



BASIC PLUS

**otopront**<sup>®</sup>



# BASIC PLUS

The technologically and functionally advanced





ced classic



**More than 25 years of continuous development**

The BASIC PLUS represents – more than 25 years of continuous technical and functional development – a design optimised, technically skilled classic.

**Highest level of combination and customisation options**

A modular, freely designable configuration of different variants and sizes of the BASIC PLUS as well as add-on modules and features meets the need for individuality and custom-made solutions.

**Practice-oriented, clearly structured workplace design**

Distinct lines and shapes provide a tidy, timeless look with calming effect on the patient. At the same time all functional elements are structured, optimally positioned and designed for one-handed operation in daily practice.

**Technologically and hygienically up to date**

Constant use of the latest technologies and materials in close cooperation with hospitals and practices provide valuable development impulses. From the beginning BASIC PLUS has set standards in terms of technical solutions, overall concept and maintainability. This also applies to the implementation of the hygiene requirement by means of practical and standardized solutions. Once again, BASIC PLUS sets new standards in compliance with hygiene requirements.

## BASIC PLUS 450 | 550 | 700

The perfect and complete ENT unit in 3 sizes. Adapted



BASIC PLUS 450

With 45cm body width and 82cm total width the most compact of the BASIC variants.





to spatial and individual needs.



### BASIC PLUS 550

With a body width of 55cm, this model like the others can be equipped with further options such as high plateau, microscope and halogen/LED light.

### BASIC PLUS 700

With a body width of 70cm and space for a 3rd instrument level, the BASIC PLUS 700 is the perfect solution for the highly frequented workplace.

**Discover the highest level of combination and customisation options ...**

# BASIC PLUS equipment details at a glance

All devices can be manufactured and customised according to your individual wishes and working methods. Special requests can be considered most of the time. Basic functions and options can be found on page 20/21.

**Ear rinsing handle**  
**autoclavable**, can also be used with **Otopront disposable cannulas**.

**Suction tube cleaner**, made of stainless steel, replaceable. Also available as **Otopront disposable rinsing nozzle**.

**Suction hose**, automatically switching, also for **Otopront disposable hoses**

**Spray bottles with protective sleeve** and simple click connection for stainless steel and **Otopront disposable cannulas**

**Pullout panel** with integrated paper roll

**Dispensers for cotton wool and tongue holder tissues** operated with one hand for easier and more efficient work

**Instrument disposal**  
Optionally with 2 discard trays and VA splash protection cover as well as **moisturiser dispensers**, disinfecting and cleaning wipes for optics

**Waste bin**  
Foot pedal operated, with detent, for commercial waste disposal bags, for cleaning purposes easily removable

**Ear rinsing funnel**, also suitable as a spittoon

**Instrument storage with plexiglass cover**  
Removable instrument trays with **antibacterial** coating and freely divisible stainless steel slats, completely **autoclavable**

