

# Medical Suction Units

# Medicop Medical Equipment

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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POWERED**  
User friendly devices due to easy maintenance,  
long shelf life, multifunctional con-  
figuration 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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# ELECTRICAL POWERED 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 efficiency, 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 installation 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

TECHNICAL DATA	
<b>Voltage:</b>	220 - 230 V / 50 Hz or 220 - 230 V / 60 Hz or 110 V / 60 Hz
<b>Max. suction power:</b>	-0.9 bar
<b>Free air flow:</b>	39 l/min (VACUMED 390) 60 l/min (VACUMED 600)
<b>Dimensions:</b>	370 × 250 × 290 mm (without a trolley) 420 × 420 × 960 mm (with a trolley)
<b>Weight:</b>	8.5 kg (without a trolley) 16 kg (with a trolley)
<b>Standard:</b>	ISO 10079-1
<b>Classification by MDD 93/42:</b>	Ila



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

AVAILABLE MODELS	
<b>1548000</b>	VACUMED 600 (60 l/min), power: 220 - 230 V/50 Hz or 220V/60Hz, or 110V/60Hz including all tubes and bacterial filter
<b>1548001</b>	VACUMED 390 (39 l/min), power: 220 - 230 V/50 Hz or 220V/60Hz, or 110V/60Hz including all tubes and bacterial filter
CONFIGURATION	
<b>1548100</b>	Trolley for VACUMED, including rail system and four castors
<b>1548300</b>	Reusable safety jar for VACUMED, capacity: 300 ml
<b>1700001</b>	Suction jar 1000 ml with cover, reusable
<b>1700009</b>	Rail carrier for suction jar of capacity 1000 ml
<b>1700014</b>	Suction jar 2000 ml with cover, reusable
<b>1700015</b>	Rail carrier for suction jar of capacity 2000 ml and bag-canister of capacities 1000,2000,3000 ml
<b>1700010</b>	Suction jar 4000 ml with cover, reusable
<b>1700012</b>	Rail carrier for suction jar of capacity 4000 ml
<b>1550042</b>	Canister for suction bag, 1000 ml
<b>1550046</b>	Suction bag for single use, 1000 ml
<b>1550043</b>	Canister for suction bag, 2000 ml
<b>1550047</b>	Suction bag for single use, 2000 ml
<b>1550044</b>	Canister for suction bag, 3000 ml
<b>1550048</b>	Suction bag for single use, 3000 ml
<b>1700015</b>	Rail carrier for suction jar of capacity 2000 ml and bag-canister of capacities 1000,2000,3000 ml
OPTIONAL ACCESSORIES	
<b>1549000</b>	Change over valve for suction jars (to switch-over from full jar to the empty one)
<b>1548400</b>	Foot switch for VACUMED, complete with connecting cable
<b>1548401</b>	Electro-control unit of foot-switch for VACUMED

# 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.



**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

TECHNICAL DATA	
<b>Vacuum regulation range:</b>	from 0 to - 1.0 bar from 0 to - 0.25 bar
<b>Inlet pressure:</b>	min -0.60 bar
<b>Max. suction power:</b>	-0.9 bar -0.25 bar
<b>Free air flow:</b>	40 l/min (25 l/min at -0.60 bar)
<b>Dimensions (mm):</b>	110 × 140 × 160 (without a safety jar) 110 × 140 × 160 (with a safety jar) 500 × 750 × 450 (ID 1540002) 450 × 300 × 170 (ID 1550001, 1500002)
<b>Weight - kg (total):</b>	0.40 kg (without a safety jar) 0.70 kg (with a safety jar) 8.50 kg (model 1540002) 3.50 kg (model 1550001) 3.70 kg (model 1500002)
<b>Standard:</b>	ISO 10079-3
<b>Classification by MDD 93/42:</b>	Ila



**1510011** Vacuum regulator (0 to 250 mbar), directly, including safety jar, 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

# GAS POWERED SUCTION UNITS

## Vacuum powered suction units

AVAILABLE MODELS	
1510004	Vacuum regulator (0 to -1.0 bar), rail mounted, including safety jar, bacterial filter, silicone tube ø6mm and inlet probe
1510007	Vacuum regulator (0 to -1.0 bar), rail mounted, including bacterial filter, silicone tube ø6mm and inlet probe
1510006	Vacuum regulator (0 to -1.0 bar), directly, including safety jar, bacterial filter, silicone tube ø6mm and inlet probe
1510005	Vacuum regulator (0 to -1.0 bar), directly, including bacterial filter, silicone tube ø6mm and inlet probe
1510014	Vacuum regulator (0 to 250 mbar), rail mounted including safety jar, bacterial filter, silicone tube ø6mm and inlet probe
1510013	Vacuum regulator (0 to 250 mbar), rail mounted, including bacterial filter, silicone tube ø6mm and inlet probe
1510011	Vacuum regulator (0 to 250 mbar), directly, including safety jar, bacterial filter, silicone tube ø6mm and inlet probe
1510012	Vacuum regulator (0 to 250 mbar), directly, including bacterial filter, silicone tube ø6mm and inlet probe
1540002	Mobile suction unit, vacuum powered, complete with two suction jars (4000ml), safety jar, bacterial filter, trolley with a jar carrier including antistatic wheels and all necessary tubes and inlet connector
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

