





Schmalz – World of Vacuum Technology

Strict customer-orientation, trend-setting innovations, excellent quality and comprehensive advice make Schmalz the world's leading partner for vacuum technology in the areas of automation, handling and clamping.

As a worldwide active company with excellent products and services, we offer our customers in trade and industry trend-setting solutions. We have enthusiastic customers wherever production processes can be made more efficient with the aid of vacuum technology.

In order to meet the specific requirements of the various sectors of industry, we offer vacuum handling systems aimed primarily at the following branches:

Wood/plastics

Metal/sheet metal

Logistics/packing

Chemicals/pharmaceuticals

Glass

Aerospace industry

Renewable energies (wind power, solar systems)

With our international marketing network with subsidiary companies and sales partners in more than 50 countries, we have highly qualified sales personnel all over the world.

Many awards demonstrate the company's dedication to protection of the environment and to society in general.

Vacuum tube lifter Jumbo

Versatile device for lifting and moving with a single medium



Jumbo Ergo, maximum load 85 kg, with double suction pad, for loading and unloading a CNC woodworking centre

The vacuum tube lifter Jumbo is particularly suitable for frequent and fast lifting and moving of cardboard boxes, sacks, barrels, sheets of wood and many other objects weighing up to 300 kg. The load is gripped and lifted with only a single medium, namely vacuum. Neither rope or chain hoists, manipulators nor lifting cylinders are needed for safe lifting and movement.

The first vacuum tube lifter Jumbo was awarded the German "Federal Prize for Excellent Innovations" and has been developed continually since then. A two-year warranty clearly demonstrates our confidence in this product.

Crane systems from Schmalz complement the system solutions designed for specific tasks.

Load classes

The various load classes permit selection of the best Jumbo for handling the desired workpiece.

Jumbo Type	Vacuum generator	Lifting height [mm]	Maximum load, horizontal								
			25 kg	50 kg	75 kg	100 kg	125 kg	150 kg	200 kg	300 kg	
Handy 20	Pump/ejector	1700	25 kg								
Handy 30	Pump/ejector	1700	50 kg								
Ergo/Sprint 35	Blower/ejector	1700/2100	75 kg								
Ergo/Sprint 45	Blower/ejector	1700/2100	90° 90 kg*								
Ergo/Sprint 65	Blower/ejector	1700/2100	90° 120 kg*								
Ergo/Sprint 85	Blower/ejector	1700/2100	90° 150 kg*								
Ergo/Sprint 110	Blower	1700/2100	90° 200 kg*								
Ergo/Sprint 140	Blower	1700/2100	90° 250 kg*								
Ergo/Sprint 200	Blower	1700/2100									
Ergo/Sprint 300	Blower	1700/2100									

* The maximum load for units with 90° swivelling is 15 to 20 kg lower.

Vacuum tube lifter Jumbo

Versatile device for lifting and moving with a single medium

Jumbo



JumboHandy, maximum load 30 kg, with double suction pad, for handling cardboard boxes



JumboErgo, maximum load 85 kg, with double suction pad, for handling cardboard boxes up to 4 m long



JumboErgo, maximum load 45 kg, with multiple vacuum gripper Compact, for handling non-rigid cardboard boxes



JumboErgo, maximum load 85 kg, with multiple vacuum gripper, for loading and unloading CNC woodworking machines



Jumbo Ergo, maximum load 90 kg, with pneumatic swivelling unit and quadruple suction pads, for handling sheets of wood



JumboErgo, maximum load 70 kg, with pneumatic swivelling unit, for lifting solar modules in a horizontal position and placing them vertically on a commissioning trolley



Jumbo Sprint, maximum load 45 kg, with sack gripper, for handling plastic and paper sacks



JumboSprint, maximum load 65 kg, with sack gripper, for handling sacks in explosion-hazard areas to ATEX



JumboErgo, maximum load 85 kg, with double suction pad, for handling air-conditioning units



JumboHandy, maximum load 30 kg, with single suction pad for commissioning camping tables



JumboErgo, maximum load 45 kg, with double suction pad, for loading gluing machines



JumboErgo, maximum load 65 kg, with round suction pad, for handling rolls of plastic film

The applications shown here are only a few examples of the many different possible applications of the Jumbo. Further applications can be found on our website www.schmalz.com under the link "Applications".

Vacuum tube lifter Jumbo

Construction, functions & performance of the Jumbo

Functionality:

- The load is gripped and lifted by a single medium, namely vacuum.
- A modular system of variable basic components which can be combined in many different ways permits simple adaptation of the unit to meet individual requirements.

Safety:

- A quick-acting non-return valve and the large area of the suction pad(s) ensure that the load is not dropped – even if the electric power or the compressed-air supply fails.
- The design complies with the German accident-prevention regulations (BGR/BGV 500).

Ergonomics:

- Compliance with the latest ergonomic considerations ensures that the use of the Jumbo does not endanger the health of the user.