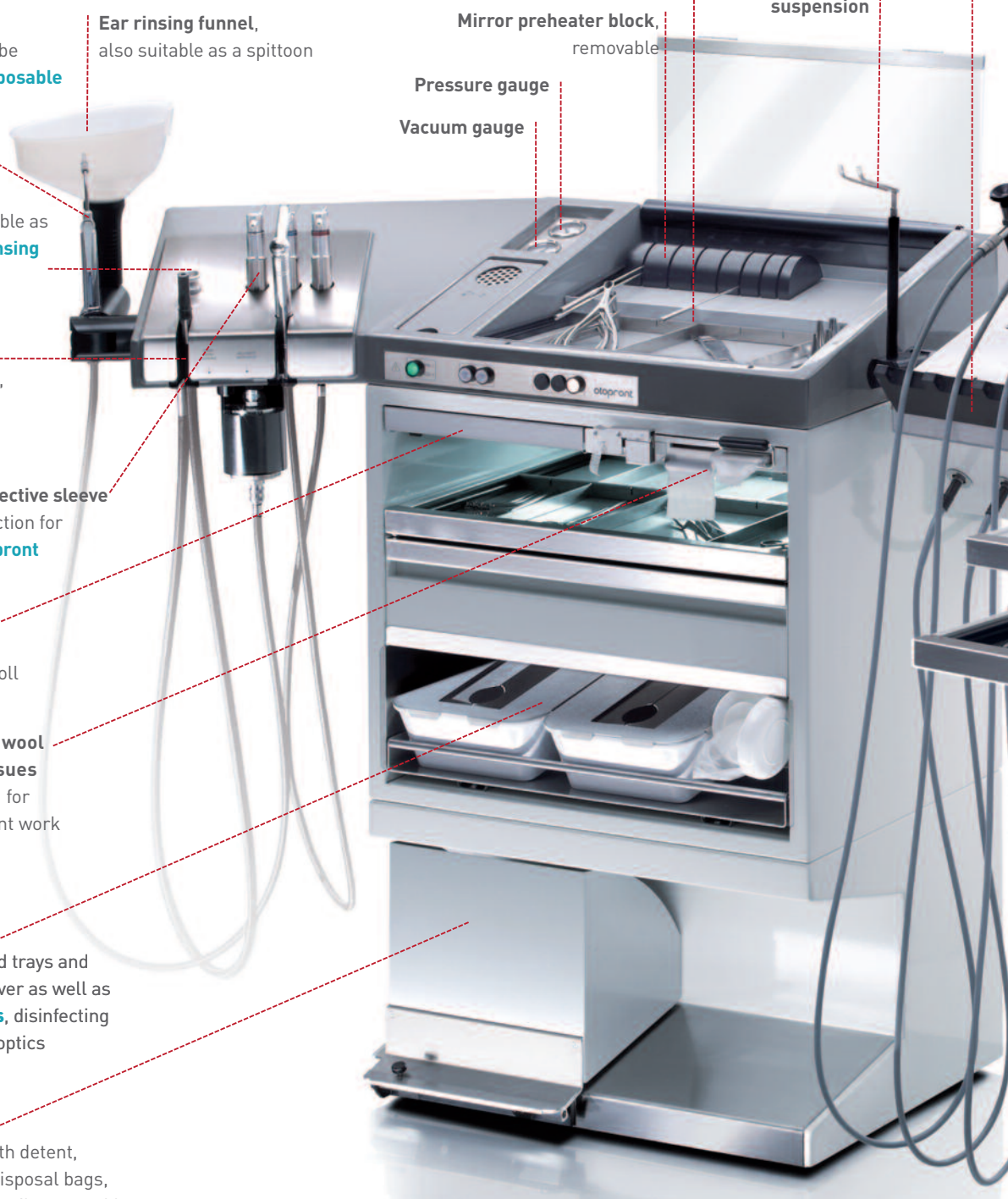
**Mirror preheater block**, removable

**Pressure gauge**

**Vacuum gauge**

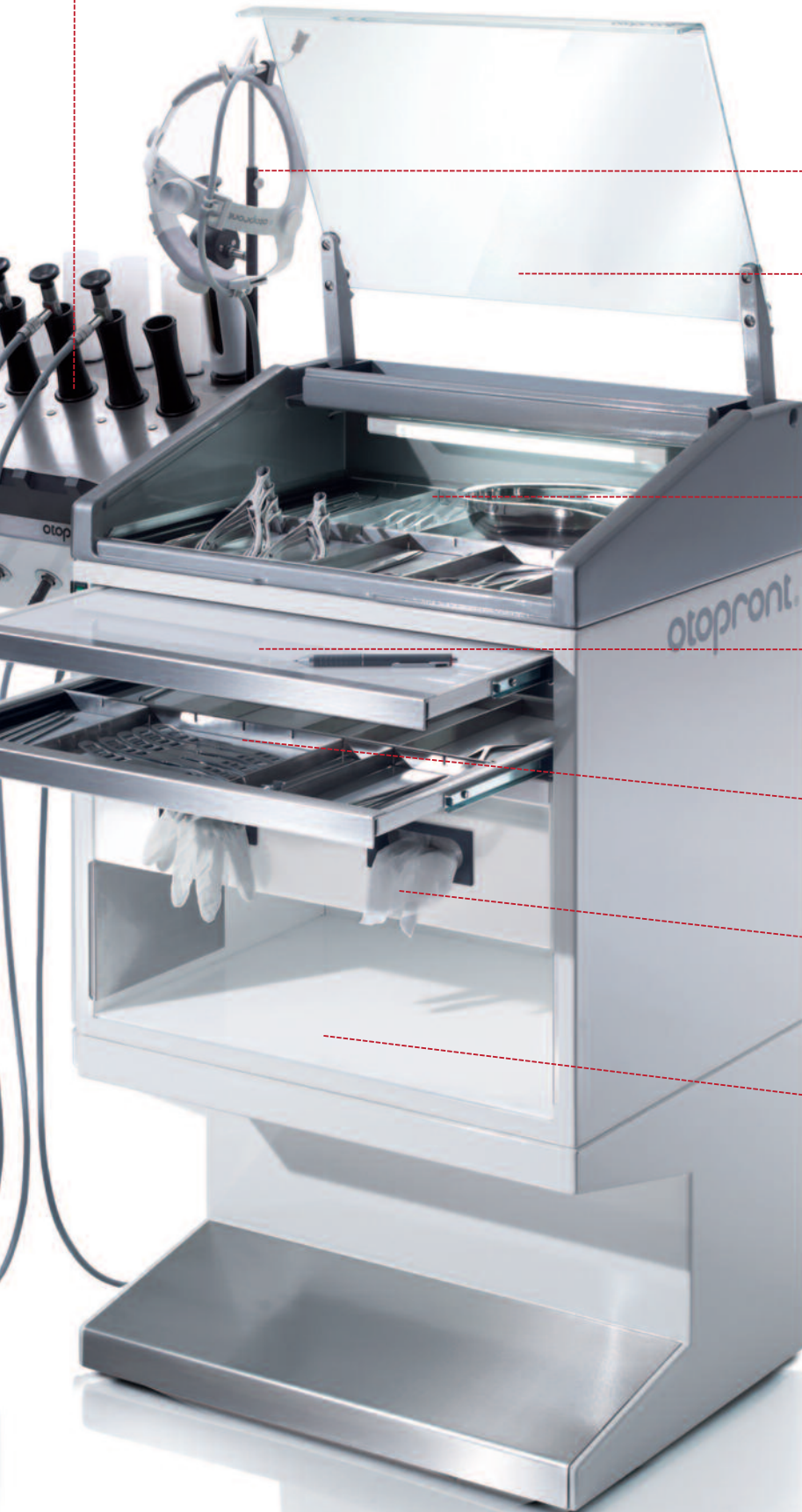
**Endoscopy centre with 4 light sources**, halogen and/or LED, light barrier controlled lighting

**Endoscope suspension**



# Instrument cabinets

2-4 preheating quivers, rinsing quiver with **Otopront double quivers** with disinfection time monitoring, quiver for flexible optics and endoscope suspension. Possibility of automatic **documentation EDDO**



## Instrument cabinets

available as 450, 550 or 700 serve as an extension of the base body for extra storage space

**Head light suspension,** height-adjustable and automatic switching

**Self-closing plexiglass cover with Softclose** allows single-handed operation. Hermetically closing, it protects the instruments from dust and other environmental influences. Easy cleaning thanks to smooth surfaces.

**Instrument storage**  
Removable instrument trays with anti-bacterial coating and freely divisible stainless steel slats, completely **autoclavable**

**Writing panel, keyboard drawer,** optional made of stainless steel, can be used as an arrangement panel or as a flat drawer for special instruments or PC keyboard

**Instrument drawer**  
Optionally open or closed, optionally as a storage space drawer. Flexibly divisible storage areas

**Hygiene dispensers**  
easy to handle dispenser for examination gloves or Kleenex tissues

**Open compartment**  
50x35x15 cm (WxDxH)  
with electric socket for additional equipment, optional as storage drawer



# Suction

## Three suction pumps to choose from

The extraction system is automatically activated when the suction hose is pulled out. The encapsulated base pump ensures extremely quiet and vibration-free operation at an output of 58l/min. As an extremely powerful variant, a two-head diaphragm pump with 72l/min is available. Both units achieve a final vacuum of >91%. Double-piston surgery pump runs at 55l/min as well as vibration-free, quiet and, if required, also in continuous operation.



**Double-piston pump**  
55 l-runner from the operation room

## Suction glass

After each suction process, the suction glass is automatically emptied via a time-controlled discharge pump. But emptying by hand is also possible at any time thanks to a simple plug-in system. So you are always on the safe side. An autarkic pressure cleaning unit for effective rinsing of the suction glass is available as an option. Thanks to this separate flushing pump there is no infectious connection to the drinking water network or the ear irrigation system. As an alternative to the plug-in suction glass, single-suction-bag systems (different manufacturers) can be used – without major retrofitting. The exhaust air filter protects against germs and aerosols and is easy to change.

## Suction hoses

**Otopront disposable suction hoses** fit seamlessly into the suction hose suspensions of all Otopront treatment units and are therefore fully compatible. As well as with the Otopront standard suction hose, the suction is automatically switched on or off when the Otopront disposable suction hose is removed.



**Standard suction hose**  
autoclavable



**Otopront disposable suction hose**  
in 1,5 m oder 2,0 m length

## Suction hose rinsing system

With the aid of the suction hose rinsing system, even the smallest suction cannulas can be flushed besides the suction hose itself. By controlled rinsing of the suction hose with disinfecting solution (for example, Aspi-Jet from Otopront), clogging of the suction hose is effectively prevented. Particularly advantageous is the possibility of flushing the suction cannula during the treatment. For this purpose, especially autoclavable rinsing inserts as well as **Otopront disposable rinsing inserts** are available.





