



 Ritter  
Made in Germany

# Dental Catalogue **2019**

# About Ritter

## **More than 130 years of dental experience.**

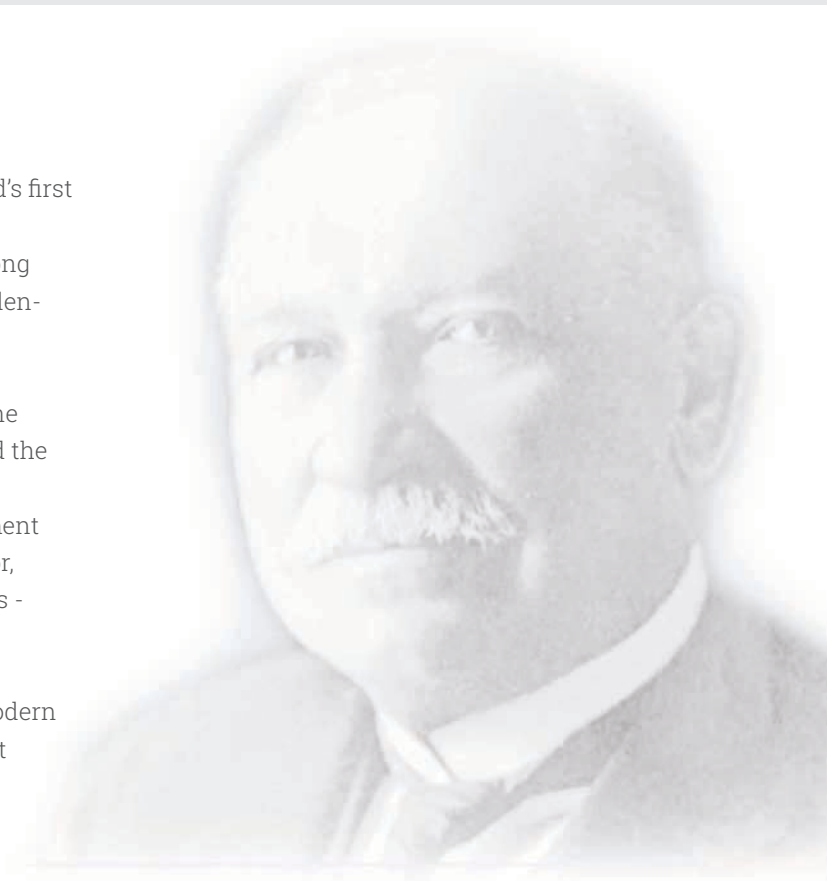
In 1887, Frank Ritter produced one of the world's first treatment chairs for the dental profession.

In the 130 years since, Ritter has produced a long line of products that has changed the face of dentistry.

1912 Ritter introduced the "control panel" for the dental instruments, a major advancement and the beginning of modern technology in dentistry.

In 1917 Ritter introduced the integrated treatment system; chair with control panel, drill, cuspidor, saliva ejector, tray table and air/water syringes - all instruments in one unit!

This system delivered for the first time the modern dental system, the core concept which has not changed even today.



Frank Ritter - founder of Ritter Dental and developer of the Ritter Dental Unit.





**A dedicated staff of many employees ensure:**

Leading Edge Design in consultation with leading universities both in Germany and worldwide. High Level of Function through the use of comprehensive control systems for the complete control of all of the unit's functions.

The Ritter brand stands for high quality, state of the art technology and innovative products made in Germany. Ritter dental units are the

reliable solution for all necessary devices and instruments, combined with many optional features and interfaces for patient data display. Ritter remains a German owned and operated company, with all Ritter products **Made in Germany** at the modern production facility in Biberach (Baden Württemberg, South Germany).

# Product Range

## D E N T A L   U N I T S



Ritter Contact World



Ritter Contact Lite Comfort



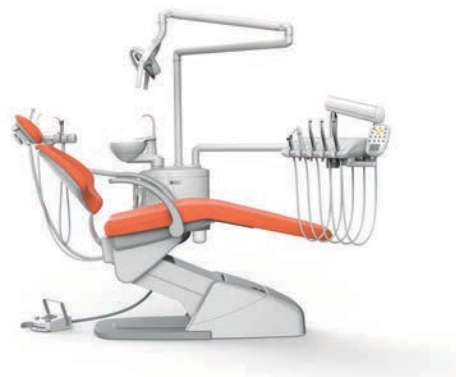
Ritter R400



Ritter R400 Smart



Ultimate Comfort



Ultimate Comfort Smart

## A U T O C L A V E S



Table Top Autoclaves Ritter CB23, 23 Liter | AB80, 80 Liter

## X - R A Y



Leadex 70



Girardelli Developing Machines

## A C C E S S O R I E S



Instruments, Motors and Turbines  
Scalers and Curing Lights  
Compressors  
Suctions



## D E N T A L I M P L A N T S



German Implant System  
including Surgical Kits  
and all Prosthetic Components

## Contact World

**Perfection in function and design:**

The Contact World probably is the most beautiful patient chair in the world! Design as well as the outstanding quality of the Contact World meet the highest demands in dentistry.

