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
- 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.
Contents

Vacuum Handling Systems

Selection assistant
Jumbo or VacuMaster? 2

Vacuum tube lifters Jumbo
Load classes 3
Applications 4
Construction, functions and performance 6
Suction-pad variants 8
Accessories 9
Customer-specific suction-pad solutions 10

Vacuum lifting devices VacuMaster
Load classes 11
Applications 12
Customer-specific solutions 13
Construction, functions and performance 14
Product variants 16
Accessories 23

Cranes and Chain hoists
Jib crane 24
Wall mounted jib crane 24
Aluminum ceiling mounted bridge crane 24
Chain hoists 24

Workshop equipment
Workbench 25
Work stand 25
Turning bench 26
Painting bench 26
Transport trolley 27
Wall rack 28
Sheet transport trolley 28

Services and contacts 29
Vacuum handling systems from Schmalz rationalize and humanize production processes by permitting effortless and efficient workpiece handling. Their functionality, safety and ergonomic design prove their value in tasks such as the loading and unloading of machine tools. They are the connecting element between economical investment and an ergonomic working environment, since they help to avoid injuries which could otherwise result from the lifting and moving of heavy objects. Vacuum handling systems rationalize manufacturing and shorten the time needed for production and, at the same time, improve the motivation and performance of company employees.

Regardless of whether you need a standard product or a customer-specific solution, vacuum handling systems from Schmalz offer reliable support in solving your handling problems.

**Selection assistant**

<table>
<thead>
<tr>
<th>Selection criterion</th>
<th>Jumbo (Page 4ff)</th>
<th>VacuMaster (Page 12ff)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workpiece</td>
<td>Airtight and porous parts such as cardboard boxes, sacks, barrels, furniture, sheets of wood, etc...</td>
<td>Sheet metal, coils, sheets of wood, plastic and glass, concrete slabs</td>
</tr>
<tr>
<td>Weight</td>
<td>Workpieces weighing up to 300 kg</td>
<td>Workpieces weighing up to 2000 kg, primarily large, flat objects</td>
</tr>
<tr>
<td>Speed</td>
<td>Frequent, fast lifting and movement with a single medium</td>
<td>The unit grips the workpiece, while lifting and lowering is done by a chain hoist</td>
</tr>
<tr>
<td>Handling type</td>
<td>Horizontal, swivelling by 90°</td>
<td>Horizontal, swivelling by 90°, turning by 180°</td>
</tr>
</tbody>
</table>
**Vacuum tube lifter Jumbo**

Versatile device for lifting and moving with a single medium

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.

<table>
<thead>
<tr>
<th>Jumbo Type</th>
<th>Vacuum generator</th>
<th>Lifting height [mm]</th>
<th>Maximum load, horizontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handy 20</td>
<td>Pump/ejector</td>
<td>1700</td>
<td>25 kg</td>
</tr>
<tr>
<td>Handy 30</td>
<td>Pump/ejector</td>
<td>1700</td>
<td>50 kg</td>
</tr>
<tr>
<td>Ergo/Sprint 35</td>
<td>Blower/ejector</td>
<td>1700/2100</td>
<td>75 kg</td>
</tr>
<tr>
<td>Ergo/Sprint 45</td>
<td>Blower/ejector</td>
<td>1700/2100</td>
<td>100 kg</td>
</tr>
<tr>
<td>Ergo/Sprint 65</td>
<td>Blower/ejector</td>
<td>1700/2100</td>
<td>125 kg</td>
</tr>
<tr>
<td>Ergo/Sprint 85</td>
<td>Blower/ejector</td>
<td>1700/2100</td>
<td>150 kg</td>
</tr>
<tr>
<td>Ergo/Sprint 110</td>
<td>Blower</td>
<td>1700/2100</td>
<td>200 kg</td>
</tr>
<tr>
<td>Ergo/Sprint 140</td>
<td>Blower</td>
<td>1700/2100</td>
<td>300 kg</td>
</tr>
<tr>
<td>Ergo/Sprint 200</td>
<td>Blower</td>
<td>1700/2100</td>
<td><em>90°</em></td>
</tr>
<tr>
<td>Ergo/Sprint 300</td>
<td>Blower</td>
<td>1700/2100</td>
<td><em>90°</em></td>
</tr>
</tbody>
</table>

* 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

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 85 kg, with pneumatic swivelling unit, for lifting solar cells 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

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

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

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

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

Jumbo Ergo, 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.vacuworld.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).

