Medical

Suction Units
Dear clients,

With present brochure we would like to introduce our newest medical suction units, which comply with demands of relevant international standards and include the most advanced technical solutions, based on our 30 years experiences with production of medical equipment. In this brochure you will find the most important benefits which devices offer, while detailed technical data and drawings are available in our Technical Catalogue.

Our entire production program of medical equipment includes the following product-groups:

- Central System of Medical Gases
- Medical Suction Units
- Oxygen Therapy Devices
- Bed Head Units
- Medical Supporting Equipment

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User friendly devices due to easy maintenance, long shelf life, multifunctional configuration and low noise level.

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Powered either by compressed air or vacuum these devices are appropriate for all kinds of aspirating purposes.

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ELECTRICALPOWERED
SUCTION UNITS

Vacumed
synonym for quality

VACUMED, a trade mark of electrical powered suction units of the
Medicop is a synonym for quality and of precise performance of
various aspiratory interventions.
The basic element of the device is an electrical membrane pump
which creates a vacuum and is valued especially for high effi-
ciency, long life and silent operation as well as minimal service
or maintenance.

Regarding the capacity of the vacuum pump
we offer two standard models of electrical
powered suction units:
• VACUMED 390 with the suction
  capacity of 39 l/min and
• VACUMED 600 with the suction
  capacity of 60 l/min.

HOW IS THE FRAMEWORK DESIGNED?
The framework is designed so that it allows
manual transportation of the device and at
the same time the installation of a so called
safety jar on one side and the suction jar on
the other side.
Additionally the device can be equipped with
a trolley and be made into a mobile device.
The trolley with four wheels allows instal-
lation of additional suction jars of various
capacities. The basic equipment of each
device includes a bacterial filter, silencer, all
connecting and aspirating tubes and a holder
for fixing the aspirating tubes.

HOW IS THE USE OF VACUMED
SUCTION UNITS?
The use of VACUMED suction units is rather
simple. The device is switched on with the
hand or foot switch. With a regulation button
the desired vacuum power is selected and
then displayed on the manometer, placed in
the middle of the dashboard plate.
Aspirated liquid is collected in suction jars.
Every suction jar cover is equipped with a
shut-off valve, which prevents liquid from
entering the device. Reusable suction jars
are made of polysulfon and can be cleaned
with sterilisation to 134°C. Suction bags for
single use allow more comfortable work than
reusable suction jars.

The aspirated liquid is collected in a plastic
bag and when full it is closed and removed
together with the cover. The suction bag
cover is equipped with a shut-off valve, which
prevents liquid from entering the
device and with an additional cork which
prevents the liquid to flow out of the suction
bag when it is full.
ELECTRICAL POWERED SUCTION UNITS

VACUMED synonym for quality

VACUMED – ELECTRICAL SUCTION UNIT

<table>
<thead>
<tr>
<th>TECHNICAL DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage:</td>
</tr>
<tr>
<td>Max. suction power:</td>
</tr>
<tr>
<td>Free air flow:</td>
</tr>
<tr>
<td>Dimensions:</td>
</tr>
<tr>
<td>Weight:</td>
</tr>
<tr>
<td>Standard:</td>
</tr>
<tr>
<td>Classification by MDD 93/42:</td>
</tr>
</tbody>
</table>

AVAILABLE MODELS

1548000 VACUMED 600 (60 l/min), power: 220 - 230 V/50 Hz or 220V/60Hz, or 110V/60Hz including all tubes and bacterial filter
1548001 VACUMED 390 (39 l/min), power: 220 - 230 V/50 Hz or 220V/60Hz, or 110V/60Hz including all tubes and bacterial filter

CONFIGURATION

1548100 Trolley for VACUMED, including rail system and four castors
1548300 Reusable safety jar for VACUMED, capacity: 300 ml
1700001 Section jar 1000 ml with cover, reusable
1700009 Rail carrier for suction jar of capacity 1000 ml
1700014 Section jar 2000 ml with cover, reusable
1700015 Rail carrier for suction jar of capacity 2000 ml and bag-canister of capacities 1000, 2000, 3000 ml
1700018 Section jar 4000 ml with cover, reusable
1700012 Rail carrier for suction jar of capacity 4000 ml
1550042 Canister for suction bag, 1000 ml
1550045 Canister for suction bag, 2000 ml
1550047 Canister for suction bag, 3000 ml
1550044 Canister for suction bag, 3000 ml
1550046 Canister for suction bag, 3000 ml
1700015 Rail carrier for suction jar of capacity 2000 ml and bag-canister of capacities 1000, 2000, 3000 ml

