



Handling Systems

# Solutions for the Food Industry



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# Schmalz: Vacuum Technology for Intelligent Automation and Ergonomic Handling

**1800**  
**employees**  
working hard for our customers.

**31**  
**locations**  
for outstanding customer service worldwide.

**8**  
**percent**  
of our revenue is invested in innovative ideas and new products.

**720**  
**copyrights**  
are proof of our groundbreaking innovations.

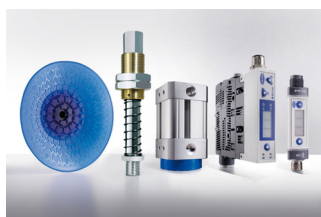


Schmalz is one of the market leaders in vacuum automation and ergonomic handling systems. The products of the internationally positioned company are used in logistics applications as well as in the automotive industry, the electronics sector and furniture production. The Vacuum Automation unit includes a broad spectrum of components such as suction cups or vacuum generators, gripping systems and clamping solutions for holding workpieces, for example on CNC machining centres. In the Handling Systems unit, Schmalz offers innovative handling solutions such as vacuum lifters and crane systems. With the Energy Storage unit, the company has established a further mainstay in the field of stationary energy storage systems.

The combination of comprehensive advice, a strong focus on innovation and first-class quality ensures sustainable added value for customers. Intelligent solutions from Schmalz make production and logistics processes more flexible and efficient – and at the same time fit for advancing digitalization.

Schmalz is represented in all major markets with its own locations and trading partners in around 70 countries. The family-owned company, headquartered in Glatten in the Black Forest, employs around 1,800 people at 31 locations worldwide.