The Contact World combines perfectly the key features of functionality and aesthetics. Therefore the Contact World is one of the most beautiful and efficient patient chairs. The numerous options guarantee an individual and cost-efficient workflow.

E L E G A N C E





## Patient Chair

**Take a seat and relax: Patient comfort for a smooth treatment at any time.**

The Contact World patient chair is famous for brilliant ergonomics and numerous unique advantages. It even received the IF Design Award for outstanding design, perfect ergonomics and function. The basis is small and offers ideal space for a stress-free treatment situation, close to the patient.



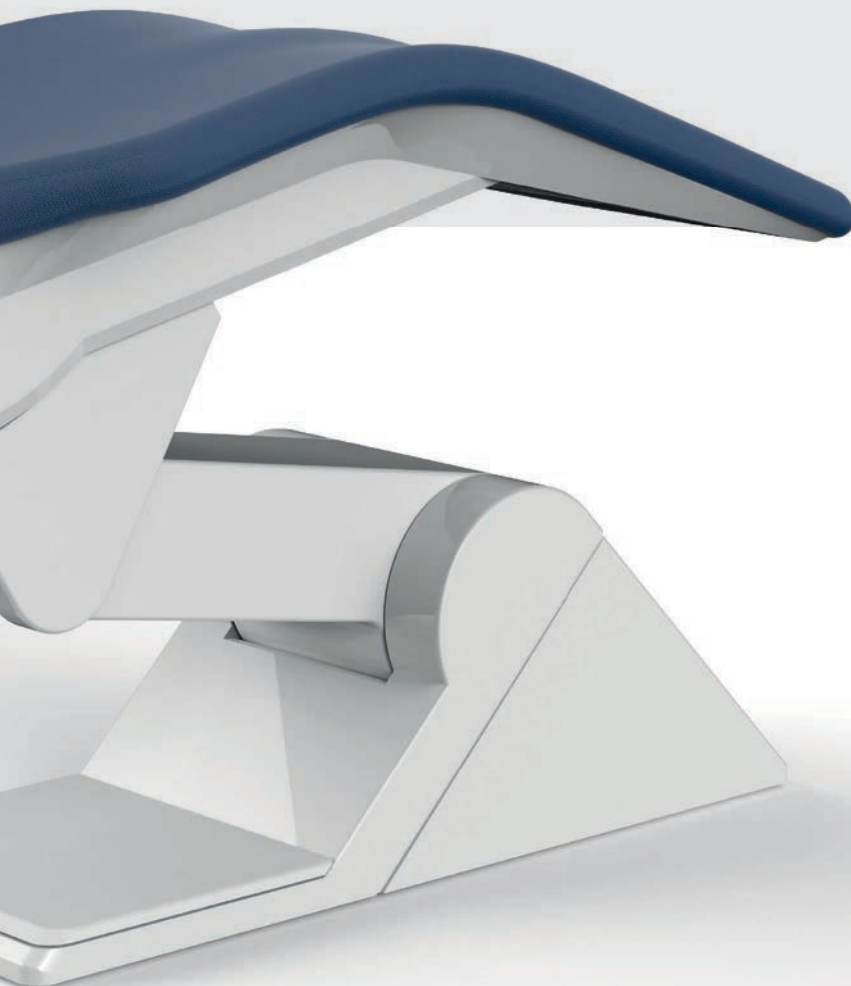
**Trust is a matter of mind:**

**The Contact World headrest**

- Quick and easy positioning with the left hand
- Convenient positioning of the patient's head
- Flexible articulating headrest
- Optional: double-articulated headrest (not with ViscoSoft)

- Unique simultaneous movement (Trendelenburg) for separate control of the backrest and seat.
- Safe and comfortable positioning, even in extreme treatment situations
- Compact, space-saving design
- Seamless surfaces and upholstery for easy disinfection
- Flexible control via foot pedal and function displays
- Chair height 35 - 85 cm
- Optional: Right armrest movable
- Highest seating comfort:  
Optional with special cushion which shapes and adapts flexibly to the body (ViscoSoft similar to TEMPUR®).

## D E S I G N



design award  
winner

# Dentist Elements

## Your individual choice:

Dentist element according to your personal preference.  
All versions contain a smooth swing arm with  
pneumatic break for the flexible positioning of the  
dentist element. (Exception: Cart version)

## FLEXIBILITY



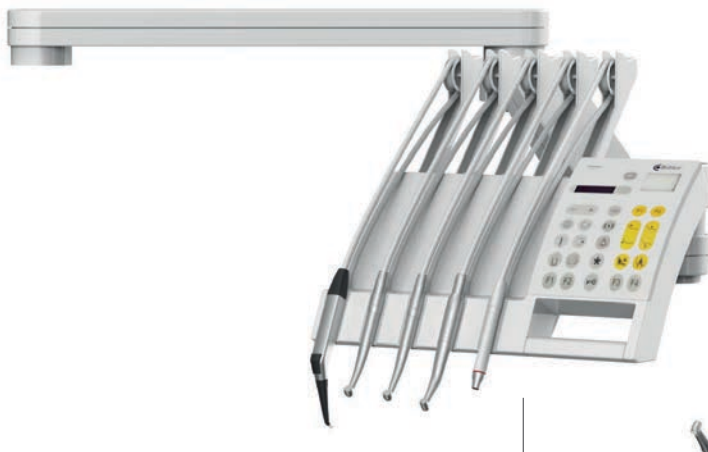
### HC-version with hanging hoses and cart head