OPTIONAL ACCESSORIES

1548000 Change over valve for suction jars (to switch-over from full jar to the empty one)
1548400 Foot switch for VACUMED, complete with connecting cable
1548401 Electro-control unit of foot switch for VACUMED

Mobile VACUMED with reusable 2 liter jars
Mobile VACUMED with disposable bags - 3 liter

Portable VACUMED with 2 liter jar
Portable VACUMED with disposable bag - 1 liter
GAS POWERED SUCTION UNITS

Vacuum powered suction units

Vacuum powered suction units are connected to the central vacuum system directly or with a connector on a flexible tube. The basic device (vacuum regulator) consists of regulation button, manometer, shut-off valve, central system connector, outlet connectors, bacterial filter and as optional equipment a safety jar with the shut-off valve, which prevents the liquid from entering the device.

In the combination with various suction jars a vacuum regulator can form various types of suction units:

- portable suction unit with reusable suction jars,
- portable suction unit with suction bags for single use,
- mobile suction unit of the operational field.

The manometer and the safety jar with the outlet connector can be rotated, so that the user can always put them in the most convenient position.

<table>
<thead>
<tr>
<th>TECHNICAL DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum regulation range:</td>
</tr>
<tr>
<td>from 0 to -0.25 bar</td>
</tr>
<tr>
<td>Inlet pressure:</td>
</tr>
<tr>
<td>Max. suction power:</td>
</tr>
<tr>
<td>-0.25 bar</td>
</tr>
<tr>
<td>Free air flow:</td>
</tr>
<tr>
<td>(25 l/min at -0.60 bar)</td>
</tr>
<tr>
<td>Dimensions (mm):</td>
</tr>
<tr>
<td>110 x 140 x 160 (with a safety jar)</td>
</tr>
<tr>
<td>500 x 750 x 450 (ID 1540002)</td>
</tr>
<tr>
<td>450 x 300 x 170 (ID 1550002)</td>
</tr>
<tr>
<td>Weight - kg (total):</td>
</tr>
<tr>
<td>0.375 kg (model 1550002)</td>
</tr>
<tr>
<td>0.37 kg (model 1550002)</td>
</tr>
<tr>
<td>Standard:</td>
</tr>
<tr>
<td>Classification by MDD 93/42:</td>
</tr>
</tbody>
</table>

1510004 Vacuum regulator (0 to -1.0 bar), rail mounted, including safety jar, bacterial filter, silicone tube ø6 mm and inlet probe

1510007 Vacuum regulator (0 to -1.0 bar), rail mounted, including bacterial filter, silicone tube ø6 mm and inlet probe

1510006 Vacuum regulator (0 to -1.0 bar), directly, including safety jar, bacterial filter, silicone tube ø6 mm and inlet probe

1510005 Vacuum regulator (0 to -1.0 bar), directly, including bacterial filter, silicone tube ø6 mm and inlet probe

1510011 Vacuum regulator (0 to 250 mbar), directly, including safety jar, bacterial filter, silicone tube ø6 mm and inlet probe

1510005 Vacuum regulator (0 to -1.0 bar), directly, including bacterial filter, silicone tube ø6 mm and inlet probe
GAS POWERED SUCTION UNITS

Vacuum powered suction units

<table>
<thead>
<tr>
<th>AVAILABLE MODELS</th>
<th>GAS POWERED SUCTION UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1510004</td>
<td>Vacuum regulator (0 to -1.0 bar), rail mounted, including safety jar, bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1510007</td>
<td>Vacuum regulator (0 to -1.0 bar), rail mounted, including bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1510006</td>
<td>Vacuum regulator (0 to -1.0 bar), directly, including safety jar, bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1510005</td>
<td>Vacuum regulator (0 to -1.0 bar), directly, including bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1510014</td>
<td>Vacuum regulator (0 to 250 mbar), rail mounted including safety jar, bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1510013</td>
<td>Vacuum regulator (0 to 250 mbar), rail mounted, including bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1510011</td>
<td>Vacuum regulator (0 to 250 mbar), directly, including safety jar, bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1510012</td>
<td>Vacuum regulator (0 to 250 mbar), directly, including bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1540002</td>
<td>Mobile suction unit, vacuum powered, complete with two suction jars (1000ml), safety jar, bacterial filter, trolley with a jar carrier including antistatic wheels and all necessary tubes and inlet connector</td>
</tr>
<tr>
<td>1550001</td>
<td>Portable suction unit with two bags for single use and rail bracket, vacuum powered complete with all tubes, filters and inlet connector</td>
</tr>
<tr>
<td>1550002</td>
<td>Portable suction unit with two reusable suction jars and rail bracket, vacuum powered, complete with all tubes, filters and connectors</td>
</tr>
</tbody>
</table>