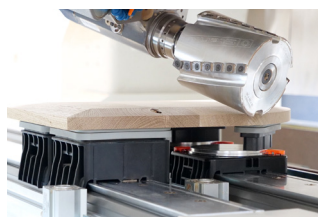
## Vacuum Automation



Components



Systems



Clamping solutions

## Handling Systems



Vacuum lifters and crane systems

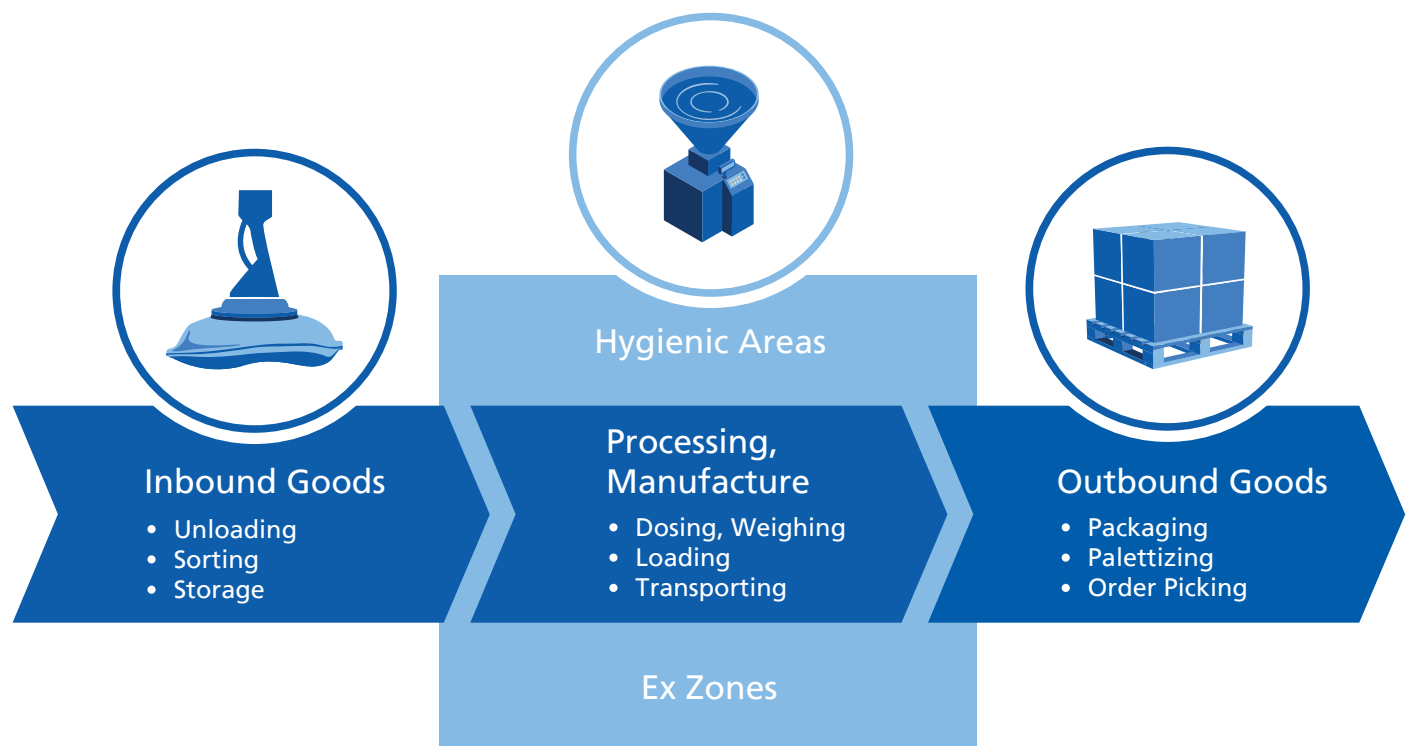


# Vacuum Technology in the Food Industry

Ergonomic vacuum lifters optimize the flow of materials in all process steps in the food industry. For example, in the picking of packaged raw materials, in the processing of intermediate products and the manufacture of the final product, as well as in packaging and delivery of goods.

Thanks to FDA-compliant materials and a design that meets GMP standards (Good Manufacturing Practice), our vacuum lifters are suitable for use in demanding wet and hygienic areas and meet all the relevant requirements of food production and processing.

## PROCESS STEPS AND HANDLING SOLUTIONS IN THE FOOD INDUSTRY



Solutions for Unloading, Sorting and Storage



Solutions for Hygienic Areas



Solutions for Explosion-Proof Areas



Solutions for Packaging and Shipping

# Inbound Goods

Solutions for Unloading, Sorting and Storage

## REQUIREMENTS AND SOLUTIONS



JumboFlex 50 with gripper for jug or bucket handling



JumboSprint 65 when handling heavy containers

### Unloading Goods

- Flexible, dynamic handling of different containers such as bags, buckets, jugs, barrels and cardboard boxes
- Vacuum tube lifter JumboFlex provides maximum flexibility thanks to a wide range of grippers and quick, tool-free gripper change

### Sorting and Storage

- Fast, precise handling without damaging the containers to avoid contamination and spoilage of raw materials
- Vacuum tube lifter JumboFlex with precise one-hand operation for gentle, damage-free gripping of containers

### Large Container Transport

- Ergonomic, safe handling of heavy containers such as bags, barrels or jugs weighing up to 300 kg with high throughput rates
- Vacuum tube lifter JumboSprint for easy, safe repositioning without physical strain

### Hygiene and Safety Requirements

- Regular cleaning of unloading and storage areas to prevent contamination
- Vacuum tube lifters and grippers are easy to clean thanks to hygienic materials and design

## SELECTED PRODUCTS

### Vacuum Tube Lifter JumboFlex



[WWW.SCHMALZ.COM/JUMBOFLEX](http://WWW.SCHMALZ.COM/JUMBOFLEX)

### Vacuum Tube Lifter JumboSprint



[WWW.SCHMALZ.COM/JUMBOSPRINT](http://WWW.SCHMALZ.COM/JUMBOSPRINT)

### Column-Mounted Jib Cranes



[WWW.SCHMALZ.COM/CRANES](http://WWW.SCHMALZ.COM/CRANES)