# Ear irrigation

## 38°C-warm water rinsing system

The system delivers exactly tempered water for the performance of ear irrigation. The water can be dispensed finely with the hand-piece made entirely of metal. The heating of the water in a stainless steel boiler guarantees the economical handling of energy and water.

Calcifications of the heating elements are eliminated by design due to the external heating sleeve. The completely autoclavable water filter system, including the irrigation handpiece, ensures hygienic safety. A long-term study conducted at a leading German university clinic demonstrates the efficacy of the facility to ensure a permanently impeccable quality of water. The water filter unit, which is only to be changed every six months, is several times more cost-effective than terminal water filter units.

## Compressed air unit

An oil-free running compressor supplies the stainless steel air tank with multiple filtered air. Compressed air is immediately available thanks to an air tank without starting an aggregate. A variably adjustable pressure limitation in the Politzer gauge ensures additional safety. Like all Otopront hand-pieces, the fine-dose spray and the Politzer handpiece are made of metal and are autoclavable. Various Politzer attachments and medication bottles complete the range. On request, the device is available for connection to a central supply unit.



# Spray

## Spray bottles

Three light protected spray bottles with different spray cannulas for oily or aqueous solutions are embedded in the device surface and provide optimum protection for light-sensitive drugs. All spray bottles have a protective sleeve and on request medication labeling rings. Each spray head can be used with both stainless steel and Otopront disposable cannulas (see adapter below). Simple click connections offer maximum safety and comfort.

## Otopront disposable cannulas for spray units and ear irrigation

Two cannula types available:



for aqueous solutions



and for oily / viscous solutions



Disposable cannula for ear irrigation

## Disposable spray cannulas

can be retrofitted with adapter for all Otopront spray heads

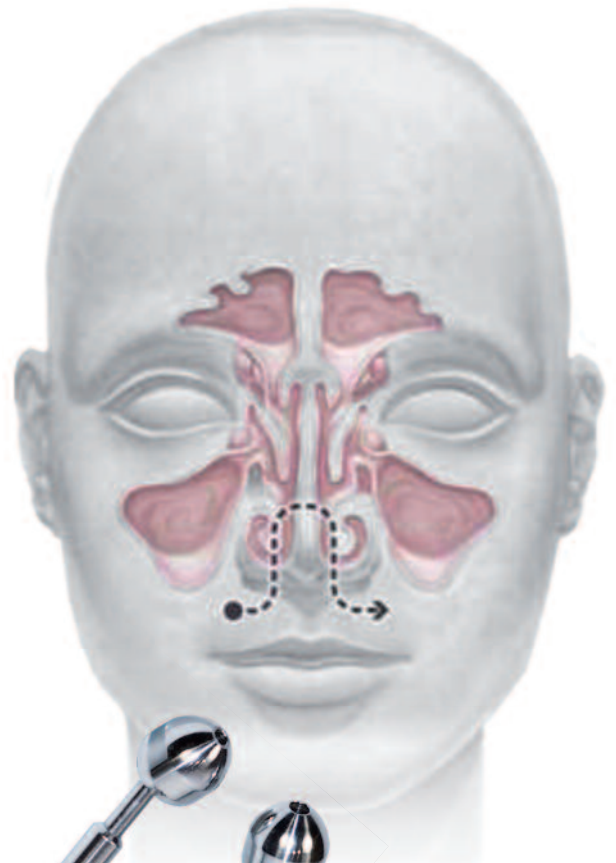
# Automatic Sinus Rinsing and Irrigation System

There are numerous methods to remove inflammation and improve nasal breathing. Among the most effective treatment methods is the nose rinsing and irrigation according to Proetz.

Indications for sinus irrigation: chronic and allergic rhinitis, polyps, various infections of nasal passages, mild forms of sinusitis, tonsillitis and adenoiditis.

With the Otopront Sinus Rinsing and Irrigation System no preliminary preparation for the procedure is required.

The required medicine is filled into the internal reservoir. The system has a special handle with a built-in medicine supply for one channel and the possibility of simultaneous aspiration through the second channel. The mutual arrangement of the handle channels can be adjusted depending on the patient's nose structure, and the optimal olive sizes can be selected.



The handle comes with a convenient flow regulator for adjusting the medicine flow. The replaceable stainless-steel olives and the handle are suitable for autoclaving.

Otopront nose rinsing system maximizes the efficiency and speeds up nose rinsing and irrigation procedures according to Proetz, both for the patient and the doctor. Since the handle can be easily operated one-handed the assistance of a nurse is no longer required.



# Tonsil washing device

## The treatment system for the infected tonsil with squeezing and cleaning function

A treatment method that has been in existence since the sixties! An increasing number of tonsillectomies replaced the reputed device. However, a huge amount of patients with chronically infected tonsils are hesitant to agree to the final procedure of tonsillectomy for various reasons.

Nowadays surgeons go back to conservative techniques s.a. peeling the tonsils, cutting the tonsils half the way, radio surgery... No matter which procedure is being used, the tonsils and the field of surgery have to be properly cleaned before.



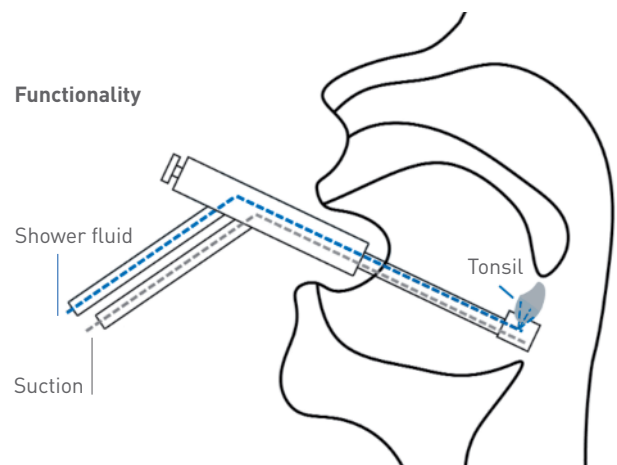
Even without an indication for surgical procedures, the patient suffering from infected tonsils is looking for immediate support and pain reduction. Cleaning the tonsils with a technique using pressurized water in combination with a tonsil shaped suction pipe offers immediate relief for the patient by removing the infected "carpet" from the tonsils. Medication can be applied on tonsils much easier and there is a new chance of bypassing a tonsillectomy.



Otopront now offers an all in one unit that converts the method into a daily routine procedure.

A stainless steel handle connected to a NaCl or water reservoir within the ENT unit provides a tonsil shower through a perforated canula, while a tonsil shaped glass pipe connected to an adjustable vacuum removes the carpet. The complete handle with glass pipe is autoclavable!