Ergonomy:
• 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
• Optional: hinged valve tube for working at greater 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
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 Jumbo-Handy

**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.

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

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

Single suction pad EG-long
- For pallets, narrow cartons, beams, square-section tubes, etc.

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

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

Double 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 vacuum blowers on and off
- Protects the blower against excessive currents

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

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)

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

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

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

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

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

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

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

The trendsetting generation of vacuum lifting devices!

Vacuum lifting devices VacuMaster are the ideal tools for the handling of sheets of metal, wood and glass, stone slabs, weighing up to 2000 kg. The object to be lifted is gripped by the VacuMaster-and can then be lifted and moved safely with the aid of a crane.

Robustness and reliability are the most important features of this product series. A three-year warranty demonstrates our confidence in these devices. It goes without saying that we comply with all current standards and guidelines for vacuum handling devices; in many cases, we even surpass them.

Crane systems from Schmalz complement the system solution designed for a specific task.

**Load classes**

Various load classes permit selection of the optimum VacuMaster device for the weight of the load to be lifted.

<table>
<thead>
<tr>
<th>VacuMaster</th>
<th>Maximum load</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100 kg</td>
</tr>
<tr>
<td></td>
<td>125 kg</td>
</tr>
<tr>
<td></td>
<td>250 kg</td>
</tr>
<tr>
<td></td>
<td>500 kg</td>
</tr>
<tr>
<td></td>
<td>1000 kg</td>
</tr>
<tr>
<td></td>
<td>1500 kg</td>
</tr>
<tr>
<td></td>
<td>2000 kg</td>
</tr>
<tr>
<td>VacuMaster horizontal</td>
<td>Available</td>
</tr>
<tr>
<td>VacuMaster 90° swivelling</td>
<td>Available</td>
</tr>
<tr>
<td>VacuMaster 180° turning</td>
<td>Available</td>
</tr>
</tbody>
</table>

Various VacuMaster models are available, depending on the application. These and their specific features are described in more detail on pages 16ff.
Vacuum lifting devices VacuMaster

The trendsetting generation of vacuum lifting devices

Vacuum Master Basic, maximum load 250 kg, horizontal, for loading and unloading steel racks

Vacuum Master Eco, maximum load 250 kg, horizontal, for loading and unloading of stoneworking machines

Vacuum Master Coil, maximum load 750 kg, horizontal, for handling stainless-steel coils

Vacuum Master Comfort, maximum load 125 kg, with 180° turning, for loading CNC machines with sheets of glued wood

Vacuum Master Comfort, maximum load 750 kg, horizontal, for handling of metal sheets

Vacuum Master Vario, maximum load 1000 kg, horizontal, for loading and unloading plasma-cutting machines

The various VacuMaster models and their specific features are described in more detail on pages 16ff.
Customer-specific solutions

The applications shown here are only a few examples of the many different jobs for which the VacuMaster series can be used. Further applications can be found on our website www.vacuworld.com under the link "Applications".
Vacuum lifting devices VacuMaster
Construction, function and performance, examples of the VacuMaster Basic/Comfort

Functionality:
• Long lifetime due to extremely robust construction
• Individual adaptation of the device with a compact modular system

Safety:
• Audible warning in the case of a power failure
• Large vacuum reservoir
• Unique manual slide valve prevents incorrect operation
• Clearly visible manometer
• High availability due to maximum reliability

Ergonomics:
• Easy handling thanks to low intrinsic weight
• All controls easily accessible
• Compliance with the latest ergonomic knowledge protects user’s health

Ergonomic operator handle
• Fatigue-free work thanks to the ergonomic arrangement of all control elements
• Easy operation because all main controls are mounted directly on the handle
• Individual handle lengths to match the maximum workpiece dimensions

Operator handle Basic
Operator handle Comfort

Unique manual slide valve
• Incorrect operation prevented by non-pinching locking element
• Easy operation, even when wearing gloves
• Double actuation prevents inadvertent dropping of the load

Aluminum main beam with integrated vacuum reservoir and distributor
• Fast gripping of workpieces thanks to the large integrated vacuum reservoir
• Load is not dropped even in the case of a power failure
• Compact design due to integrated vacuum distributor
• Corrosion-resistant