- Up to 6 instruments
- Integrated double tray
- Optional implementation of multimedia components



### H-version with hanging hoses

- Up to 5 instruments
- Integrated double tray
- Optional implementation of multimedia components
- Perfect handling, even in small working environments



**S-version with swinging hoses**

- Up to 5 instruments
- Single or double tray possible
- Perfect handling, even in small working environments



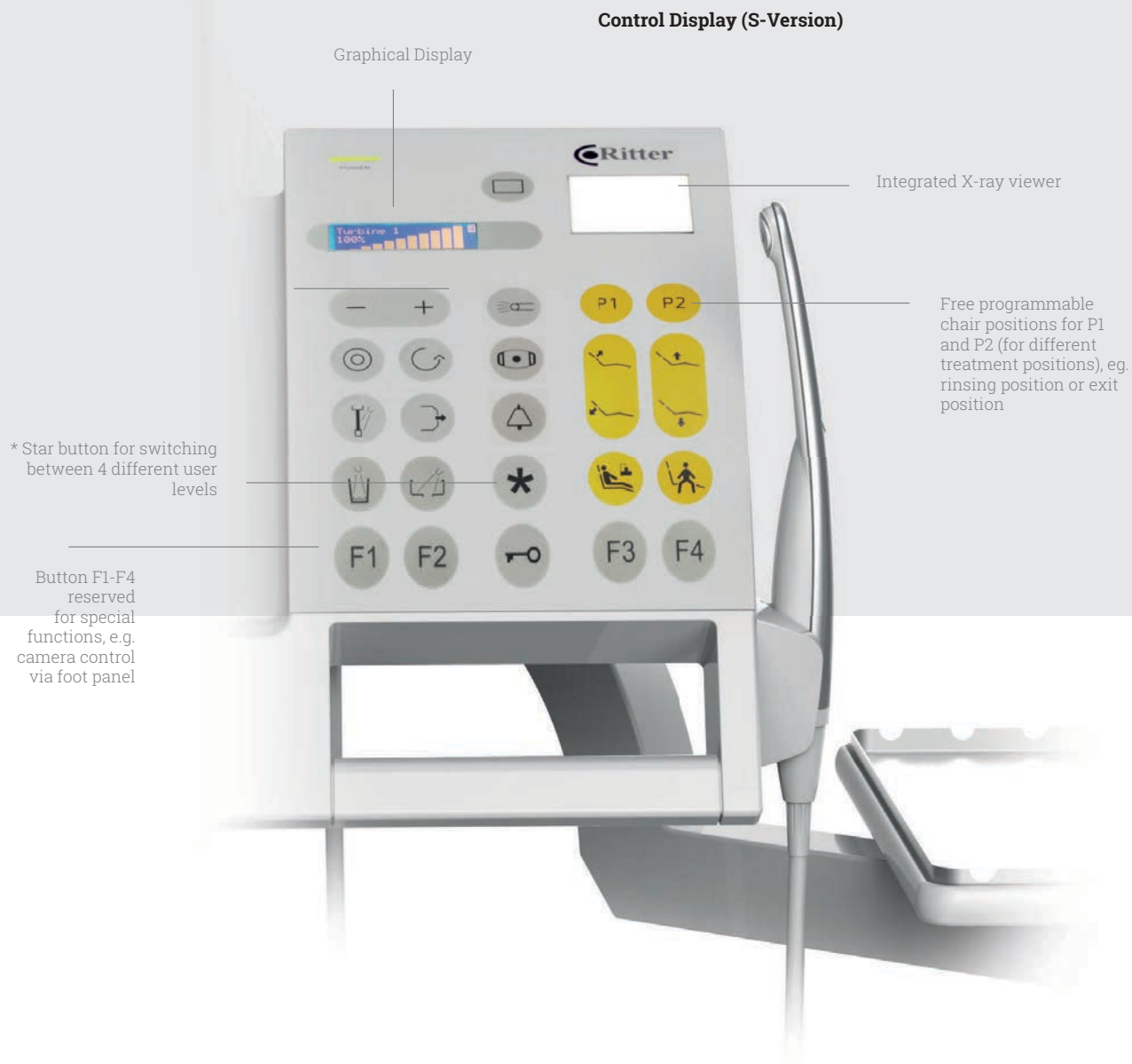
**C-version - The cart system**

- Mobile cart for easy movement
- Large steerable wheels
- Up to 6 instruments
- Silicone pad for two standard trays
- Optional implementation of multi-media components

# Control Display

## Intuitive and user-friendly: Control of chair and instruments.

Easy and fast control of all functions of the treatment unit with a simple touch. Various user settings and memory functions ensure a perfect handling.