### Functionality



# Endoscopy centre

## LED light

From the beginning the development of the Otopront LED light sources was not only a matter of brightness, but also of a high-CRI color spectrum that was as close to daylight as possible. Thanks to an array of 5 color-different LED chips, which can be individually controlled, this has been perfectly achieved in every respect. The continuous development has finally led to our **LED Superbright** light source for flexible endoscopes, with which it is now also possible to produce high-quality **LED stroboscopy** videos with natural colors and sharp images (see page 12). In order to maintain LED color accuracy over many years, active cooling is automatically switched on during long-term examinations.



### Variety for every need

Light activation, easily operated by light barrier control or via automatic position detection

## Halogen light source

Otopront continues to offer halogen light, for those who are accustomed to this light source and are convinced that many situations can be better assessed with it. Both types of light sources can also be operated simultaneously in the same device.

## Quiver disinfection

The **Otopront double quiver system** facilitates the correct immersion of the optical device. Precisely vertically guided by the inner quiver (diving quiver), contact of the optical device with the outer quiver (rinsing quiver) is avoided. The inner quiver itself fully immerses in the disinfecting solution and is thereby also disinfected. On the way from the disinfectant to the preheating quiver, a clean water quiver for rinsing disinfecting solution residues is provided, which – always filled with distilled water – ensures a clear view through the endoscope and avoids limescale edges.



## Suspension

For "endoscopes in treatment" with automatic switching





# Documentation system EDDO

## Long-term documentation of the disinfection processes

The endoscopy center can be equipped with a **fully automatic system for a complete long-term documentation of the disinfection processes.**

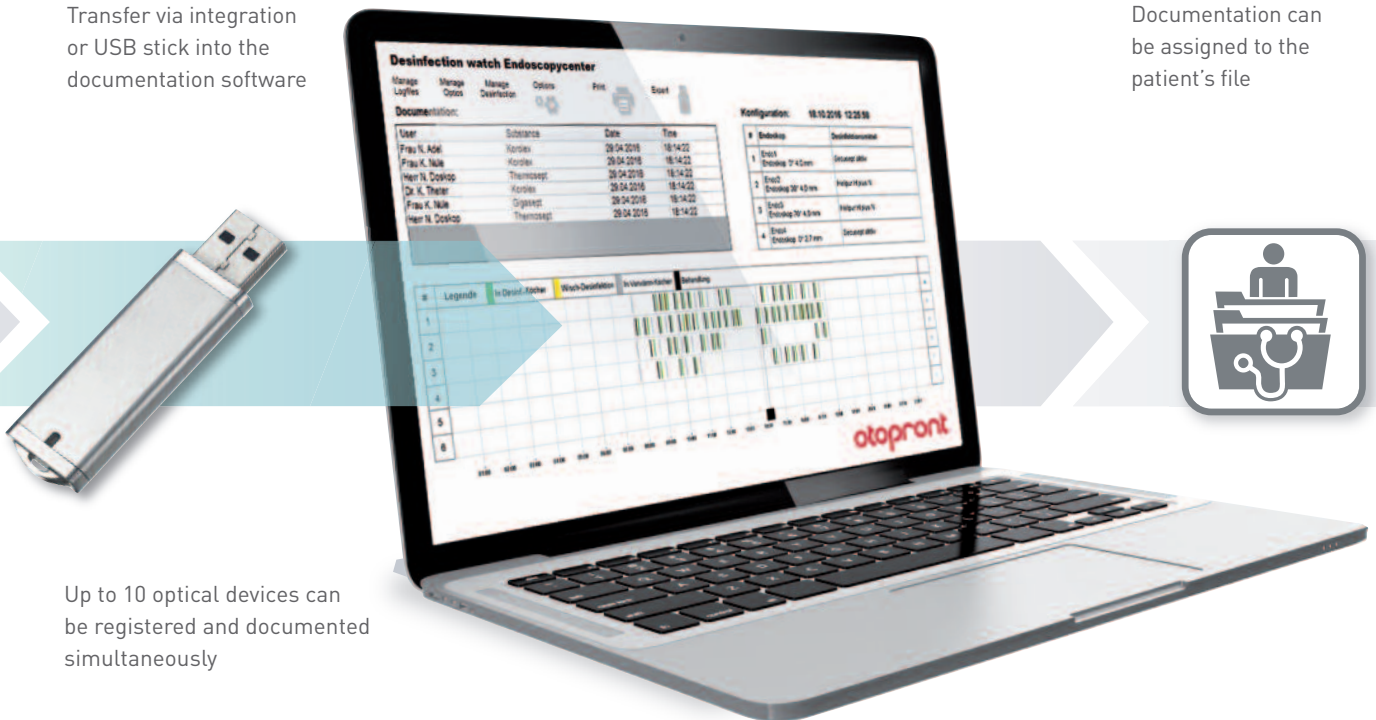
It is recognized which optics are disinfected, stored or used at which time. This data is documented on a readable memory, graphically processed and is accessible at any time. So the processing of endoscopes by immersion disinfection is not only safer, but **its proper execution will always be documented.**

By means of several sensors, the system permanently recognizes the current position and application of the optics in use. The data thus obtained is processed and stored on an integrated computer and can be retrieved by either a USB stick or LAN connection. Optionally the data can be assigned directly to the patient's file via GDT.

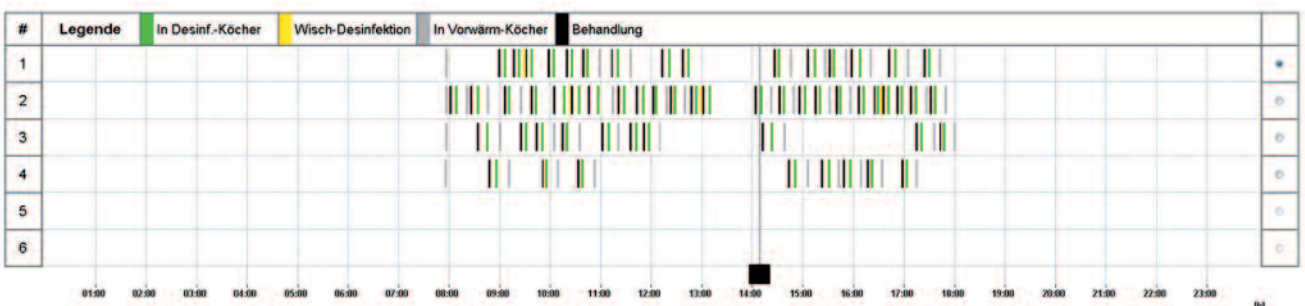
The **Otopront documentation software** is intuitive to use and provides a simple user interface for fast detection of all relevant disinfection factors. EDDO is available for the BASIC PLUS units and almost every BASIC PLUS unit can be upgraded.