Ergonomic controls for almost every application



JumboHandy pistol-grip

- Precise movement and positioning of loads at bench-top heights (horizontal movement)
- Ideal one-hand operation for light objects which have to be moved frequently



JumboSprint

- Accurate and precise handling of heavy and unwieldy loads in rough surroundings
- The load is lowered by pushing the handle down and lifted by raising the handle
- Safe positioning of sacks, slabs, bales of raw rubber, etc.
- Safety and a healthy posture at all working heights



JumboErgo

- Fast and precise handling of light and heavy loads with the aid of the twist grip (similar to that on a motorcycle)
- The load is lowered by lowering the wrist and lifted by raising it
- Safety and a healthy posture at all working heights



JumboHandy bow handle

- Ergonomic operation and guidance over a large lifting range (vertical movement)
- Ideal one-hand operation for light objects which have to be moved frequently



JumboSprint Mini

- Operation as for JumboSprint
- Compact shape for easy insertion into mesh boxes, cartons, etc.



JumboErgo with hinged operator handle

- Operation as for JumboErgo
- Ergonomical handling of loads at great heights or for picking up from the floor





Lifting unit

- A wide range of lifting units are available, depending on the maximum load, the lifting height and the workpiece weight.
- Compact design and easy handling thanks to the single-tube system.
- 2 standard lifting strokes:
 - 1700 mm
 - 2100 mm
- Optionally available in stainless steel.
- Optionally available for use in explosion-hazard areas to ATEX.



Long-life vacuum generators

Three different vacuum generators are available, depending on the surface finish and the weight of the workpieces to be lifted:



Vacuum pumps EVE 25/40

- Electrically powered vacuum generators for the JumboHandy



Ejectors SEM 100/300

- Pneumatically powered vacuum generators for the JumboHandy, JumboErgo and JumboSprint
- Optionally available for use in explosion-hazard areas to ATEX



Blowers SB-M, SB-L and SB-V

- Vacuum blowers for the handling of porous workpieces with the JumboSprint and JumboErgo.
- Blower SB-V is frequency-regulated for optimal adjustment of the suction capacity and the vacuum to the requirements of many different applications.
- Blower SB-L Ex is suitable for use in explosion-hazard areas to ATEX



Vacuum tube lifter Jumbo

Suction pads galore

Eight different standard suction pads and many customer-specific suction pads are available for your application.



Quick-change adapter SWA

- With the optional quick-change adapter SWA, all suction pads can be changed in a matter of seconds



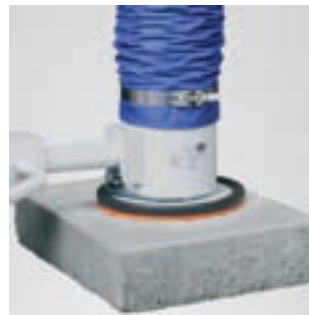
Single suction pad EG

- For rigid cartons, sheets, furniture elements, etc.



Single suction pad EG-long

- For pallets, narrow cartons, beams, square-section tubes, etc.



Round suction pad RG

- For barrels, cans or stone slabs with rough surfaces



Sack gripper SG

- For paper and plastic sacks, raw-rubber bales, film-packed products, etc.



Double suction pad DG

- For stapled, glued, banded or open cartons, also for crates, pallets, etc.
- The two suction pads can be positioned freely on a cross beam



Quadruple suction pad VG

- For cartons, sheets and non-rigid objects.
- The suction pads can be positioned freely in both directions



Double suction pad FM

- For product layers, pallets, sheets with holes, aluminium sections, etc. Particularly for workpieces where the gripper does not have 100% coverage



Multiple suction pad Compact

- For soft cartons such as those with loose lids.
- The suction pads adapt themselves optimally to the shape of the workpiece and ensure very safe handling

Accessories



Dust filter STF

- For handling dirty objects or working in dusty surroundings
- Easy maintenance with replaceable filter cartridges
- Optionally available with filter monitoring



Motor protection switch MSS

- For switching the vacuum generator on and off.
- To protect the vacuum generator against excessively high currents



Radio remote control FFS

- For switching the vacuum generator on and off from a distance
- Integrated overcurrent protection
- Radio signal can penetrate thin walls, floors and ceilings



Schmalz BlowerBox SBB

- For installation of vacuum blowers and pumps
- Reduces the noise output to only 65 dB (A)
- Optionally available with kit for mounting on a crane column



Pneumatic swivelling unit PSE

- Smooth swivelling by 90°
- Low overall height due to compact design
- Workpiece remains swivelled even if the air supply fails
- Maximum load 120 kg



Manual swivelling unit SE

- For manual swivelling by 90°, e.g. for setting workpieces on end
- Maximum load 85 kg



Feed hose VSL

- Connects the vacuum generator to the vacuum tube lifter Jumbo
- Hoses lengths of up to 50 meters are possible if a hose with an internal diameter of 60 mm is used (as illustrated)



Protective sleeve

- To protect the lifting tube against mechanical damage
- Easy to clean

Parking net

- Space-saving parking of the lifter
- Protects the gripper and the lifting tube while the lifter is not being used



Tube-cylinder extension SZV

- For deep insertion into high-sided crates, cartons, open-grid boxes, etc.