## Multi-function display (S-/ HC- / Cart-Version)

(valid for all displays: S-/H-/HC-/Cart-Version)

- Graphical display shows the instrument status
- All parameters are freely programmable, 4 chair positions, advance settings for up to 4 different users
- Prophylaxis function
- Timer
- 2. Instrument status

F1 - Activation Sprayheating

F2 - Activation multimedia mode

F3 - Activation Prophylaxis function

F4 - Security lock / sleeping mode

F1 & F2, if options are choosed

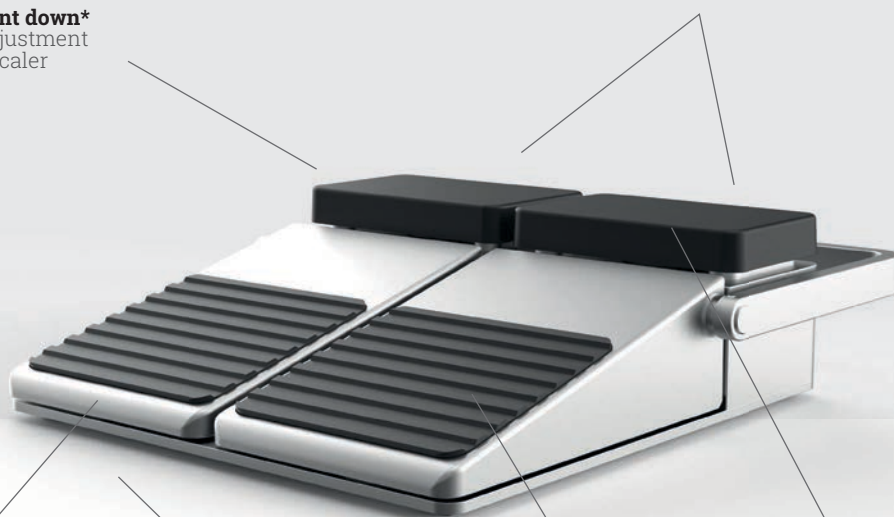
# Foot Controller



## P R A C T I C A B L E

**Backrest movement down\***  
+ speed mode / adjustment  
+ Endo Mode for Scaler

**Rinsing position**



**Patient Chair up\***  
+ speed mode / adjustment  
with water and spray

**Patient chair exit position**

**Backrest movement up\***  
+ chip blower for instruments

\* if all instruments are located in the holders

**Patient chair down\***  
+ speed mode / adjustment  
with water and spray

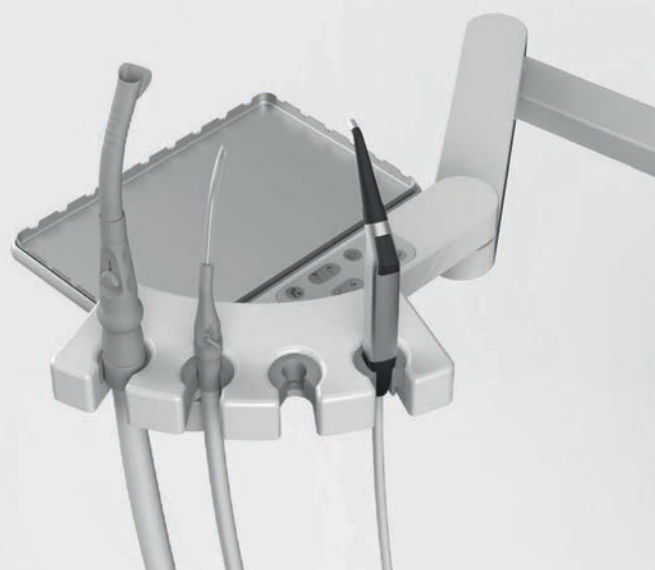


## Assistant Side

### Comfort is key: The assistant element

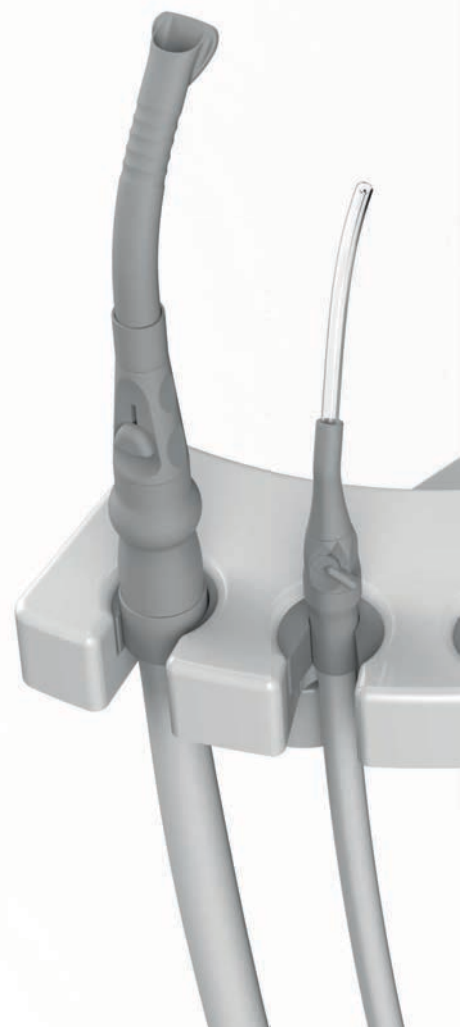
- Two-parted instrument arm for flexible positioning  
- regardless of the patient's position and treatment situation
- Built-in touch panel for the control of all main functions
- Ergonomically shaped suction handpieces for fatigue-free treatment
- No twisting of the hoses due to clearly arranged suspensions