Use of a modern technical plastic material
• Easy sliding of the cross beam and the suction pads without scratching
• Low intrinsic weight
• Tested functionality and high reliability
Large range of suction pads
- Individual adaptation of the suction pads to the size and weight of the workpiece
- Suction plates SPU for lifting workpieces with smooth surfaces
- Suction plates SPK for lifting workpieces with structured surfaces such as checker plates

Basic module with integrated functions
- Extremely insensitive to dirt
- Components protected by a robust sheet-metal cover
- Easy operation thanks to easily legible, integrated meters
- Vacuum generator easily accessible for maintenance

Long-life vacuum generators
- Pump size can be selected to match the properties of the workpiece
- Regulated vacuum generators, pump with energy-saving function (Comfort model)
- Country-specific voltages in the range 200-575 V, 50/60 Hz available

Electric linear drive
- Vibration-free swivelling by 90° or 180°
- Low overall height due to compact design
- Short cycle times due to high swivelling speed
- Load remains in swivelled position even if the power fails
## Vacuum lifting devices VacuMaster

A wide range of products for almost every application

### VacuMaster Basic – comprehensive basic configuration

For handling of sheets, barrels etc.

- Extremely versatile vacuum lifting device
- Pump size, operator-handle length, suction pads, main and cross beam can be selected to match specific applications
- Main beam with integrated vacuum reservoir and distributor
- Ergonomic operator handle
- Electronic warning device, non-return valve
- Optionally with 90° swivelling or 180° turning of the load (see Page 17)
- Maximum load 125 to 750 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Minimum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Basic 125</td>
<td>125 / 0</td>
<td>4000 x 2000</td>
<td>250 x 250</td>
<td>horizontal</td>
<td>1, 2, 4, 6, 8</td>
<td>410 - 555</td>
<td>34 - 82</td>
</tr>
<tr>
<td>VacuMaster Basic 250</td>
<td>250 / 0</td>
<td>4000 x 2000</td>
<td>360 x 360</td>
<td>horizontal</td>
<td>1, 2, 4, 6, 8</td>
<td>410 - 555</td>
<td>37 - 74</td>
</tr>
<tr>
<td>VacuMaster Basic 500</td>
<td>500 / 0</td>
<td>4000 x 2000</td>
<td>740 x 590</td>
<td>horizontal</td>
<td>2, 4, 6, 8</td>
<td>570 - 635</td>
<td>69 - 95</td>
</tr>
<tr>
<td>VacuMaster Basic 750</td>
<td>750 / 0</td>
<td>4000 x 2000</td>
<td>780 x 470</td>
<td>horizontal</td>
<td>4, 6, 8</td>
<td>570 - 635</td>
<td>89 - 106</td>
</tr>
</tbody>
</table>

### VacuMaster Comfort – with “high-end” features

Basic configuration like the VacuMaster Basic – but with the following additional features:

- Ergonomically integrated push-button controls for “chain hoist up/down”, “vacuum on/off” and, on devices with swivelling option, “vertical/horizontal”
- Solenoid valve with two-hand actuation for “vacuum off”
- Regulated vacuum generator, pump with automatic energy-saving function
- Delivered complete with chain hoist
- Optional: chain hoist with frequency-regulated motor
- Maximum load 125 to 750 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Minimum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Comfort 125</td>
<td>125 / 0</td>
<td>4000 x 2000</td>
<td>250 x 250</td>
<td>horizontal</td>
<td>1, 2, 4, 6, 8</td>
<td>445 - 590</td>
<td>42 - 84</td>
</tr>
<tr>
<td>VacuMaster Comfort 250</td>
<td>250 / 0</td>
<td>4000 x 2000</td>
<td>360 x 360</td>
<td>horizontal</td>
<td>1, 2, 4, 6, 8</td>
<td>445 - 590</td>
<td>45 - 82</td>
</tr>
<tr>
<td>VacuMaster Comfort 500</td>
<td>500 / 0</td>
<td>4000 x 2000</td>
<td>740 x 590</td>
<td>horizontal</td>
<td>2, 4, 6, 8</td>
<td>605 - 670</td>
<td>82 - 108</td>
</tr>
<tr>
<td>VacuMaster Comfort 750</td>
<td>750 / 0</td>
<td>4000 x 2000</td>
<td>780 x 470</td>
<td>horizontal</td>
<td>4, 6, 8</td>
<td>605 - 670</td>
<td>103 - 120</td>
</tr>
</tbody>
</table>

