

Totaalleverancier van lasers en medische technologieën



méér dan lasers ...



### ATMOS C 451 & ATMOS C 361

The success story continues!

Surgical Suction: Silent and powerful!





# If you don't go forward, you go backwards





# Suction performance – "Putting the horsepower to the road"

"A lot helps a lot!" is a popular saying.

At ATMOS the saying goes: "Putting the horsepower to the road".

During a surgical intervention it has to be ensured that with the help of suction systems body fluids (e.g. blood) and irrigation fluids are sucked off fast and reliable at every time.

This guarantees the doctor a free view in the OT field, so that the patient's welfare is not at risk.

Basic requirements are, that the

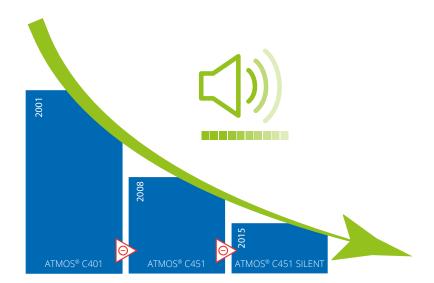
Made in Germany since 1888

required vacuum at the suction cannula is built up immediately and that the suction system is reliably running over a longer period.

A big airspace (dead space) is between the suction cannula at the patient and the suction aggregate due to hose connections and secretion canister. This leads to an undesirably delay in the vacuum build-up – and thus a delayed availability of the optimum suction performance.

The complete solution from ATMOS prevents this delay:

- ATMOS DDS Direct-Docking-System
- ATMOS DDS bacterial filter
- ATMOS ball-shaped vacuum controller





# Innovations

#### Safe and intuitive

# ATMOS DDS – Direct-Docking-System

The ATMOS Direct-Docking-System enables a direct adaption of the secretion canisters to the suction unit. Therefore, all hose connections between suction unit, filter and secretion canister are no longer required.

## ATMOS ball-shaped vacuum controller

At common suction systems the vacuum is regulated with an air bypass valve. This amplifies the effect of a delayed availability of vacuum.

During the vacuum build-up to the adjusted value the air bypass valve loses suction power!

The ATMOS C 451 and ATMOS C 361have an innovative ball-shaped vacuum controller where the secondary air opening is closed until the required vacuum is reached. Therefore, the vacuum build-up is significantly faster.



#### ATMOS DDS-bacterial filter

In comparison to common membrane filters the ATMOS DDS bacterial filter impresses with its bigger surface, which guarantees a free air flow and simultaneously holds back 100% bacteria.

But that is not all – with the new "Silent" generation of surgical suction devices ATMOS succeeded in implementing another product improvement.

The air permeability of the ATMOS DDS filter was further optimized, so that an increased suction performance is now available at the suction cannula.

And all this without compromises with regard to overflow protection and holding back bacteria!

Moreover by wetting with secretion, blood and other fluids the ATMOS DDS bacterial filter guarantees an immediate flow stop

Any oversuction of the suction system can therefore be ruled out. This overflow protection works to 100% – an additional overflow bottle is not necessary!





# Autoclavable canister for minimum effort

The innovation of the ATMOS DDS is in the details:

- No piping required just plug & play
- Changeover system for easy handling
- Hydrophobic bacterial filter integrated in the canister
- Canisters are easy to mount and dismount
- Easy to clean contours and surfaces

# Canister system – you have the choice!

The intelligent ATMOS DDS reusable canister system is available in different canister sizes. Depending on the field of application 1.5 litre, 3 litre or 5 litre canisters can be used.

In addition to the ATMOS DDS reusable canister system we can offer you disposable canister versions.

Disposable bags and the matching external canisters from Serres\*, Receptal\* and Medi-Vac\* are optionally available. They can also be supplied in different sizes in a range from 1 litre to 3 litres.

# Poka Yoke - "Avoid unfortunate mistakes"

Poka Yoke is a concept for preventive error avoidance. The starting point is the realization that no one is able to completely avoid inadvertent errors.

Easy tubing - no error thanks to the ATMOS DDS "plug & play" or a bacterial filter, which you cannot insert in a wrong way, are just two examples that underscore the Poka Yoke understanding of ATMOS.