Turning unit DE

- For horizontal turning of objects, e.g. for stacking in alternating orientations
- Handle remains stationary, load can be rotated endlessly
- Maximum load 200 kg

Vacuum tube lifter Jumbo

Customer-specific suction-pad solutions

Jumbo



JumboErgo, maximum load 45 kg, for unstacking canisters on a roller conveyor



JumboErgo, maximum load 140 kg, for lifting four barrels at once



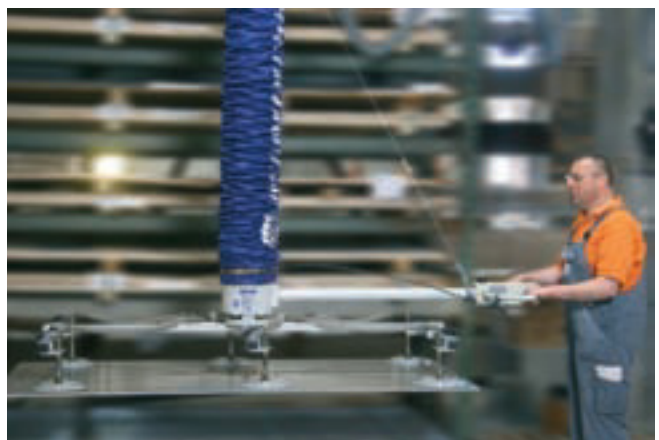
JumboErgo, maximum load 45 kg, for commissioning rolls of textile materials packed in plastic film



JumboErgo, maximum load 85 kg, for handling 48 jam jars



JumboSprint, maximum load 65 kg, stainless steel, for handling foodstuffs in the food industry



JumboErgo, maximum load 140 kg, for commissioning small and medium-sized sheets of aluminum

Services related to vacuum technology

Comprehensive advice any where in the world



How you benefit from Schmalz

- System consultation, including on-site planning
- Fast delivery of devices and systems, and of spare parts
- Complete systems (including crane and, if applicable, chain hoist)
- High degree of flexibility, even for customer-specific solutions
- Comprehensive after-sales service with regular inspection and maintenance
- Worldwide presence
- At least two year's warranty on all products
- Reliable spare-parts management to ensure the shortest possible down times
- Inspection in accordance with BGR/BGV 500
- Further services can be found at www.schmalz.com

What can we do for you?

Do you have questions about the Schmalz vacuum handling systems?

Our team is at your service:

Tel: 1800 99 22 11

Would you like a personal consultation, or are you interested in further information?

If so, please fill out this reply fax and send it back:

Fax: (03) 9720 7879

I would like a personal consultation – please call me to arrange a time

I am interested in the branch solutions from Schmalz.
Please send me further information free of charge:

- Branch solutions, metal
- Branch solutions, wood
- Branch solutions, packing/logistics
- Branch solutions, chemical industry

Name: _____

Company: _____

Function: _____

Street: _____

Postcode/City: _____

Tel.: _____ Fax: _____

E-Mail: _____



Vacuum components and gripping systems

For a large range of users in many different branches of trade and industry – from the automotive to the pharmaceutical industries – Schmalz offers reliable support and assistance in the solution of automation and handling tasks – either as individual components or complex vacuum gripping systems.

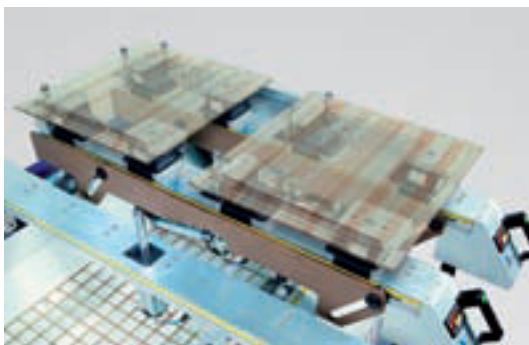
Our teams are at your service!



Vacuum handling systems

Ergonomical solutions for many types of applications. Vacuum lifting devices VacuMaster and vacuum tube lifters Jumbo for easy handling of workpieces without damage to their surfaces. Crane systems from Schmalz complement the system solutions designed for specific tasks. Workshop equipment as practical aids in trade and industry.

Our "Vacuum Handling Systems" team is at your service!



Vacuum clamping systems

Future-oriented vacuum clamping technology from Schmalz is the intelligent answer to the continually increasing demand for more productivity and the economic use of CNC machine tools.

Our "Vacuum Clamping Systems" team is at your service!!

Australian Agents:



FRECALL 1800 99 22 11

sales@millsom.com.au www.millsom.com.au