AVAILABLE INLET CONNECTIONS

German, French, British, Italian, Japan, Australian

1550001 Portable suction unit with two bags for single use and rail bracket, vacuum powered complete with all tubes, filters and inlet connector

1500002 Portable suction unit with two reusable suction jars and rail bracket, vacuum powered, complete with all tubes, filters and connectors

1540002 Mobile suction unit, vacuum powered, complete with two suction jars by choice (reusable suction jars: from 1000 to 4000 ml or suction bags for single use: from 2000 ml to 3000 ml), safety jar, bacterial filter, trolley with a jar carrier including antistatic wheels and all necessary tubes and inlet connector
Compressed air powered suction units

Compressed air powered suction units generate the vacuum with the compressed gas, usually air.

For the conversion of compressed air into the vacuum, a so-called ejector is used. The ejector can be connected to the central system of compressed gas directly or with a connector on a flexible tube, whereas compressed gas from a cylinder can also be used.

A button for fine and rough vacuum regulation, a manometer (from 0 to -1.0 bar) for the display of currently selected vacuum power, a silencer, connecting accessories, a bacterial filter and an optional safety jar with a shut-off valve which prevents the liquid from entering the device are installed on the ejector.

In the combination with various suction jars an ejector can form various types of suction units:
- **portable suction unit with reusable suction jars**,
- **portable suction unit with suction bags for single use**,
- **mobile suction unit of the operational field**.

**Compressed air or oxygen powered suction units**

<table>
<thead>
<tr>
<th>TECHNICAL DATA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum regulation range:</td>
<td>from 0 to -1.0 bar</td>
</tr>
<tr>
<td>Max. suction power:</td>
<td>-0.9 bar</td>
</tr>
<tr>
<td>Inlet pressure:</td>
<td>working 2.7 - 5.5 bar</td>
</tr>
<tr>
<td>Free air flow:</td>
<td>15 l/min, or 25 l/min</td>
</tr>
<tr>
<td>Dimensions (mm):</td>
<td>A: connector:</td>
</tr>
<tr>
<td></td>
<td>(100 + A) x 50 x 145 (without a safety jar)</td>
</tr>
<tr>
<td></td>
<td>(100 + A) x 140 x 145 (with a safety jar)</td>
</tr>
<tr>
<td></td>
<td>500 x 350 x 190 (ID 1500001)</td>
</tr>
<tr>
<td></td>
<td>450 x 300 x 170 (ID 1550001, 1550002) A - BS 60 mm</td>
</tr>
<tr>
<td>Weight – kg (total):</td>
<td>0.65 kg (without a safety jar)</td>
</tr>
<tr>
<td></td>
<td>1.0 kg (with a safety jar)</td>
</tr>
<tr>
<td></td>
<td>6.80 kg (ID 1540001)</td>
</tr>
<tr>
<td></td>
<td>3.70 kg (ID 1500001)</td>
</tr>
<tr>
<td></td>
<td>3.50 kg (ID 1550000)</td>
</tr>
<tr>
<td>Temperature:</td>
<td>working 0 to 40°C</td>
</tr>
<tr>
<td>Standard:</td>
<td>ISO 10079-3</td>
</tr>
<tr>
<td>Classification by MDD 93/42:</td>
<td>Eu</td>
</tr>
</tbody>
</table>

**Ejector, powered from compressed air or oxygen drive, rail mounted including safety jar, bacterial filter, silicone tube ø6mm and inlet probe**

**Ejector, powered from compressed air/oxygen drive, directly including bacterial filter, silicone tube ø6mm and inlet probe**

**Mobile suction unit, compressed air/oxygen powered, complete with two suction jars by choice (reusable suction jars: from 1000 to 4000 ml or suction bags for single use: from 2000 ml to 3000 ml), safety jar, bacterial filter, trolley with a jar carrier including antistatic wheels and all necessary tubes and inlet connector**
GAS POWERED SUCTION UNITS

Compressed air powered suction units

Permanent drainages

Permanent drainages are used for protracted aspiratory interventions. The vacuum source goes through a water column which enables setting of low level vacuum rate in range between 0 and -0.05 bar.