# We listened carefully

Because it is about detail



#### Mobile & handy

Depending on the requirement in the clinic or the medical practice you need a suction device which you can use independent of the room. The ATMOS C 451 can be used both, as a basic unit easily carried from room to room or pushed with the optional mobile system trolley.

#### Hygiene problems – not with us!

In 1926 the first medical suction devices branded ATMOS entered the market. Since that time, our suction units have always enhanced. Nowadays hygiene is an increasingly important issue in hospitals and medical practices.

Due to our long-time experience we can help you that hygiene problems do not arise.

Easy to clean contours, smooth surfaces, liquid- and dirt- repellent membrane buttons:

For us a matter of course!

#### Low follow-up costs

For you the total cost of ownership is an important aspect?
The ATMOS suction devices are characterized by low follow-up costs

Favourably priced filters are a main aspect – compare us!

Others are speaking of low maintenance – we are talking about freedom from maintenance!

ATMOS stands for quality products "Made in Germany".

We put emphasis on precise processing and top-quality material. Plastic is completely out of the question.

The pump unit consists of seawater-resistant aluminium and is designed for long runtimes.

Made in Germany since 1888





# ATMOS C 451 The standard in OT suction!

#### Typical applications:

OT suction, OMS, doctor's and dental practice, emergency room, surgical intensive care unit and hospital wards.

#### Product specifications:

- Highest user comfort
- Continuous suction
- Suction performance 45 l/min +3/-5 l/min, max -91 kPa
- Easy and quick changeover from a mobile to a table-top unit
- Easy to clean
- Can be used with different canister systems
- Clear design
- Vacuum emission on the top and bottom side of the device
- Operation with foot switch or foot regulator is possible

#### ATMOS C 361

#### Secretion management - simple, safe and highly efficient

Designed for a continuous operation with less power requirements.

#### Typical applications:

endoscopy, gastroenterology, doctor's and dental practice, emergency room, surgical intensive care unit and hospital wards.

#### Differences to ATMOS C 451:

- 36 +/- 4 l/min, max -91 kPa
- · Vacuum emission only on the top side of the device
- Operation with foot switch or foot regulator is not possible





## Characteristics

	ATMOS C 451 with system trolley	ATMOS C 451 table-top device
Suction performance	45 l/min +3/-5 l/min	
Weight	14.3 kg	6.7 kg
Single-canister system (DDS or reusable canister)	•	•
Double-canister system (DDS with changeover station or single use canisters)	•	
Standard rail for single use canisters and accessories	•	•
Foot regulator / switch	•	•
Antistatic castors	•	
Precision vacuum gauge	•	•
Vacuum display	-10 bar ± 16 mbar (Class 1,6), Ø 63 mm	
Infinitely variable vacuum control	•	•
Continuous suction operation	•	•
Noise level	< 48 dB (A) @ 1 m (ISO 7779) at max. Vacuum	
Power consumption	max. 173 W	
Voltage	230 V~ 50/60 Hz	



	ATMOS C 361 with trolley	ATMOS C 361 table-top device
Suction performance	36 ± 4 l/min	
Weight	10.5 kg	6.3 kg
Single-canister system (DDS or reusable canister)		
Double-canister system (DDS with changeover station or single use canisters)		
Standard rail for single use canisters and accessories	•	•
Foot controller / switch		
Antistatic castors	•	
Precision vacuum gauge	•	•
Vacuum display	-10 bar ± 16 mbar (Class 1,6), Ø 63 mm	
Infinitely variable vacuum control	•	•
Continuous suction operation	•	
Noise level	< 50 dB (A) @ 1 m (ISO 7779)	
Power consumption	ca. 100 W	
Voltage	230 V~ 5	0/60 Hz