Three parted instrument arm for more flexibility (option)

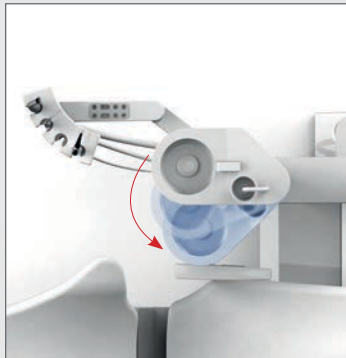


### Option: Instrument cleaning support

- For instrument cleaning
- Easy access to internal components
- Easy disinfection

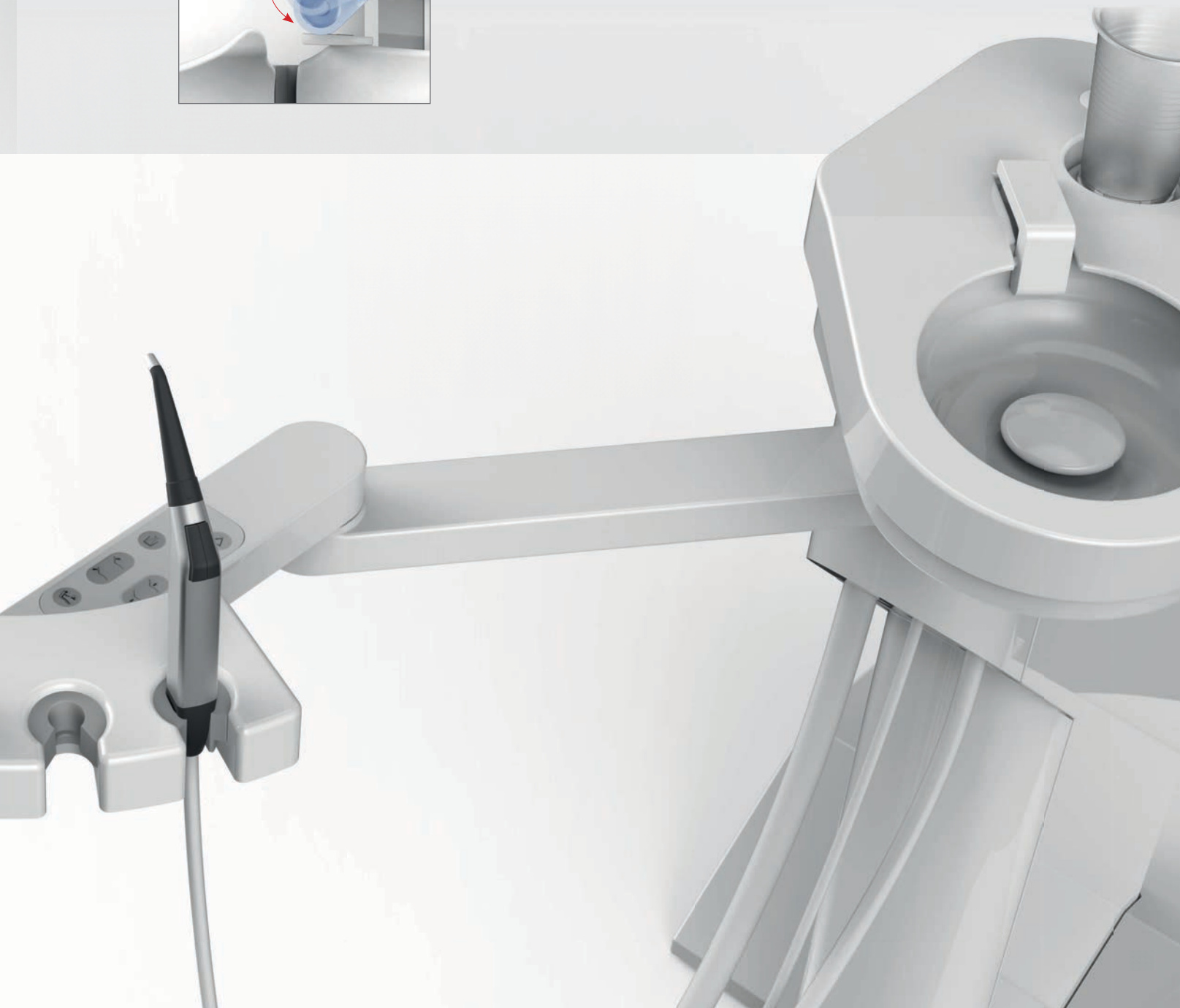


## Water Unit



### The spittoon element

- Porcelain cuspidor
- Optimum hygiene by simple removal of the components
- Optional: Swiveling cuspidor



# Hygiene

## **Your safety has priority: Hygiene made easy.**

The Ritter Contact World is designed for fast and effective cleaning.