  

AVAILABLE INLET CONNECTIONS	
German, French, British, Italian, Japan, Australian	



**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



**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

# GAS POWERED SUCTION UNITS

## 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.



**1510003** Ejector, powered from compressed air or oxygen drive, rail mounted including safety jar, bacterial filter, silicone tube ø6mm and inlet probe



**1700013** Ejector, powered from compressed air/oxygen drive, directly including bacterial filter, silicone tube ø6mm and inlet probe

## COMPRESSED AIR OR OXYGEN POWERED SUCTION UNITS

TECHNICAL DATA	
<b>Vacuum regulation range:</b>	from 0 to -1.0 bar
<b>Max. suction power:</b>	-0.9 bar
<b>Inlet pressure:</b>	working 2.7 - 5.5 bar
<b>Free air flow:</b>	15 l/min, or 25 l/min
<b>Dimensions (mm):</b>	A- connector (100 + A) × 50 × 145 (without a safety jar) (100 + A) × 140 × 145 (with a safety jar) 500 × 750 × 450 (ID 1540001) 450 × 300 × 170 (ID 1500001, 1550000) A - BS 60 mm
<b>Weight – kg (total):</b>	0.65 kg (without a safety jar) 1.0 kg (with a safety jar) 8.80 kg (ID 1540001) 3.70 kg (ID 1500001) 3.50 kg (ID 1550000)
<b>Temperature:</b>	working 0 to 40°C
<b>Standard:</b>	ISO 10079-3
<b>Classification by MDD 93/42:</b>	Ila



**1540001** 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

AVAILABLE MODELS	
1510008	Ejector, powered from compressed air or oxygen drive, rail mounted including bacterial filter, silicone tube ø6mm and inlet probe
1510003	Ejector, powered from compressed air or oxygen drive, rail mounted including safety jar, bacterial filter, silicone tube ø6 mm and inlet probe
1700013	Ejector, powered from compressed air/oxygen drive, directly including bacterial filter, silicone tube ø6 mm and inlet probe
1510009	Ejector, powered from compressed air/oxygen drive, directly including safety jar, bacterial filter, silicone tube ø6mm and inlet probe
1540001	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
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
AVAILABLE INLET CONNECTIONS	
German, French, British, Italian, Japan, Australian	



**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

## 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	
1520002	Portable permanent drainage, vacuum powered
1520001	Portable permanent drainage, compressed air powered
1530002	Rail mounted permanent drainage, vacuum powered
1530001	Rail mounted permanent drainage, compressed air powered



**1520002** Portable permanent drainage, vacuum powered



VACUMED - 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.



1700001  
Suction jar 1000 ml  
with cover, reusable



1700014  
Suction jar 2000 ml  
with cover, reusable



1700010  
Suction jar 4000 ml  
with cover, reusable



1700009  
Rail carrier for suction  
jar, 1000 ml



1700015  
Rail carrier for suction  
jar, 2000-3000 ml



1700012  
Rail carrier for suction  
jar, 4000 ml



1700032  
Wall carrier for suction  
jar, 1000 ml



1700028  
Wall carrier for suction  
jar, 2000 ml



1700035  
Wall carrier for suction  
jar, 4000 ml

## 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.



1550046  
Suction bag  
for single use 1000 ml



1550042  
Canister for suction  
bag 1000 ml



1550048  
Suction bag  
for single use 3000 ml



1550044  
Canister for suction  
bag 3000 ml



1550047  
Suction bag for  
single use 2000 ml



1550043  
Canister for suction  
bag 2000 ml



1700015  
Rail carrier for suction  
jar, 2000-3000 ml

# ACCESSORIES

## Available connections

### Vacuum



1047007  
Inlet probe for vacuum,  
DIN standard



1047004  
Inlet probe for vacuum,  
BS standard



1047003  
Inlet probe for vacuum,  
AFNOR standard



1047028  
Inlet probe for vacuum,  
C&U standard



1047023  
Inlet probe for vacuum,  
CIG standard



1048025  
Inlet probe for vacuum,  
SS standard

### Air



1046007  
Inlet probe for AIR,  
DIN standard



1046004  
Inlet probe for AIR,  
BS standard



1046003  
Inlet probe for AIR,  
AFNOR standard



1047026  
Inlet probe for AIR,  
C&U standard



1047021  
Inlet probe for AIR,  
CIG standard



1048015  
Inlet probe for AIR,  
SS standard

## Consumables



1610070  
Hose holder for rail



1540101  
Aspirating accessory  
with fingertip



1700022  
Bacterial filter for silicon hose

## Flexible hoses



1540100  
Silicon hose ø12/6 mm



1050000  
Silicon hose ø17/11 mm

## Switch



1548400  
Foot switch for VACUMED

- 1053001 Flexible pressure hose ø12/6 mm; yellow color
- 1053002 Flexible pressure hose ø12/6 mm; blue color
- 1053003 Flexible pressure hose ø12/6 mm; white color
- 1053004 Flexible pressure hose ø12/6 mm; grey color
- 1053005 Flexible pressure hose ø12/6 mm; black color
- 1053006 Flexible pressure hose ø12/6 mm; green color
- 1053007 Flexible pressure hose ø12/6 mm; black-white color



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All products comply with:  
MDD 93/42/EEC and 2007/47/EEC