## ATMOS C 451 / ATMOS C 361

ATMOS C 451	REF
Powerful surgical suction unit for high requirements.  Designed for continuous operation, very silent running, quick-mount mechanism for connection to system trolley without the use of tools, two vacuum attachments, easy to clean surfaces with additional protection against the penetration of liquids, integrated extra-large precision-vacuum indication, loss-free, infinitely variable ball-shaped vacuum regulator. DDS system for hose-free coupling of the pump to the DDS canister.  Technical data: vacuum: 0 up to -91 kPa/-682 mmHg pump performance: 45 l/min +3/-5 l/min, voltage: 230 V~, ± 10%, 50/60 Hz dimensions: (H x W x D): 330 x 240 x 360 mm Included in delivery: Basic unit, mains cable, operating instructions	
2 ATMOS C 451 portable with standard rail Included in delivery: Basic unit, mains cable, suction hose I = 2.1 m, standard rail adapter	340.0357.0
ATMOS C 361	REF
ATMOS C 361 Powerful surgical suction unit for high demands. Designed for continuous operation, very silent running, quick-mount mechanism for connection to system trolley without the use of tools, two vacuum attachments, easy to clean surfaces with additional protection against the penetration of liquids, integrated extra-large precision-vacuum indication, loss-free, infinitely variable ball-shaped vacuum regulator. DDS system for hose-free coupling of the pump to the DDS canister.  Technical data: vacuum: 0 up to -91 kPa/-682 mmHg, pump performance: 36 l/min ± 4 l/min, voltage: 230 V~ ± 10%, 50/60 Hz, dimensions: (H x W x D): 330 x 240 x 360 mm Included in delivery: basic unit, mains cable, operating instructions	
ATMOS C 361 portable with standard rail  Included in delivery:  Basic device, mains cable, suction hose $\emptyset = 6$ mm, $I = 2.1$ m, adapter for standard rail system with vacuum connection, operating instructions	340.0363.0





#### 1 REF 340.0300.0



2 REF 340.0357.0



# ATMOS C 451 - practice packages

ATMOS C 451 - mobile		REF
1	ATMOS C 451 mobile with 2 x 3 l canister Powerful surgical suction unit for high demands. Designed for continuous operation, silent running, quick-mount mechanism for connection to system trolley without the use of tools, two vacuum attachments, easy to clean surfaces with additional protection against the penetration of liquids, integrated extra-large precision-vacuum indication, loss-free, infinitely variable ball-shaped vacuum regulator. DDS system for hose-free coupling of the pump to the DDS canister. Included in delivery: Basic unit, mains cable, 2 DDS canisters 3 l, 2 DDS canister lids, 2 DDS canister handles, 2 DDS splash protections, 10 DDS-bacterial filters with integrated oversuction stop, DDS hose adapter set (Ø 6 mm / Ø 10 mm), DDS hose holder on canister, DDS change-over docking station, system trolley, suction hose Ø = 6 mm, L = 2 m, standard rail adapter, operating instructions	340.0334.0 for self-assembling 340.0377.0 completely assembled
2	ATMOS C 451 mobile with 2 x 5 l canister Included in delivery: Basic unit, mains cable, 2 DDS canisters 5 l, 2 DDS canister lids, 2 DDS canister handles, 2 DDS splash protections, 10 DDS-bacterial filters with integrated oversuction stop, DDS hose adapter set ( $\emptyset$ 6 mm / $\emptyset$ 10 mm), DDS change-over docking station, system trolley, suction hose $\emptyset$ = 6 mm, L = 2 m, DDS hose holder, standard rail adapter, operating instructions	340.0333.0 for self-assembling 340.0378.0 completely assembled
3	ATMOS C 451 mobile with standard rail Included in delivery: Basic unit, system trolley, mains cable, suction hose I = 2 m, standard rail adapter, standard rail set, hose for the connection of device and canister system, operating instructions	340.0358.0 for self-assembling 340.0375.0 completely assembled
AT	MOS C 451 - portable	REF
4	ATMOS C 451 with practice package 1.5 l Included in delivery: Basic unit, mains cable, DDS canister 1.5 l, DDS canister lid, DDS canister handle, DDS splash protection, 10 DDS-bacterial filters with integrated oversuction stop, DDS hose adapter set (Ø 6 mm / Ø 10 mm), DDS hose holder on canister, suction hose Ø = 6 mm, L = 2 m, operating instructions	340.0339.0
5	ATMOS C 451 with practice package 3 I Included in delivery: Basic unit, mains cable, DDS canister 3 I, DDS canister lid, DDS canister handle, DDS splash protection, 10 DDS-bacterial filter with integrated oversuction stop, DDS hose adapter set ( $\emptyset$ 6 mm / $\emptyset$ 10 mm), DDS hose holder on canister, suction hose $\emptyset$ = 6 mm, L = 2 m, operating instructions	340.0338.0