All critical areas and components are easily accessible and disinfected. All surfaces are smooth and designed to prevent dirt zones and accumulations of germs / bacteria. Many components can be removed with just one hand.



### **Cuspidor**

- Made of porcelain
- Optional swivelling
- Critical, quickly contaminated components can be easily removed and disinfected

### **Surfaces**

All surfaces of the arm system are flat and very easy for disinfection and cleaning.

### **Option: Aqua-Bottle-System**

- Bottle solution
- Complete disinfection of the internal water lines



#### Cart

- Removable cover plate
- Easy to disinfect



## H Y G I E N E



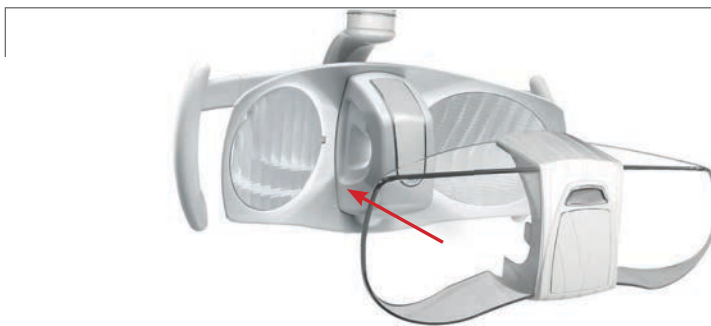
#### Operating lamps

- Removable handles
- Autoclavable

## Operating Lights

**Ritter operating lights - the high-end solution for a long life time cycle of daily work.**

The proven lighting system is the excellent combination between lightened working field and the optimum of color temperature, e.g. for the choose of the right tooth color.



### **Ritter MoonLite, LED**

- 2 LED lamps
- Intensity of light 60.000 lx
- Color temperature 5000K
- 2 brightness levels
- 3 hinged axis
- regular constant light spot at all lighting levels
- Power can be controlled by manual switch or sensor
- Grips are removable and autoclavable easily
- Protection shield with mirror (option)



## I L L U M I N A T I O N

### **Ritter SunLite, LED**

The perfect spotlighting:

- Precise illumination of the working field
- Color temperature 4.200 - 6000K
- Intensity of light 8.000 - 35.000 lx
- High quality for a long life time cycle



## X-ray Device

**Leadex 70: The Small x-ray device - mounted directly at the treatment unit.**

- Meets all needs of intraoral dental radiology
- Flexible, fast and safe solution in order to produce an excellent small x-ray image chairside
- Compatible with standard films and digital x-ray sensors
- Sharp and crisp images

# Multimedia

## Patient communication builds trust: Multimedia components.

Showing x-ray images and images of an integrated intra-oral camera creates trust when advising patients. The integrative Ritter concept facilitates a successful patient communication.

Intra-oral camera

CartLite with iPad holder

Big x-ray viewer

### Multimedia package, optional

- Integrated multimedia monitor
- Integrated intra-oral camera
- Complete system with camera and monitor
- High quality for a long life time cycle
- Ipad holder or big x-ray viewer

### Intraoral Camera

- Bright, clear image under all conditions
- 15 ° larger angle of view thanks to the curved design
- Illumination by 8 LEDs - reduces heat emission
- Aspherical lens - avoids distortions
- Maximum clarity - from portrait to tooth
- SoproTouch system handpiece control instead of foot switch
- Plug & Play Technology - install and operate



#### Monitor

- 22" TFT-Monitor with sealed glass front
- Specially designed for medical use
- Smooth surfaces in a special design provide easy disinfection



#### **Reliable and durable - proven in daily practice: The Ritter quality promise.**

Working with a Ritter unit means being ideally prepared for the daily challenges in dentistry. The solid construction is based on many years of experience. Ritter dental units are very reliable, robust and durable. We only use materials of highest quality. The Contact World is entirely made of metal and varnished completely. The high-quality construction and finish of Ritter units bears a commitment for life. Thanks to easy access and clearly arranged components, even installation, service and maintenance are very easy.

**Quality - Made in Germany: You can always rely on your Ritter unit!**

# Your favourite colors

Please choose your personal upholstery and varnish color:



Special coatings of the whole unit as well as partly coatings for water unit or cart are available in **all RAL colors or metallic colors!** Standard color is RAL 9003 / signal white.