### Aluminum Crane Systems SRA



[WWW.SCHMALZ.COM/CRANE-SYSTEMS](http://WWW.SCHMALZ.COM/CRANE-SYSTEMS)



# Processing and Manufacturing

Solutions for Hygienic Areas

## REQUIREMENTS AND SOLUTIONS



PalVac Sprint during cutter loading

### Ingredient Preparation and Machine Loading

- Conveying raw materials for weighing, dosing and feeding kneading and mixing machines
- Vacuum tube lifter PalVac Sprint vacuum for clean, ergonomic transport of containers weighing up to 100 kg in hygienic areas

### Compliance With GMP Requirements

- Cleaning the production facility and equipment at the end of the process step or production shift
- Vacuum tube lifter PalVac Sprint for easy on-site cleaning and tool-free disassembly for machine cleaning



PalVac Sprint when loading containers

### Handling of Meat Products

- Loading and unloading of containers according to DIN 55423 with fresh meat or finished products
- Vacuum tube lifter PalVac Sprint with FDA-compliant, easy-to-clean box gripper for use in deep-freeze and wet areas

### Direct Contact and Handling of Intermediate Products

- Hygienic transportation of intermediate products to downstream processing machines
- Vacuum tube lifter PalVac Sprint for direct food contact thanks to FDA-compliant materials and hygienic design

## SELECTED PRODUCTS

### Vacuum Tube Lifter PalVac Sprint



[WWW.SCHMALZ.COM/  
PALVAC-SPRINT](http://WWW.SCHMALZ.COM/PALVAC-SPRINT)

### Vacuum Tube Lifter PalVac Sprint Hygienic



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PALVAC-SPRINT-HYGIENIC](http://WWW.SCHMALZ.COM/PALVAC-SPRINT-HYGIENIC)

### Stainless-Steel Jib Cranes PalVac



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# Processing and Manufacturing

Solutions for Explosion-Proof Areas

## REQUIREMENTS AND SOLUTIONS



JumboSprint EX for bag handling in Ex zones

### Areas with Explosion Risk

- Safe loading of kneading or mixing machines with containers of combustible dusts such as flour, sugar, milk powder or spices
- Vacuum tube lifter JumboSprint EX when handling containers up to 250 kg in ATEX zone 2/22 and up to 85 kg in ATEX zone 1/21

### Different Standards

- Equipment for Ex zones must meet different regional approval requirements
- The vacuum tube lifter JumboSprint EX is certified in accordance with the ATEX 2014/34 EU directive. Certification in accordance with IECEx is also optional



Crane system ATEX with JumboSprint EX for bag handling

### Complete Solution

- Both the vacuum lifter and the crane must be certified for use in Ex zones
- Schmalz offers various crane solutions suitable for this area of application: free standing, wall mounting, existing pillar clamping or overhead crane system

## SELECTED PRODUCTS

### Vacuum Tube Lifter JumboSprint Ex



[WWW.SCHMALZ.COM/  
JUMBOSPRINT-EX](http://WWW.SCHMALZ.COM/JUMBOSPRINT-EX)

### ATEX Jib Crane



[WWW.SCHMALZ.COM/  
CRANE-SYSTEMS](http://WWW.SCHMALZ.COM/CRANE-SYSTEMS)

# Outbound Goods

Solutions for Packaging and Shipping

## REQUIREMENTS AND SOLUTIONS



JumboFlex for end-of-line packaging

### Palletizing

- Fast, precise positioning of cardboard boxes, crates or bags on pallets
- Vacuum tube lifter JumboFlex for fast, precise handling of containers weighing up to 50 kg

### End-of-Line Packaging

- Lifting products into cardboard boxes or crates, moving packaged products and picking for shipping
- Vacuum tube lifter JumboFlex with intuitive one-hand operation, various grippers and quick-change adapter for different EOL processes