1 REF 340.0334.0



2 REF 340.0333.0



4 REF 340.0339.0

5 REF 340.0338.0



# ATMOS C 361 - practice packages

AT	MOS C 361 - mobile	REF
1	ATMOS C 361 mobile with 1.5 l practice package Included in delivery: Basic unit, trolley with standard rail, mains cable, DDS canister 1.5 l, DDS canister lid, DDS canister carrying handle, DDS splash protection, 10 DDS bacterial filter with integrated overflow protection, DDS hose adapter set, DDS hose holder, suction hose l = 2 m, operating instructions	340.0360.0 for self-assembling 340.0371.0 completely assembled
2	ATMOS C 361 mobile with 3.0 l practice package Included in delivery: Basic unit, trolley with standard rail, mains cable, DDS canister 3.0 l, DDS canister lid, DDS canister carrying handle, DDS splash protection, 10 DDS bacterial filter with integrated overflow protection, DDS hose adapter set, DDS hose holder, suction hose l = 2 m, operating instructions	340.0361.0 for self-assembling 340.0372.0 completely assembled
3	ATMOS C 361 mobile with standard rail Included in delivery: Basic unit, trolley with standard rail, mains cable, standard rail adapter with vacuum connection, suction hose I = 2 m, operating instructions	340.0362.0 for self-assembling 340.0370.0 completely assembled
AT	MOS C 361 - portable	REF
4	ATMOS C 361 with practice package 1.5 l Powerful surgical suction unit for high demands. Designed for continuous operation, very silent running, quick-mount mechanism for connection to trolley without the use of tools, with vacuum attachment on top side, easy to clean surfaces with additional protection against the penetration of liquids, integrated extra-large precision-vacuum indication, loss-free, infinitely variable ballshaped vacuum regulator. DDS system for hose-free coupling of the pump to the DDS canister. Included in delivery: Basic unit, mains cable, DDS canister 1.5 l, DDS canister lid, DDS canister handle, DDS splash protection, DDS bacterial filter with integrated oversuction stop, DDS hose adapter set (Ø 6 mm / Ø 10 mm), DDS hose holder on canister, suction hose Ø = 6 mm, L = 2 m, operating instructions	340.0351.0
5	ATMOS C 361 with practice package 3 I Included in delivery: Basic unit, mains cable, DDS canister 3 I, DDS canister lid, DDS canister handle, DDS splash protection, DDS bacterial filter with integrated oversuction stop, DDS hose adapter set ( $\emptyset$ 6 mm / $\emptyset$ 10 mm), DDS hose holder on canister, suction hose $\emptyset$ = 6 mm, L = 2 m, operating instructions	340.0350.0







2 REF 340.0361.0



1 REF 340.0360.0



3 REF 340.0362.0



5 REF 340.0350.0



6 REF 340.0363.0

4 REF 340.0351.0



## Accessories

Acc	cessories ATMOS C 451	REF
1	Foot switch	443.0755.0
2	Foot regulator (091 kPa) For infinitely variable vacuum regulation, especially with vacuum extraction, liposuction etc. (can also be retrofitted)	443.0310.1
Acc	cessories ATMOS C 451 and ATMOS C 361	REF
3	Standard rail set for system trolley (instead of DDS-docking station for 2 system canisters)	340.0081.0
4	DDS adapter for tissue collector Connects the ATMOS DDS canister to the tissue collector temperature-resistant up to 200 °C	340.0062.0
5	DDS-standard rail adapter with vacuum connection For the use of disposable systems at the unit	340.0059.0
6	Tray for system trolley	340.0084.0
7	Trolley with standard rail	320.0070.1
	System trolley ATMOS C 451 - for self-assembling	340.0070.0
8	System trolley ATMOS C 451 - completely assembled	340.0170.0
	System trolley ATMOS C 451 with DDS-switchover station completely assembled	340.0171.0
	System trolley ATMOS C 451 with standard rail completely assembled	340.0172.0
9	Serres <sup>®</sup> device holder	340.0095.0
10	Serres®-vacuum changeover station Enables the changeover between two secretion canisters. Can be fixed to the standard rail with the Serres® dev. holder (REF 340.0095.0) Part is not required for DDS!	340.0096.0