## Upholstery

- Seamless
- Colour proven and durable
- easy to remove due to velcro fasteners

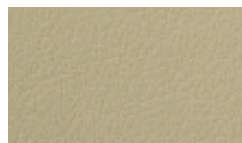




264 dental weiss/dental white



265 basic grau/basic grey



178 champagner/ginger



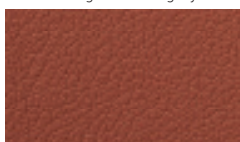
101 gelb/yellow



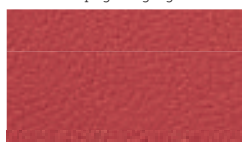
280 safrangelb/saffron



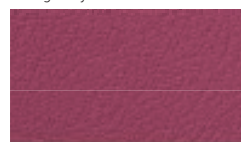
478 lachs/salmon orange



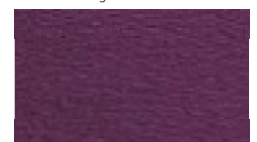
175 cotto/cotto



184 cherry/cherry



190 orchidee/orchid



817 beere/berry



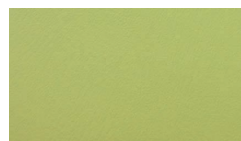
279 bordeaux/bordeaux



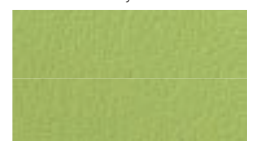
191 mokka/mocha



815 schoko/chocolate brown



CS3 kiwi/kiwi



180 spring/spring



274 aquamarin/aquamarin



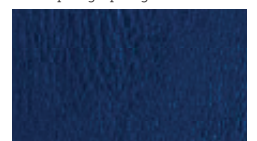
262 horizonlight/light horizon



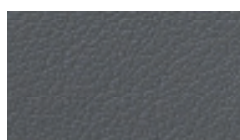
283 pastellblau/pastel blue



189 saphir/saphir



278 saphirblau/sapphire



187 basalt/basalt



316 anthrazit/anthracite



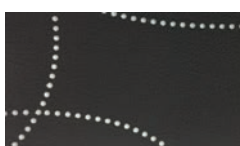
172 carbon/carbon



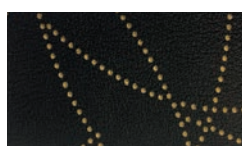
270 schwarz/black



\*ED3 grün/green



\*ED1 anthrazit/anthracite



\*ED2 schwarz/black

Shown samples may appear different in structure and color due to the printing process.

**Dentist / Assistant stool**  
**GIRA-FLEX A and D Series**

- General-purpose working stools with backrest or with footring



## Stools

**The Mobilorest series sets new standards in terms of ergonomics and fatigue-free work.**

The high level of comfort and the rapid adjustment of seat positions make this working stool to a real job aid - for the doctor and the assistant - for a long practice everyday.

**Dentist stool**

156 for right-handers

156L for left-handers

- High grade metal components
- Asymmetrical backrest:  
Optimal support for the working hand and freedom for the other hand (for left - and right-handed)
- foot control (hand control 150/150L)

## ERGONOMIC



CONTACT WORLD

### **Assistant stool 158**

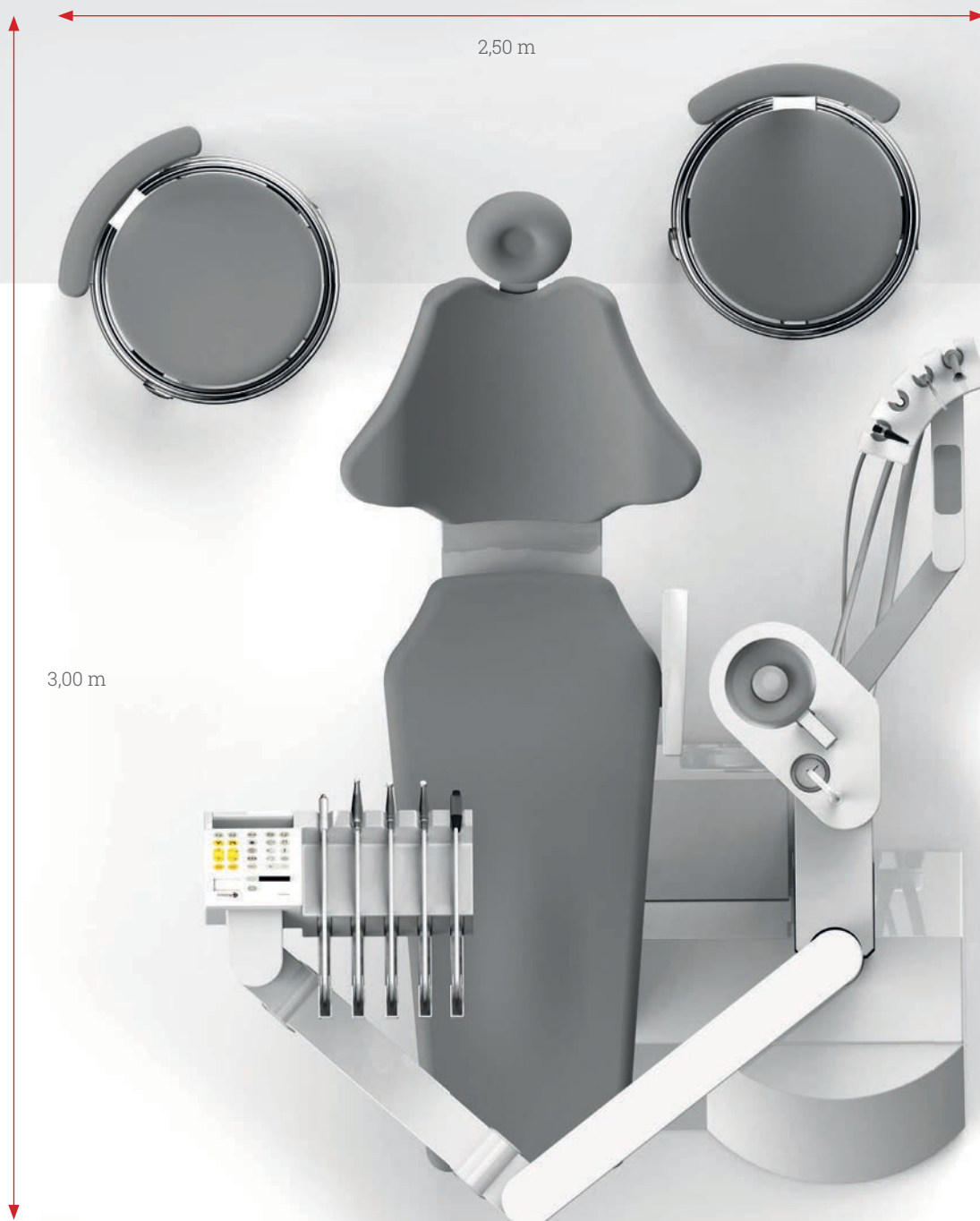
- General-purpose working stool
- Symmetrical backrest
- foot control (hand control 151)