Transfer via integration or USB stick into the documentation software

Documentation can be assigned to the patient's file



Up to 10 optical devices can be registered and documented simultaneously



# Video endoscopy and stroboscopy

For workplace videoendoscopy the BASIC PLUS is optimally expandable with our **endoscopy system PES Pilot HDpro**. The device is positioned centrally on the BASIC PLUS by means of a swivel camera mount. Due to the swivel arm's radius of movement and the frontal mounted touchscreen, the PES Pilot HDpro is always easy to operate in the field.

In addition, an **Otopront chip-on-the-tip video nasopharyngo-scope** and the Otopront Superbright LED light source are available for stroboscopy with an additional brightness gain of more than 40%.



**Otopront video nasopharyngo-scope (Chip-on-the-tip)**  
See leaflet PES Pilot HDpro /PES Pilot HDpro Stroboscope



The PES Pilot is optionally available with a 9 or 15 inch screen and is also available with an **integrated stroboscope**



# Microscopy

The BASIC PLUS is offered optionally with **Carl Zeiss** or **Kaps** microscopes. Both microscopes can derive their light from a separate Otopront LED light source integrated in the device, with the advantage of varying brightness and color temperature. Thanks to the daylight temperature (CRI >95%) and high brightness (>1800 lumens, dimmable) of the Otopront LED, an optimal true-color and contrast-rich image is produced.



A sharp, clear video image is crucial in the examination – with the microscope or the endoscope. Otopront has developed further improvements in detail in order to achieve a maximum viewing quality.



**ENT diagnostic microscope OPMI Pico**  
stably attached to the Otopront unit,  
Alternatively operated with halogen or LED light

# Visualisation

As described above, the front-mounted **touch screen** and the **compact size** allow the integration directly in the work area (e.g. on the ENT unit). In this way, all functions can be operated comfortably and without great effort on the screen.

In addition to the Pilot's screen **two additional monitors** can be connected. In this way, a **doctor's monitor** placed obliquely behind the patient's chair can facilitate endoscopic (no rotation of the head necessary).

## Rendering of a workplace with 3 monitors:

We can assist your practice planning with our 3D program

On a further **patient monitor**, the patient's findings can be shown directly in detail. The patient monitor can also be suppressed at any time.

**A second camera** (for example, for a microscope) with **automatic switching** between both cameras can also be integrated. Like all Otopront PES video systems, the Pilot can be used flexibly on various locations thanks to its small dimensions and uncomplicated assembly and dismantling.

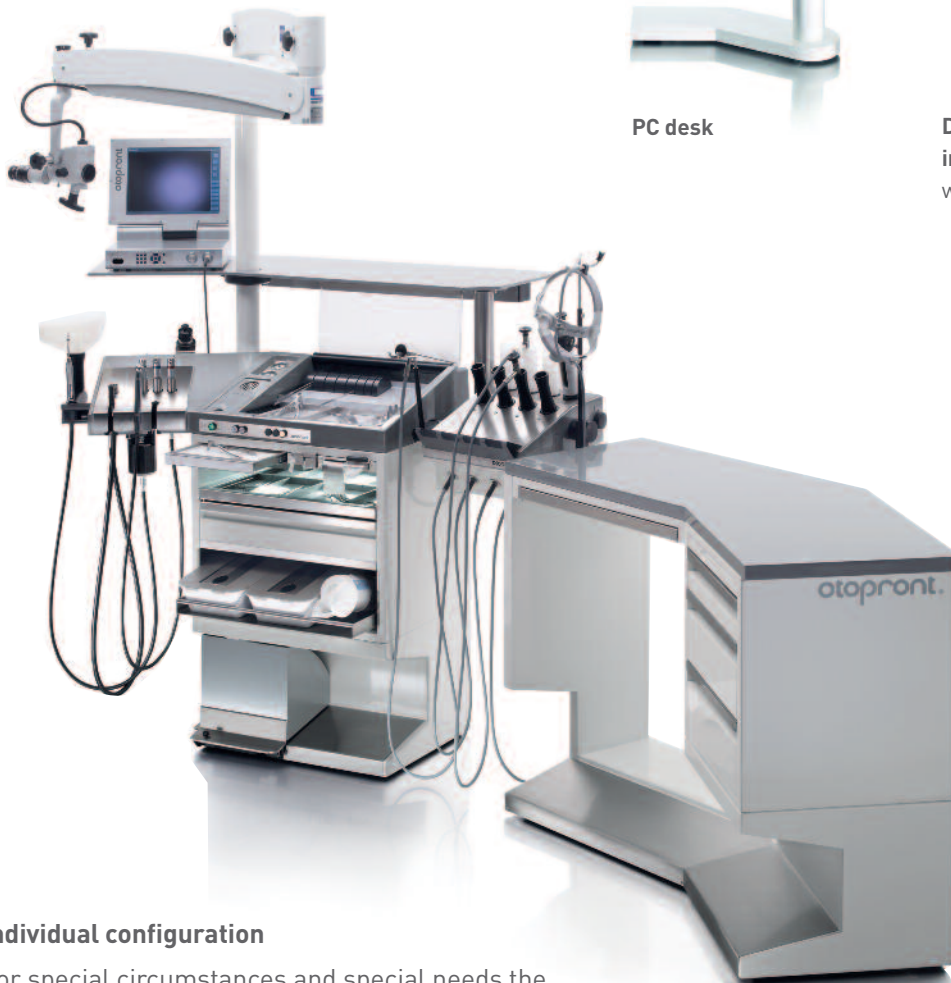




# Customisation options and custom-made products

## Combinable additional components

Instrument cabinets, desks and endoscopy stations as well as all further equipment details can be combined freely. In addition, there are a number of existing special-purpose solutions from which you can also benefit.



PC desk



Desktop and instrument desk with sink

## Individual configuration

For special circumstances and special needs the BASIC PLUS can be modified to your liking. The process for such a special design takes place in close collaboration between you and our sales people, to provide you with the best possible advice and to built a unit for your complete satisfaction – your personal BASIC PLUS treatment unit.