Further information can be found in our brochure “Branch Solutions”, which can be ordered free of charge with the reply fax on Page 29.
**Swivelling by 90° or turning by 180°**

VacuMaster Basic and VacuMaster Comfort

- Vibration-free swivelling of workpieces with electrically powered linear drive
- Ergonomic operation thanks to the very compact and weight-optimized design
- Maximum load 125 to 500 kg

**Swivelling workpieces by 90°**

VacuMaster Comfort, maximum load 125 kg, with 180° turning, for handling panes of glass

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Basic 250</td>
<td>125 / 250</td>
<td>4000 x 2000</td>
<td>horizontal/vertical</td>
<td>2, 4, 6, 8</td>
<td>720 - 800</td>
<td>78 - 89</td>
</tr>
<tr>
<td>VacuMaster Basic 500</td>
<td>250 / 500</td>
<td>4000 x 2000</td>
<td>horizontal/vertical</td>
<td>4, 6, 8</td>
<td>1030</td>
<td>160</td>
</tr>
<tr>
<td>VacuMaster Comfort 250</td>
<td>75 / 75</td>
<td>2500 x 1250</td>
<td>horizontal/vertical</td>
<td>2, 4, 6, 8</td>
<td>1025 - 1105</td>
<td>74 - 96</td>
</tr>
<tr>
<td>VacuMaster Comfort 125</td>
<td>75 / 125</td>
<td>2500 x 1250</td>
<td>horizontal/vertical</td>
<td>2, 4, 6, 8</td>
<td>1025 - 1105</td>
<td>87 - 99</td>
</tr>
<tr>
<td>VacuMaster Comfort 250</td>
<td>250 / 250</td>
<td>4000 x 2000</td>
<td>horizontal/vertical</td>
<td>4, 6, 8</td>
<td>1025 - 1105</td>
<td>137 - 143</td>
</tr>
</tbody>
</table>

**Turning workpieces by 180°**

VacuMaster Basic und VacuMaster Comfort

- Vibration-free turning of workpieces with electrically powered linear drive
- Narrow basic body provides a good view of the workpiece
- Adaptable to varying workpiece sizes and shapes
- Ergonomic operation thanks to the very compact and weight-optimized design
- Maximum load 75 to 250 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Basic 75</td>
<td>75 / 75</td>
<td>2500 x 1250</td>
<td>horizontal/vertical</td>
<td>2, 4, 6, 8</td>
<td>1025 - 1105</td>
<td>74 - 96</td>
</tr>
<tr>
<td>VacuMaster Basic 125</td>
<td>125 / 125</td>
<td>2500 x 1250</td>
<td>horizontal/vertical</td>
<td>2, 4, 6, 8</td>
<td>1025 - 1105</td>
<td>87 - 99</td>
</tr>
<tr>
<td>VacuMaster Basic 250</td>
<td>250 / 250</td>
<td>4000 x 2000</td>
<td>horizontal/vertical</td>
<td>4, 6, 8</td>
<td>1640</td>
<td>137 - 143</td>
</tr>
<tr>
<td>VacuMaster Comfort 75</td>
<td>75 / 75</td>
<td>2500 x 1250</td>
<td>horizontal/vertical</td>
<td>2, 4, 6, 8</td>
<td>1025 - 1105</td>
<td>75 - 96</td>
</tr>
<tr>
<td>VacuMaster Comfort 125</td>
<td>75 / 125</td>
<td>2500 x 1250</td>
<td>horizontal/vertical</td>
<td>2, 4, 6, 8</td>
<td>1025 - 1105</td>
<td>87 - 99</td>
</tr>
<tr>
<td>VacuMaster Comfort 250</td>
<td>250 / 250</td>
<td>4000 x 2000</td>
<td>horizontal/vertical</td>
<td>4, 6, 8</td>
<td>1640</td>
<td>139 - 145</td>
</tr>
</tbody>
</table>
Vacuum lifting devices VacuMaster
A wide range of products for almost every application

