and Punch Press degaters. We were aware of their heavy duty nature so it made sense to investigate the feasibility of integrating the linear slides into this kind of application where durability would be our competitive edge. We approached our longtime supplier, Rollon Corporation, to help us develop an alternative solution."

Prater continues, "Rollon's application engineers recommended the Compact Rail for the bag gripper because Compact Rail slides provide the combination

of accuracy and durability required for this application. Critically, the Compact Rail offers accuracy and precise alignment so it was a given to integrate them into our tool increasing the ease of use and lowering our manufacturing costs. These slides also include wipers and grease ports - which facilitates maintenance - an important factor in dusty and dirty packaging environments.”



Rollon Corporation’s Compact Rail is a precision linear motion guide-rail system that allows for rail mis-alignment in both out-of-parallel and out-of-plane conditions. Palletizing lines must be able to deal with the dust and dirt typically found in plants that package grains, chemicals, minerals or concrete cement. With the large rolling elements used inside the ROLLON Compact sliders, dirt and contamination are less of a problem than with recirculating-ball carriages.

Since the Compact Rail sliders run on an induction heat treated steel surface, they are able to move very quickly, very quietly, and with an extremely low coefficient of friction. The ABG-50 utilizes the Compact Rail Series 43 which provides 43 mm or 1.69 inches for the mating mounting surface dimension across the backside of the cold-drawn steel rail. This linear guide with the induction hardened raceways is available in lengths up to four meters or 160” long; beyond this length the rails are completely joinable for very long guidance.

SAS Automation’s General Manager, Robert Dalton, adds, “The decision to use linear slides in this design enabled us to divide the bag gripper. This allowed each side to operate independently in actuation and removed the requirement for mechanical linkage that would require adjustment each time the bag size was changed. It significantly simplified the change-over process for the bag line operator.”



“We have also incorporated independent decking plates that straighten the bags as they are placed so they are not crooked on the pallets. This accuracy is key for our customers because straighter bags mean more stable pallets and smoother transportation.”

Since its launch at Pack Expo 2009, the ABG-50 has been very well received by customers in both Europe and North America. What’s next for SAS, the new boys on the packaging block who are turning heads with their innovative design approach? Well, next is the ABG-25, a smaller version which has a payload of 25Kg, which accounts for over 60 per cent of the bags used for packaging in the North American marketplace. Watch this space!

For more information visit [www.rollonnews.com](http://www.rollonnews.com).