High-plateau with concealed sockets for easy extension of diagnostic and examination equipment

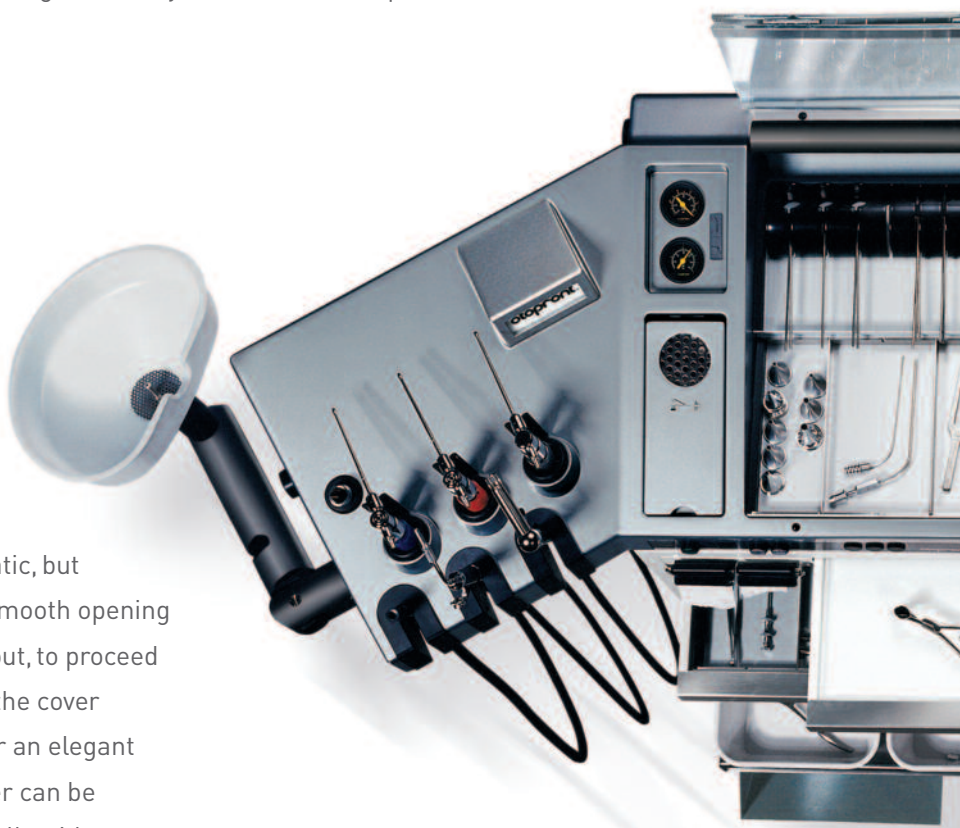
# BASIC PLUS hygiene

## Instrument management and storage

For the BASIC PLUS and the instrument module Otopront offers a dust- and splash-free storage of instruments. The special feature is that for all systems the instruments are kept visible behind plexiglass for a quick orientation. Not only further underlying drawers, but also the upper trays of the cabinets and units can be equipped with our **Softclose** and **Quicksafe systems**. So an ergonomically ideal, dust- and splash-free storage of instruments is possible.

### Softclose

The **Softclose system** allows an automatic, but damped closing of the cover. After the smooth opening of the cover, instruments can be taken out, to proceed directly with the treatment. Meanwhile the cover descends automatically. Prerequisite for an elegant one-hand operation. Of course, the cover can be opened completely and be fixed. Optionally with hermetically closing cover.



### Quicksafe

With the **Quicksafe closure system**, instruments are freely visible and protected from dust and other contamination. Opening, grasping and closing with only one hand are a single movement.





Removable instrument trays with antibacterial coating and freely divisible stainless steel slats. All parts can be mechanically reprocessed. The instrument cover can be equipped with a hermetic sealing and with the soft self-closing **Otopront Softclose system**.

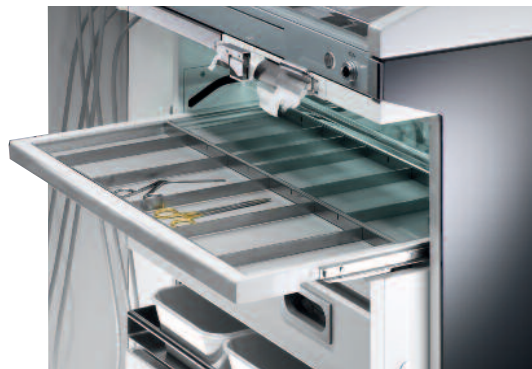
### Drawer variants and arrangement

Furthermore all drawers can be fit with a plexiglas front for a better overview. Clean/unclean or storage/discard layout of the individual cabinet and unit elements can be individually designed by request, depending on the situation.



Opening the instrument drawer lifts and moves the plexiglass cover to the rear.

Closing the drawer slides the panel back to the front and covers the instruments again.



# General hygiene as Otopront standard

**A few examples** from the Otopront hygiene range (see also supplementary leaflet "Hygiene"):

## Otopront double quiver disinfection system

The double quiver disinfection system aids the correct immersion of optical devices. Precisely vertically guided by the inner quiver (diving quiver), contact of the optical device with the outer quiver (rinsing quiver) is avoided. The inner quiver itself fully immerses in the disinfecting solution and is thereby also disinfected.

- Recontamination protection of the optics
- For fully virucidal disinfectants
- Quiver for flexible optics



**Diving quiver**  
for the safety of a perfect disinfecting process

## Otopront disposable cannulas for spray units and ear irrigation

Two cannula types available:



For aqueous solutions



and oily/viscous solutions



Disposable cannula  
for ear irrigation

The in recent years more tightened interpretation of requirements on hygienic preparation of medical instruments sees the cleaning of suction hoses and cannulas due to the small lumens at some point critical or not to be feasible. Otopront solved that issue by the development of **disposable cannulas**.

- **Fast replacement** of the cannulas with quick fastener
- Additional safety during treatment of **high risk patients**, bleeding noses or change of dressing
- Support of compliance with **hygiene standards**
- **Two cannula types** available: For aqueous solutions or oily/viscous solutions

**Otopront disposable suction hoses** fit without modification for all Otopront suction hose suspensions. The hygiene solution for the daily routine in practice and clinic or as an occasional replacement for the conventional standard Otopront suction hose in case of obstruction or for infectious/critical patients.