AVAILABLE MODELS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1510001</td>
<td>Ejector, powered from compressed air or oxygen drive, rail mounted including bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1510003</td>
<td>Ejector, powered from compressed air or oxygen drive, rail mounted including safety jar, bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1720013</td>
<td>Ejector, powered from compressed air/oxygen drive, directly including bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1510009</td>
<td>Ejector, powered from compressed air/oxygen drive, directly including safety jar, bacterial filter, silicone tube ø6mm and inlet probe</td>
</tr>
<tr>
<td>1540001</td>
<td>Mobile suction unit, compressed air/oxygen powered, complete with two suction jars by choice (reusable suction jars from 1000 to 4000 ml or suction bags for single use from 2000 ml to 3000 ml), safety jar, bacterial filter trolley with a jar carrier, including antistatic wheels and all necessary tubes and inlet connector</td>
</tr>
<tr>
<td>1550000</td>
<td>Portable suction unit with two reusable suction jars and rail bracket, compressed air/oxygen powered, complete with all tubes, filters and inlet connector</td>
</tr>
</tbody>
</table>

AVAILABLE INLET CONNECTIONS

German, French, British, Italian, Japanese, Australian

FAILSAFE - electrical powered drainage system

VACMED - electrical powered drainage system

AVAILABLE MODELS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1520002</td>
<td>Portable permanent drainage, vacuum powered</td>
</tr>
<tr>
<td>1520001</td>
<td>Portable permanent drainage, compressed air powered</td>
</tr>
<tr>
<td>1530002</td>
<td>Rail mounted permanent drainage, vacuum powered</td>
</tr>
<tr>
<td>1530001</td>
<td>Rail mounted permanent drainage, compressed air powered</td>
</tr>
</tbody>
</table>

1500001 Portable suction unit with two reusable suction jars and rail bracket, compressed air/oxygen powered, complete with all tubes, filters and inlet connector

1550000 Portable suction unit with two bags for single use, compressed air/oxygen powered, complete with all tubes, filters and inlet connector

1520002 Portable permanent drainage, vacuum powered

VACMED - electrical powered drainage system
**ACCESSORIES**

**Reusable Suction Jars**

Reusable suction jars are produced of polysulfon and can be cleaned with sterilisation to 134°C. Before use it is advisable to attach them to rail system with an appropriate connector or in the specially designed carrier on the suction unit. Every suction jar cover usually has two connectors. On the vacuum connector the vacuum tube is placed and on the patient connector you place the aspirating tube. Every suction jar cover is additionally equipped with a shut-off valve, which prevents liquid from entering the device.

**Suction Bags for Single Use**

Suction bags for single use allow more comfortable work than reusable suction jars. Before use they must be placed into a plastic bottle, which is attached to the rail system or into the specially designed carrier on the suction unit. Aspirated liquid is collected in a plastic bag and when full it is closed and removed together with the cover. Every suction bag cover usually has two connectors. On the vacuum connector the vacuum tube is placed and on the patient connector you place the aspirating tube. The suction bag cover is additionally equipped with a shut-off valve, which prevents liquid from entering the device and with a special cork, which prevents the outflow of liquid when the bag is full.
**ACCESSORIES**

### Available connections

**Vacuum**
- 1047007: Inlet probe for vacuum, DIN standard
- 1047006: Inlet probe for vacuum, BS standard
- 1047003: Inlet probe for vacuum, APM standard

### Consumables
- 1610090: Hose holder for rail
- 1540101: Aspirating accessory with fingertip
- 1750022: Bacterial filter for silicon hose

### Flexible hoses
- 1340110: Silicon hose ø 2/6 mm
- 1050000: Silicon hose ø 12/11 mm
- 1050001: Flexible pressure hose ø 2/6 mm; yellow color
- 1053002: Flexible pressure hose ø 12/6 mm; blue color
- 1053003: Flexible pressure hose ø 12/6 mm; white color
- 1053004: Flexible pressure hose ø 12/6 mm; black color
- 1053005: Flexible pressure hose ø 12/6 mm; green color
- 1053006: Flexible pressure hose ø 12/6 mm; black-white color

### Switch
- 1358010: Foot switch for VACUMED
All products comply with:
MDD 93/42/EEC and 2007/47/EEC