1 REF 443.0755.0



2 REF 443.0310.1



3 REF 340.0081.0



4 REF 340.0062.0



5 REF 340.0059.0



6 REF 340.0084.0



9 REF 340.0095.0



7 REF 320.0070.1

8 REF 340.0070.0

10 REF 340.0096.0



# DDS

Ac	cessories	REF
1	DDS-secretion canister, plastic 1.5 l, autoclavable Height 146 mm, external Ø 166 mm	340.0050.0
2	DDS-secretion canister, plastic 3 l, autoclavable Height 247 mm, external Ø 166 mm	340.0051.0
3	DDS-secretion canister, plastic 5 l, autoclavable Height 396 mm, external Ø 166 mm	340.0052.0
	DDS-canister set 2 x 3 l, autoclavable	444.0901.0
	DDS-canister set 2 x 5 l, autoclavable	444.0902.0







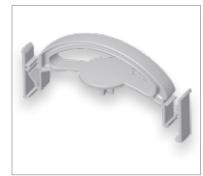
# DDS

Accessories	REF
DDS-canister lid, complete set Consisting of:  DDS canister lid, DDS canister handle, DDS splash protection, DDS hose adapter set, Ø 6 mm + Ø 10 mm, DDS bacterial filter with integrated oversuction stop, hose holder on DDS canister.	340.0040.0
2 DDS-canister lid with gaskets, autoclavable	340.0053.0
3 DDS-canister handle, grey, autoclavable	340.0055.0
DDS canister handle, blue, autoclavable	340.0326.0
5 DDS-splash protection, silicone, autoclavable	340.0056.0
6 DDS-hose adapter set (Ø 6 mm + Ø 10 mm) autoclavable	340.0057.0
7 DDS-hose holder, autoclavable	340.0066.0
Consumables	REF
Bacterial filter for ATMOS DDS secretion canister, 10 pcs. disposable, not autoclavable, For hygienic reasons a weekly exchange is recommended. In case of contamination or new patient the filter must immediately be replaced	340.0054.0









1 REF 340.0040.0



2 REF 340.0053.0



3 REF 340.0055.0



4 REF 340.0326.0



5 REF 340.0056.0



8 REF 340.0054.0

6 REF 340.0057.0



# Receptal<sup>®</sup>

Ac	cessories	REF
1	Receptal® canister 1.5 l	310.0221.0
2	Receptal® canister 2 l	443.0256.0
3	Receptal® canister 3 l	444.0157.0
4	Receptal® package 2 x 1.5 l, for mounting on a standard rail consisting of:  2 Receptal®-holder for 1 canister, 2 canisters for Receptal®-suction bags 1.5 l, 2 Receptal®-suction bags 1.5 l, one of them with integrated overflow valve filter, connection hose, L = 12 cm  Attention: Basic unit must be ordered separately!	444.0027.0
5	Receptal® package 1 x 2 l, for mounting on a standard rail consisting of:  1 Receptal®-holder for 1 canister, 1 canisters for Receptal®-suction bags 2 l, 1 Receptal®-suction bags 2 l with integrated overflow valve filter Attention: Basic unit must be ordered separately!	444.0030.0
6	Receptal® package 2 x 2 l, for mounting on a standard rail	444.0028.0
	Receptal® package 1 x 2 l, with standard rail adapter	444.0021.0
7	Receptal® package 1 x 3 l, for mounting on a standard rail	444.0031.0
8	Receptal® package 2 x 3 l, for mounting on a standard rail	444.0029.0
Со	nsumables	REF
	Receptal® suction bag 1.5 l, not autoclavable, 50 pcs.	310.0222.2
9	Receptal® disposable bag 1.5 l, w/o integ. overflow protection, 50 pcs	310.0222.1
10	Receptal® disposable bag 2 l, without integrated overflow protection Not autoclavable, 50 pcs., change: 1 x per patient	443.0257.0
	Receptal® suction bag 2 l, with integrated overflow protection Not autoclavable, 50 pcs., change: 1 x per patient	443.0257.2
11	Receptal® suction bag 3 l, without integrated overflow protection For tandem hose system, not autoclavable, 50 pcs., change: 1 x per patient.	444.0153.0
	Receptal® suction bag 3 l, with integrated overflow protection Not autoclavable, 50 pcs., change: 1 x per patient.	444.0154.0