# Features

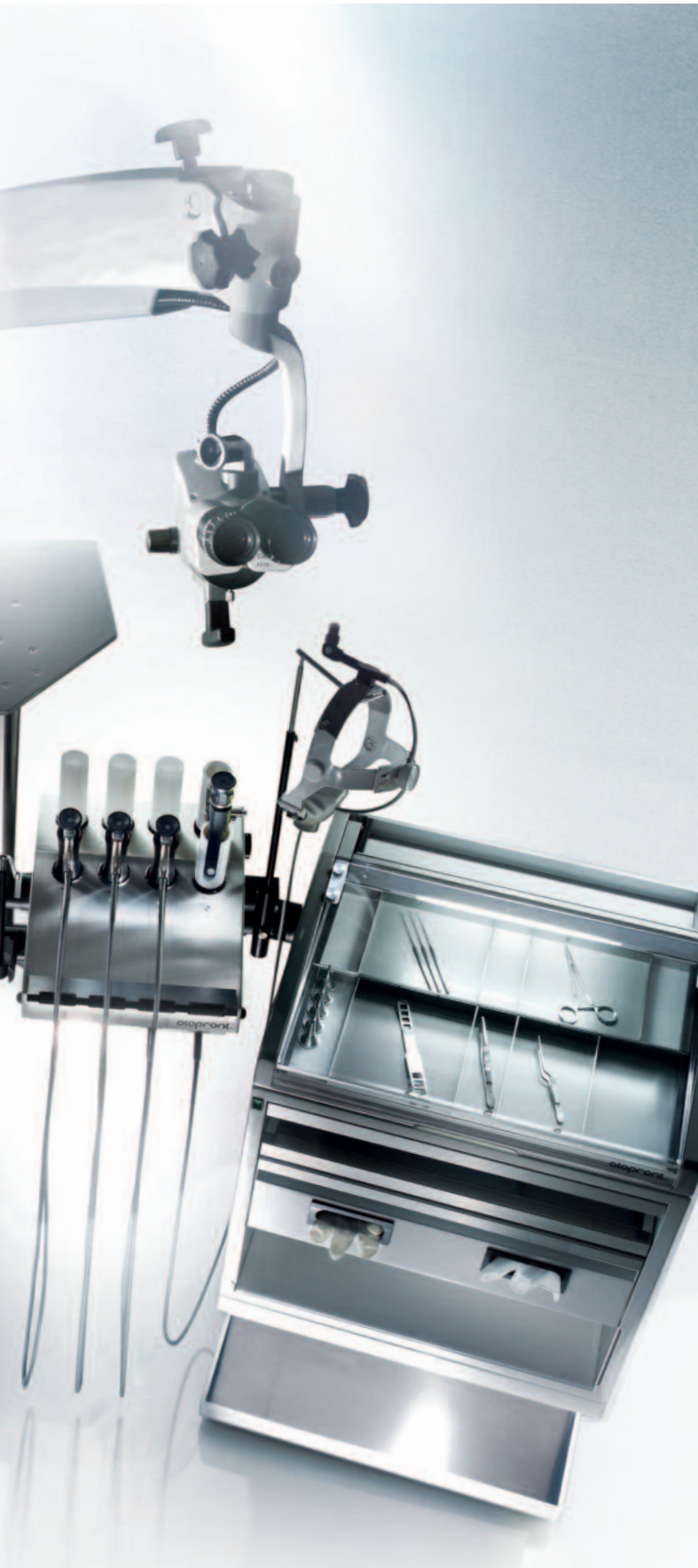
## Basic equipment

- Suction unit with non-vibrating, smooth-running vacuum pump, 58 l/min, 91% vacuum
- Auxiliary air regulation
- Suction hose rinsing unit
- Automatic suction bottle emptying
- 38°C warm water rinsing device with autoclavable water filter unit
- Mirror reheating unit
- Instrument tray in the upper part, 2-stage with plexiglas cover
- Instrument drawer
- Pullout panel with integrated paper roll
- Storage drawer
- Open compartment





## Most chosen optional extras



- Suction diaphragm pump: 72 l/min, 91% vacuum, vibration-free suspension, vibration-free, slow and silent-running
- Suction piston pump: 55 l/min, 91% vacuum, for 24 h continuous use, vibration-free suspension vibration-free, slow and silent-running
- Single, dual or quad light source
- Single, dual or quad light source, 150 W halogen and/or LED (CRI > 95%) with light barrier control, disinfection time monitoring and Otopront double quiver system
- Endoscope rest, head light rest, both switching
- LED light source and superbright LED, especially for flexible endoscopes with small diameters
- Spittoon on swivel arm with second suction hose
- Heated instrument panel for body warm instruments
- High-plateau with concealed sockets
- Swivel support for additional equipment
- Microscope with holder, electrical supply and own light source
- Video endoscopy system PES Pilot HD*pro* including microscope camera or PES pilot HD*pro* stroboscope
- Stainless steel edges on all drawers as additional mechanical protection
- Instrument discharge cups for disinfecting solutions
- Integrated container for injection needles, cannulas etc.
- Waste bin with foot control
- Removable stainless steel surfaces for cleaning
- External suction hose system
- Compressed air system complete with fine dosing handpiece, flow limiter and pressure gauge
- 3 spray bottles (optional for disposable spray cannulas),
- Instrument drawers with plexiglass front cover
- Free choice of colors, optionally 2-layer metallic paint
- Mirror preheater: aluminum block detachable for 50 mirrors
- Special solutions

# Maintenance

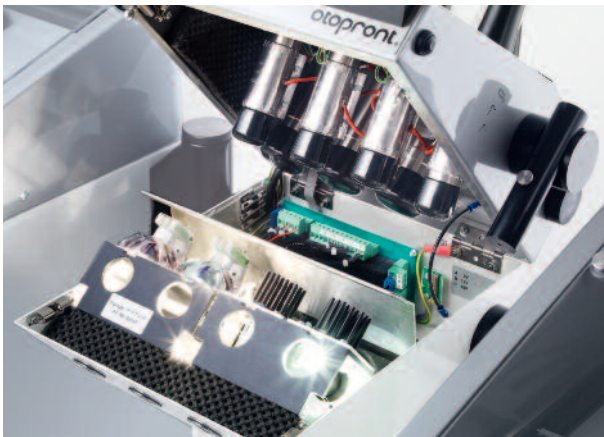
BASIC PLUS devices are always kept up-to-date hygienically, technically and ergonomically. The use of state-of-the-art technologies and materials in conjunction with a continuous and close collaboration with hospitals and practices provide us with valuable development impulses.

This also applies to routine maintenance and speed during repairs.



## Detachable surfaces and hoses

Quick-fit couplings on all hoses ensure easy assembly



## Validated water filter unit

The microbial pollution of water-bearing medical products is valued increasingly critical. Already years ago Otopront has taken this threat very seriously and developed a solution for all water-bearing devices. The water filter unit with a service life of 6 months with weekly autoclaving is specially tailored to the user's requirements:

- With a pore size of <math>< 0.2</math> micrometers for containment of pseudomonas and legionella
- Easy to use, economical, high level of hygiene safety
- Autoclavable



Easy access to all filters, suction glasses and suction hose rinsing containers, optionally with side or front assembly (with flap).