**VacuMaster Vario**

For horizontal handling of heavy, mainly non-porous workpieces
- Particularly suitable for loading machines with sheets of metal
- Modular design permits easy adaptation to specific applications
- Safe operation thanks to the large vacuum reservoir and the electronic warning device
- Maximum load 1000 to 2000 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Minimum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Vario 1000-1</td>
<td>1000 / -</td>
<td>2500 x 1500</td>
<td>900 x 520</td>
<td>horizontal</td>
<td>1</td>
<td>630</td>
<td>104</td>
</tr>
<tr>
<td>VacuMaster Vario 1000-4</td>
<td>1000 / -</td>
<td>3000 x 1500</td>
<td>1150 x 810</td>
<td>horizontal</td>
<td>4</td>
<td>750</td>
<td>162</td>
</tr>
<tr>
<td>VacuMaster Vario 1000-8</td>
<td>1000 / -</td>
<td>4000 x 2000</td>
<td>1580 x 500</td>
<td>horizontal</td>
<td>8</td>
<td>935</td>
<td>252</td>
</tr>
<tr>
<td>VacuMaster Vario 2000-2</td>
<td>2000 / -</td>
<td>3000 x 1500</td>
<td>1230 x 900</td>
<td>horizontal</td>
<td>2</td>
<td>820</td>
<td>229</td>
</tr>
<tr>
<td>VacuMaster Vario 2000-8</td>
<td>2000 / -</td>
<td>4000 x 2000</td>
<td>2030 x 760</td>
<td>horizontal</td>
<td>8</td>
<td>1000</td>
<td>345</td>
</tr>
</tbody>
</table>

Vacuum lifting devices VacuMaster Vario, maximum load 1000 kg, horizontal, for loading and unloading plasma-cutting machines

**VacuMaster Eco**

For horizontal handling of smooth, air-tight workpieces without an external energy supply
- Safe operation thanks to the battery-powered warning device with battery-test function
- Can be used anywhere, since it requires no external power
- Construction similar to the VacuMaster Basic/Vario
- Maximum load 250 to 1000 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Minimum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Eco 250</td>
<td>250 / -</td>
<td>3000 x 1500</td>
<td>350 x 350</td>
<td>horizontal</td>
<td>1, 2, 4, 6</td>
<td>570 - 840</td>
<td>25 - 68</td>
</tr>
<tr>
<td>VacuMaster Eco 500</td>
<td>500 / -</td>
<td>4000 x 2000</td>
<td>480 x 480</td>
<td>horizontal</td>
<td>1, 4, 8</td>
<td>850 - 1120</td>
<td>82 - 131</td>
</tr>
<tr>
<td>VacuMaster Eco 750</td>
<td>750 / -</td>
<td>4000 x 2000</td>
<td>360 x 360</td>
<td>horizontal</td>
<td>4, 8</td>
<td>1050 - 1126</td>
<td>109 - 131</td>
</tr>
<tr>
<td>VacuMaster Eco 1000</td>
<td>1000 / -</td>
<td>4000 x 2000</td>
<td>625 x 625</td>
<td>horizontal</td>
<td>1, 4, 8</td>
<td>980 - 1390</td>
<td>138 - 309</td>
</tr>
</tbody>
</table>

Vacuum lifting devices VacuMaster Eco, maximum load 1000 kg, horizontal, for loading and unloading of laser-cutting machines
### VacuMaster Coil

**For handling coils and rings of split strip**
- Particularly suitable for lifting workpieces from a pallet in the horizontal position and placing them on the mandrel in the vertical position.
- Suitable for thin and very thin sheets, metal foil, steel, tin, aluminum, etc.
- Damage-free gripping without mechanical clamps
- Handling of coils with varying diameters with the aid of switchable annular chambers
- Precise, continuous swivelling of the load with the aid of an electromechanical linear drive
- Maximum load 500 to 1000 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Minimum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Overall weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Coil 500-90°</td>
<td>500 / 500</td>
<td>1100</td>
<td>410</td>
<td>horizontal/vertical</td>
<td>1 / 850</td>
<td>1300</td>
<td>150</td>
</tr>
<tr>
<td>VacuMaster Coil 750-90°</td>
<td>750 / 750</td>
<td>1300</td>
<td>410</td>
<td>horizontal/vertical</td>
<td>1 / 1050</td>
<td>1300</td>
<td>210</td>
</tr>
<tr>
<td>VacuMaster Coil 1000-90°</td>
<td>1000 / 1000</td>
<td>1400</td>
<td>410</td>
<td>horizontal/vertical</td>
<td>1 / 1200</td>
<td>1300</td>
<td>250</td>
</tr>
</tbody>
</table>