JumboFlex Picker for mobile order picking

### Mobile and Flexible

- Moving, stacking and picking containers at different locations in the company
- Vacuum tube lifter JumboFlex Picker as a mobile solution for handling and distribution of containers weighing up to 50 kg

## SELECTED PRODUCTS

### Vacuum Tube Lifter JumboFlex



[WWW.SCHMALZ.COM/JUMBOFLEX](http://WWW.SCHMALZ.COM/JUMBOFLEX)

### Vacuum Tube Lifter JumboFlex Picker



[WWW.SCHMALZ.COM/JUMBOFLEX-PICKER](http://WWW.SCHMALZ.COM/JUMBOFLEX-PICKER)

### Vacuum Tube Lifter JumboFlex Mobile



[WWW.SCHMALZ.COM/JUMBOFLEX-MOBILE](http://WWW.SCHMALZ.COM/JUMBOFLEX-MOBILE)

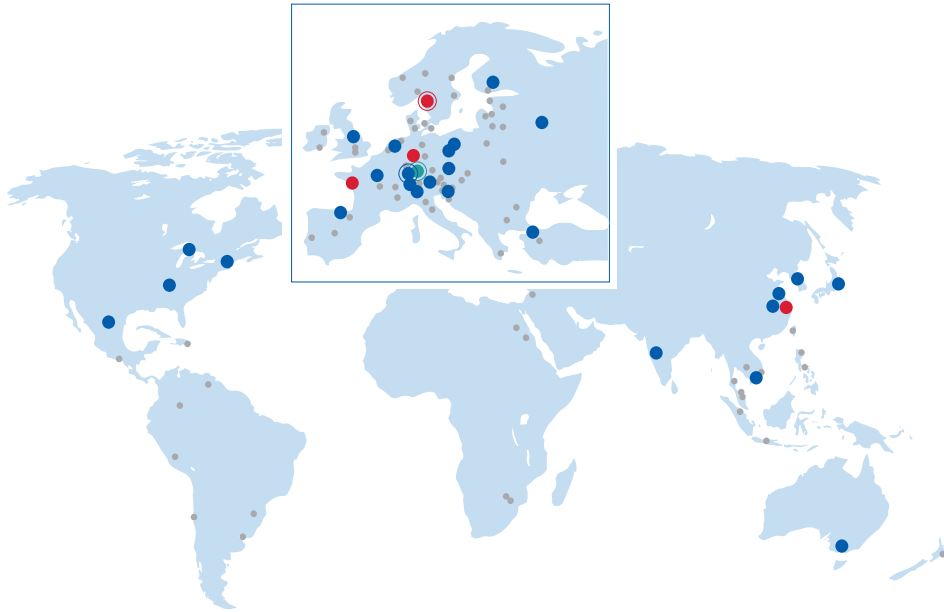
### Aluminum Crane Systems SRA



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## THE SCHMALZ GROUP – WORLDWIDE ON SITE



● Germany – Glatten

● International companies:

Australia – Melbourne  
Austria – Pasching  
Benelux – Hengelo  
Canada – Mississauga  
China – Shanghai  
China – Taicang  
Czech Republic – Hranice  
Finland – Vantaa  
France – Champs-sur-Marne  
India – Pune  
Italy – Galliate  
Japan – Yokohama  
Mexico – Querétaro

Poland – Bydgoszcz  
Poland – Poznan  
Russia – Moscow  
South Korea – Anyang  
Slovenia – Vrhnika  
Spain – Erandio  
Switzerland – Nürensdorf  
Turkey – Istanbul  
United Kingdom – Chesterfield  
USA – Boston  
USA – Raleigh  
Vietnam – Ho Chi Minh City

● Sales partners

### Binar Handling

● Sweden – Trollhättan

● International companies:

China – Shanghai  
France – La Haie-Fouassière  
Germany – Staufenberg



● Germany – Stuttgart

### Vacuum Automation

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### Handling Systems

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