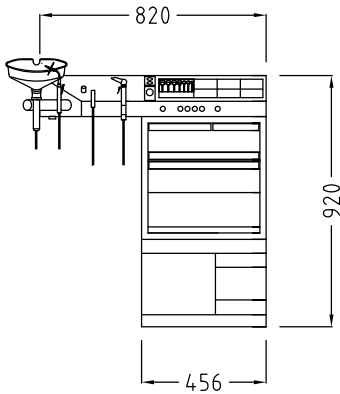




# Dimensions

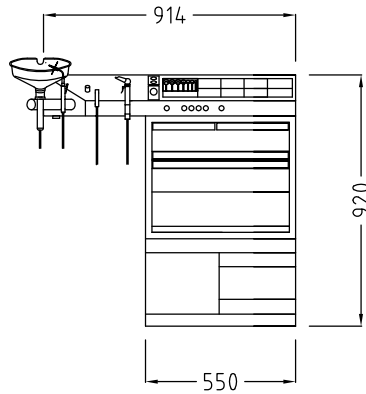
## BASIC PLUS 450

Width 450 mm



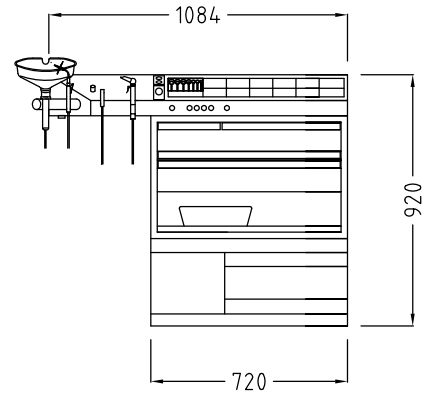
## BASIC PLUS 550

Width 550 mm

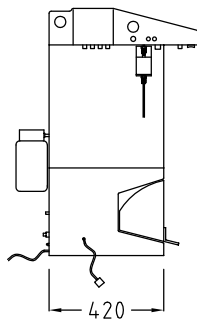


## BASIC PLUS 700

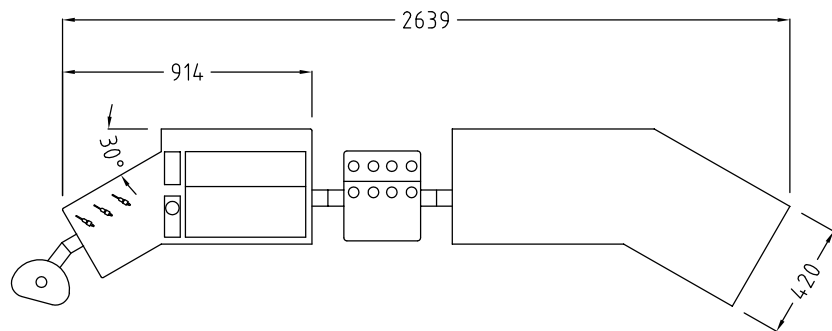
Width 720 mm



### Lateral view

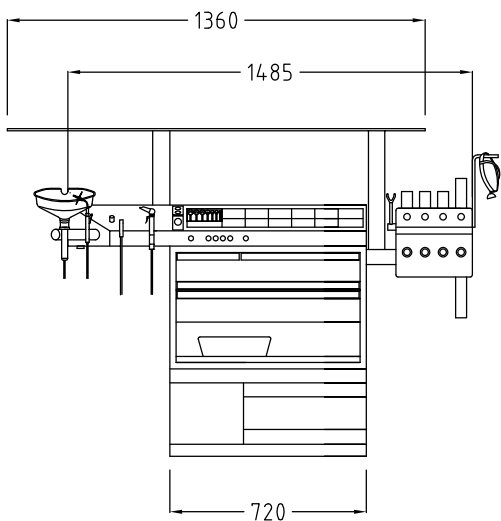


### BASIC PLUS with Desk L



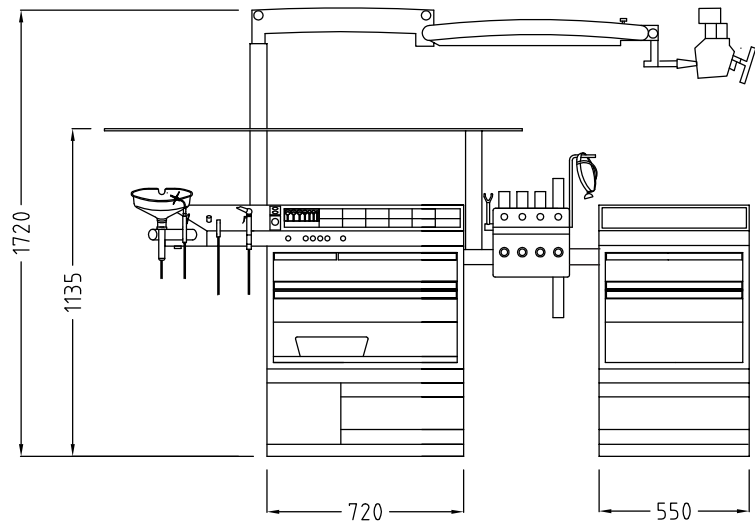
## BASIC PLUS 700

with high-plateau



## BASIC PLUS STATION

with microscope and with high-plateau



# Technical data

## Suction unit

- Basic pump: 58 l/min, 91% vacuum  
Alternatively:
- Diaphragm pump: 72 l/min, 91% vacuum
- Double-piston pump: 55 l/min, 93% vacuum, designed for continuous operation
- all pumps are vibration-free and extremely quiet running
- Easily accessible water filter unit
- Vacuum gauge
- Double overflow protection
- Automatic activation, optionally by foot switch
- Plug-in suction glass
- Automatic suction glass emptying
- Use of disposable suction bags and suction hoses, no modifications required

## Suction hose cleaning

- Integrated rinsing of hose and cannulas with disinfectant solution

## LED/halogen light sources

- 2 or 3 halogen light sources 150W
- Alternatively with 2 or 3 LED light sources (CRI > 95%, > 1800 lumens, dimmable, warm white)
- Otopront Superbright LED (> 2600 lumens)

## Endoscope quivers

- 2 removable preheating quivers, thermostat controlled
- 2 rinsing quivers
- 2 quivers for flexible optics suspension
- Swimming quiver for all standard optics as contamination protection

## Spray unit

- 0–4 bar, adjustable, with gauge
- Fine dosing
- Spray handpiece, [autoclavable](#)
- 3 spray bottles with replaceable cannulas
- [Otopront disposable cannulas](#)

## Ear irrigation unit

- Handpiece, fine-dosing
- Calcification-free boiler system

## Ear irrigation cup

- Disposal via separate suction hose
- On swivel arm

## Hygiene

- All application parts with patient contact are [autoclavable](#)
- Quick fasteners on all hoses
- [Otopront disposable suction hoses](#)
- [Otopront disposable cannulas](#)
- [Otopront disposable rinsing nozzles](#)
- [Otopront disposable suction bag](#)

## Smoke evacuation system, switchable

- In case of laser and HF surgical optional connection of a multistage [activated carbon filter system](#) for targeted extraction of aerosols from the ENT body cavities on the suction hose
- ULPA filter for protection against bacteria, viruses and aerosols

## Head light suspension

- Height-adjustable and automatic switching
- Laterally mounted

## OP-Normschiene

- Stainless steel profile type DRÄGER 25x10 mm or 35x10 mm
- Laterally mounted

## Construction

- Steel body, multi-layer lacquered
- Colour selection acc. to RAL colour range
- Top and base made of stainless steel or steel coated

## Driveability

- Antistatic rollers
- 2 castors on the front

## Weight

- 55–85 kg

## Power supply

- 110–230 V~, 50/60 Hz

## Power consumption

- 1800 W max.

## CE marking

- in accordance with MDD 93/42/EEC

Basic configuration and optional supplementary equipment as per price list.

All designs and specifications subject to change without notice.

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