### VacuMaster Box

**For turning over metal boxes**
- Particularly suitable for turning over safes, air-conditioner cabinets, large domestic appliances, switchgear cabinets, etc.
- Simple gripping and release of the load thanks to fold-away arm
- Optional: Load can be turned endlessly, either electrically or manually
- Easy adaptation to varying workpieces thanks to continuously adjustable gripping arms
- Maximum load 125 to 250 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Minimum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Box 125-360°</td>
<td>125 / 125</td>
<td>1000 x 1200</td>
<td>750 x 360</td>
<td>Endless turning</td>
<td>2</td>
<td>1000</td>
<td>80</td>
</tr>
<tr>
<td>VacuMaster Box 250-360°</td>
<td>250 / 250</td>
<td>1000 x 1200</td>
<td>750 x 360</td>
<td>Endless turning</td>
<td>2</td>
<td>1000</td>
<td>150</td>
</tr>
</tbody>
</table>

Further information can be found in our brochure “Branch Solutions, Metal”, which can be ordered free of charge with the reply fax on Page 29.
Vacuum lifting devices VacuMaster
A wide range of products for almost every application

### VacuMaster Multi

For handling of large, air-tight or porous sheets and panels
- Particularly suitable for handling raw and coated chipboard, sheets of MDF and OSB, plasterboard and sheets of plastic
- Ergonomic handling thanks to swivelling operator handle (standard)
- Safe handling of porous sheets thanks to the powerful vacuum blower and the electronic warning device with load detection
- Quick release of the load thanks to the reversing valve on the blower
- Precise swivelling of the load with a geared electric motor
- Maximum load 150 to 400 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Multi 400-1</td>
<td>400 / -</td>
<td>4100 x 2100</td>
<td>horizontal</td>
<td>1 / 1000 x 675</td>
<td>520</td>
<td>75</td>
</tr>
<tr>
<td>VacuMaster Multi 400-2</td>
<td>400 / -</td>
<td>5600 x 2100</td>
<td>horizontal</td>
<td>2 / 675 x 1000</td>
<td>600</td>
<td>105</td>
</tr>
<tr>
<td>VacuMaster Multi 400/150-90°-1</td>
<td>400 / 150</td>
<td>4100 x 2100</td>
<td>horizontal/vertical</td>
<td>1 / 1000 x 675</td>
<td>535</td>
<td>118</td>
</tr>
<tr>
<td>VacuMaster Multi 400/300-90°-2</td>
<td>400 / 300</td>
<td>5600 x 2100</td>
<td>horizontal/vertical</td>
<td>2 / 675 x 1000</td>
<td>620</td>
<td>148</td>
</tr>
<tr>
<td>VacuMaster Multi 400/300-90°-8</td>
<td>400 / 300</td>
<td>5600 x 2100</td>
<td>horizontal/vertical</td>
<td>8 / 400</td>
<td>635</td>
<td>195</td>
</tr>
</tbody>
</table>

### VacuMaster RE

For horizontal handling of coated or uncoated sheets of wood and sheets of plastic
- Particularly suitable for loading horizontal mechanical saws with sheets from a pallet and for removal of sheets from cantilever-arm racks
- Vacuum generator (ejector) powered by compressed air, 2 vacuum circuits
- Safe handling thanks to an audible warning device and a vacuum reservoir
- Maximum load 250 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster RE 250-4</td>
<td>250 / -</td>
<td>5200 x 2400</td>
<td>horizontal</td>
<td>4</td>
<td>360</td>
<td>133</td>
</tr>
</tbody>
</table>
VacuMaster HHVM

For handling coated or uncoated sheets of wood and sheets of plastic
- Particularly suitable for removing sheets from vertical storage racks and loading upright or horizontal mechanical saws.
- Load can be swivelled 90° in either direction and locked there
- Damage-free handling by a single person
- Vacuum generator (ejector) powered by compressed air
- Safe handling thanks to an audible warning device and a vacuum reservoir
- Maximum load 100 to 200 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Minimum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster HHVM 100-4</td>
<td>100 / 100</td>
<td>3500 x 3050</td>
<td>2065 x 525</td>
<td>horizontal/vertical</td>
<td>4 / 315 x 245</td>
<td>325</td>
<td>133</td>
</tr>
<tr>
<td>VacuMaster HHVM 200-4</td>
<td>200 / 200</td>
<td>4100 x 3050</td>
<td>2400 x 500</td>
<td>horizontal/vertical</td>
<td>4 / 600 x 220</td>
<td>325</td>
<td>135</td>
</tr>
</tbody>
</table>