1 REF 310.0221.0



3 REF 444.0157.0







5 REF 444.0030.0



6 REF 444.0028.0



4 REF 444.0027.0



7 REF 444.0031.0



8 REF 444.0029.0



9 REF 310.0222.2

10 REF 443.0257.0

11 REF 444.0153.0



# Serres® & MediVac®

Accessories Serres®	REF
1 Serres® external canister 1 I	312.0465.0
2 Serres® canister 2 l	310.0402.0
3 Serres® canister 3 I	310.0403.0
4 Serres® device holder	340.0095.0
Consumables Serres <sup>®</sup>	REF
Serres® suction bag 1 l, not autoclavable, 36 pcs. With angled connection	312.0466.0
Serres* suction bag 2 I with gelling agent Not autoklavable, 22 pcs.	310.0400.0
Serres <sup>®</sup> suction bag 3 I with gelling agent Not autoclavable, 20 pcs.	310.0401.0
Accessories Medi-Vac <sup>®</sup>	REF
8 Medi-Vac® canister 1 l	312.0473.0
Standard rail support For disposable system Medi-Vac* 1 l, 1.5 l	444.0451.0
Consumables Medi-Vac <sup>®</sup>	REF
10 Medi-Vac® suction bag 1 l, not autoclavable, 50 pcs.	312.0474.0





1 REF 312.0465.0



4 REF 340.0095.0



2 REF 310.0402.0



3 REF 310.0403.0



5 REF 312.0466.0



8 REF 312.0473.0



6 REF 310.0401.0



9 REF 444.0451.0



7 REF 310.0400.0



10 REF 312.0474.0



# General consumables & accessories

General consumables	REF
Suction hose, silicone, Ø 6 mm, L = 1.30 m, 1 pc. single packed, temperature-resistant up to 200 °C	000.0013.0
Suction hose, silicone, Ø 6 mm, L = 2 m, 1 pc temperature-resistant up to 200 °C	000.0361.0
2 Suction hose, silicone, Ø 10 mm, L= 2 m, 1 pc temperature-resistant up to 200 °C	000.0243.0
Suction hose, PVC, disposable, Ø 6 mm, L = 1.30 m, 10 pcs. individually packed, change: 1 x per patient	006.0057.0
3 Suction hose, PVC, single-packed, Ø 6 mm, L = 2,10 m, 50 pcs. change: 1 x per patient	006.0059.0
4 Hydrophobic bacterial and viral filter, Ø 8 mm for use with suction hose Ø 6-8 mm 99,9999% bacterial and viral efficiency disposable, not autoclavable, change: 1 x per patient	443.0738.0
Bacterial filter FFG - hydrophobic	444.0082.0
6 Hydrophobic bacterial and viral filter, Ø 11 mm for use with suction hose Ø 10-11 mm 99,999% bacterial and viral efficiency disposable, not autoclavable, change: 1 x per patient	444.0628.0
7 Tissue collector 300 ml, disposable Ø 6 mm, change: 1 x per patient	340.0061.0
8 Tissue collector 50 ml, disposable Ø 6 mm, change: 1 x per patient	401.0555.0
General accessories	REF
9 Graduated secretion canister 1.5 l Height 192 mm, external Ø 115 mm	444.0032.0
Graduated secretion canister 3 l Height 247 mm, Ø 145 mm	444.0033.0
10 Secretion canister lid incl. standard rail holder	444.0650.0
Socket nipple set Consisting of: Double socket nipple, hose reducer, mechanical overflow safety	444.0640.0
12 Deposit tray, stainless steel With support for rail system	443.0790.0









1 REF 000.0361.0







3 REF 006.0059.0



4 REF 443.0738.0



5 REF 444.0082.0



6 REF 444.0628.0



7 REF 340.0061.0



8 REF 401.0555.0



9 REF 444.0032.0



10 REF 444.0650.0

11 REF 444.0640.0

12 REF 443.0790.0

De Grift 20 7711 EJ, Nieuwleusen