Further information can be found in our brochure “Branch Solutions, Wood”, which can be ordered free of charge with the reply fax on Page 29.
Vacuum lifting devices VacuMaster
A wide range of products for almost every application

**VacuMaster Window**

For handling sheets of glass and window frames
- Workpiece can be turned 90° to the left and right
- Fatigue-free work thanks to ergonomic operation and low weight
- Handling of multi-casement windows with frame elements thanks to the intelligent arrangement of the suction pads (max. 45 mm)
- Safe handling thanks to an electronic warning device and a vacuum reservoir
- Electric swivelling drive available as an option
- Maximum load 170 to 300 kg

**VacuMaster Light**

For handling of air-tight or slightly porous workpieces such as barrels, furniture elements or sections
- Typical applications: assembly of parts, packing, loading of machines, etc.
- Fatigue-free work thanks to ergonomic operation and low weight
- Handling of workpieces of varying shapes and sizes thanks to quick and easy suction-pad adjustment
- Quick commissioning thanks to simple installation (compressed-air supply required)
- Safe handling thanks to intelligent warning device
- Maximum load 100 kg

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Window 170-2</td>
<td>170 / -</td>
<td>2000 x 2000</td>
<td>vertical</td>
<td>2 / 300</td>
<td>760</td>
<td>34</td>
</tr>
<tr>
<td>VacuMaster Window 300-4</td>
<td>300 / -</td>
<td>2000 x 2000</td>
<td>vertical</td>
<td>4 / 300</td>
<td>760</td>
<td>41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum load, horizontal/vertical [kg]</th>
<th>Workpiece format Maximum [mm]</th>
<th>Handling of the load</th>
<th>Number of suction pads</th>
<th>Overall height [mm]</th>
<th>Intrinsic weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VacuMaster Light 100-1</td>
<td>100 / -</td>
<td>1500 x 800</td>
<td>horizontal</td>
<td>1</td>
<td>250</td>
<td>13</td>
</tr>
<tr>
<td>VacuMaster Light 100-4</td>
<td>100 / -</td>
<td>2000 x 800</td>
<td>horizontal</td>
<td>4</td>
<td>310</td>
<td>15</td>
</tr>
</tbody>
</table>

VacuMaster Window, maximum load 170 kg, vertical, for handling of multi-casement windows

VacuMaster Light, maximum load 100 kg, horizontal, for loading and unloading CNC machine tools
Accessories

The valve for deactivating individual suction pads or beams simplifies the handling of workpieces of varying shapes and sizes.

Swivelling, lockable operator handle for easy control even with a long lifting stroke.

Spiral cable and CEE plug for electrical connection of the vacuum lifting devices to the chain hoist.

CEE plug and coupling for simple connection of power to the vacuum lifting device.

Compressed-air hose for supplying the lifting device with compressed air.

Parking feet for preventing damage to the suction pads.
Cranes and chain hoists
Safety and mobility for vacuum lifting systems

The appropriate crane, complemented if necessary by a chain hoist, makes your customised vacuum lifting system complete.

Cranes
- Specially designed for the Jumbo and VacuMaster
- High degree of mobility and low moving mass

Chain hoists
- Extremely safe operation due to low-voltage operating controls
- Long lifetime thanks to limit switches
- Precise and careful positioning of workpieces with two-stage speed control
- Fast operation thanks to high lifting speeds
- Optionally available with frequency regulation for even more precise positioning, particularly when handling fragile objects or for assembly work
- 24-month warranty
Workshop equipment
Indispensable helpers in trade and industry

Damage-free clamping of parts for machining and manual work
• Particularly suitable for workpieces made of wood, glass, metal or plastic
• Simple clamping and release of the workpiece with a foot-operated valve
• Ergonomic working thanks to adjustable height
• Variable: a wide range of round and rectangular suction pads is available
• Vacuum generators powered by electricity or compressed air, optionally with energy-saving function!

Vacuum workbench PVT
• Workpiece can be swivelled through 180° (vertical – horizontal – vertical)
• Locking at 45° increments with foot pedal
• Manual locking at any desired angle
• Optionally available with four suction pads
• Optionally available with extension for large workpieces
• Maximum load 90 kg to 180 kg

Vacuum workstand PVS
• Quick replacement of suction pads without tools
• Optionally available with 2 or 4 suction pads
• Can be turned endlessly and locked in any desired position
• Can be swivelled by 90° to the vertical position
• Cross-beam can be locked in 45° increments, with end stop
• Sensing valve activates the vacuum when a workpiece is placed on the stand; unused suction pads remain deactivated
• Maximum load 90 kg to 100 kg
Workshop equipment
Indispensable helpers in trade and industry

Vacuum turning bench VWT 180°

For turning over workpieces (by 180°)
• For large sheets of wood, plastic, glass, etc.
• Assembly work or machining of the sheet possible from both sides without releasing and reclamping
• Safety:
  - Workpiece can be released only in the end position
  - Audible warning device
  - Generously dimensioned vacuum reservoir
• Continuous swivelling by 180° in only 10 seconds
• Other suction pads available as option
• Maximum load 100 to 150 kg

Vacuum turning bench VWT 180° for turning over workpieces

Simple operation with clearly designed control panel

Easy adjustment of the suction pads

Painting bench LTP 100

Bench for painting of small sheets, furniture parts, etc.
• Adjustable height
• Bench top mounted on ball bearings and easy to turn
• Maximum load 35 kg

Painting bench LTP 100

Painting bench LTT 120

Bench for painting large and small furniture elements, doors, sheets, etc.
• Adjustable height
• Bench top mounted on ball bearings and easy to turn
• Swinging telescopic arms
• Maximum load 35 kg

Painting bench LTT 120
Workshop equipment
Indispensable helpers in trade and industry

**Transport trolley HW**

Trolley for damage-free storage and transport of parts
- Suitable, for example, for furniture elements, sheets, section, metal/plastic parts, solar panels, etc.
- Easy transport thanks to four castors, two of which have parking brakes
- Shelf rods covered with solvent-resistant plastic tubes
- Number of levels, depending on model: 12, 16 or 20

Options
- Telescopic: distance between supports can be adjusted to any desired value
- Loading from both sides
- Telescopic shelf rods
- Removable shelf rods
- Additional sets of rods

- Maximum load, depending on model: 240 to 360 kg

**Transport trolley HWV**

Trolley with very high maximum load for damage free storage and transport of parts
- Can be used, for example, for furniture elements, sheets, sections, metal/plastic parts, solar panels, etc.
- Easy to move thanks to four castors, two of which have parking brakes
- Shelf rods covered with solvent-resistant plastic tubes
- Easy adjustment of the rod angle with tension rods and locks on each level
- Very robust design with rigid frame
- One set of rods fixed, one set adjustable
- Further sets of rods (fixed or adjustable) optionally available
- Maximum load: up to 480 kg, depending on the model
Workshop equipment
Indispensable helpers in trade and industry

**Wall rack WA**

*Easy-to-use wall-mounted rack for damage-free storage of workpieces*

- Suitable, for example, for use in paint shops for drying of freshly painted workpieces such as doors, strips of wood, sections, furniture front panels, etc.
- Mounting brackets for easy mounting; drilling template included
- Support rods can be swung away to save space
- Rods covered with solvent-resistant plastic tube
- Removable rods as option
- Can be extended as desired
- Maximum load 120 kg per set of rods

**Sheet transport trolley PTS 250**

*Transport trolley for loading and unloading of upright and horizontal mechanical saws*

- Workpiece can be lifted and lowered to any desired height with easily-operated jack
- Mechanical swivelling unit for swivelling the workpiece between the vertical and horizontal positions
- Easy transport thanks to four castors, two of which have parking brakes
- Maximum sheet size 5200 x 2100 mm
- Maximum load 250 kg
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.vacuworld.com

What can we do for you?

Do you have questions about the Schmalz vacuum handling systems?
Our team is at your service:
Tel. +49 (0)7443 2403 301

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 +49 (0)7443 2403 399

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

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 components
Tel. +49 (0)7443 2403 201
Fax +49 (0)7443 2403 299

Vacuum gripping systems
Tel. +49 (0)7443 2403 103
Fax +49 (0)7443 2403 197

Vacuum handling systems
Ergonomical solutions for many different applications. Vacuum lifting devices VacuMaster and vacuum tube lifters Jumbo for effortless, damage-free workpiece handling. Workshop equipment as practical aids in trade and industry.

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

Tel. +49 (0)7443 2403 301
Fax +49 (0)7443 2403 399

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!!

Tel. +49 (0)7443 2403 501
Fax +49 (0)7443 2403 599