# Dimensions

**Contact World has the right dimensions** - also for smaller practice rooms in all versions, whether as H-, S- or Cart-Version. With an operating range of approximately 2x3m, the slim unit perfectly adapts to every working environment. The dental operating lights can be ordered as ceiling- or unitmounted versions.

Information: A total of 2 connection points (1 standard / 1 alternative) offers additional flexibility, so that the unit can suit in every clinic room!



# Features and Options



☒ STANDARD    
 ☐ OPTION    
 — NOT AVAILABLE

## C O N T A C T   W O R L D

### Patient chair

- Trendelenburg movement
- Saving of positions
- Safety switch
- 1 articulated headrest mechanically
- 2 articulated head restraint mechanically
- Children's head rest
- Left armrest
- Right armrest, swiveling
- Seamless upholstery
- ViscoSoft Comfort Soft Pads
- I-panel
- Pilot foot controller
- External device connection

### Dentist element

- 3 Functional syringe TopFlex
- 3 Functional syringe Luzzani
- 6 Functional syringe TopJet
- 6 Functional syringe Luzzani
- 1. Turbine equipment
- 2. Turbine device \* 1
- 1. Motor RBL-15 LED
- 2. Motor RBL-15 LED
- ZEG Newtron with LED
- ZEG EMS no pain LED
- ZEG Kolibri S or E
- Quick couplings for instrument hoses
- Graphical display
- Multifunction panel
- 4 user levels for instr. + Chair radio.
- Instrument spray heating
- Small x-ray film viewer
- Large x-ray film On tray or cart \* 6
- Physiological saline pump
- Absorption for 2 standard trays \* 2
- Pneumatic brake for arm system \* 4

### Assistant element

- Instrument cleaning support
- 3 Functional syringe TopFlex
- 3 Functional syringe Luzzani
- Large suction hose
- Small suction hose
- LED polymerization handpiece
- 2-part arm with control panel
- 3-part arm with control panel
- Pneumatic selective storage

### Water unit

- Porcelain rinsing bowl
- Swiveling spittoon
- ABS Aqua Bottle System
- Flushing-glass heating
- Dürr MSBV for wet suction
- Amalgam separator MST1 Metasys
- Amalgam Separator CAS1 Dürr
- Separation system
- MST1 ECO Light Metasys
- Automatic separation CS1 Dürr
- Double tray support \* 3

### Small X-ray equipment

- LEADEX 70 AC or DC \* 7

### Operating lights \* 8

- Ritter LED Sunlite / or
- Ritter LED MoonLite

### Stools

- Mobilorest 156/156L/158/150/150L/151
- GIRA-FLEX A (with backrest or foot ring)
- GIRA-FLEX D (with backrest or foot ring)

### Multi media

- Intraoral camera with USB connection
- Monitor Neovo \* 5

\* 1 Max. 3 drilling instruments (2 turbines / 1 engine or 1 turbine / 2 engines), if without scaler - 2 turbines / 2 motors are possible  
 \* 2 In the case of a swiveling version, it is standard for 1 norm tray / optional for 2 norm trays  
 \* 3 Only for C, HC and H versions (S-version optional)  
 \* 4 Only for S, H and HC versions  
 \* 5 Monitor on the cart or on the lamp pole  
 \* 6 On Cart not in combination with monitor  
 \* 7 Not possible with C-version or swiveling spittoon  
 \* 8 only one light is standard, choosable

# Contact Lite Comfort

## Contact Lite Comfort - A true classic in design and functionality.

Based on the longterm experience and knowhow of Ritter, the Contact Lite Comfort combines outstanding technology and functionality with an attractive design - Made in Germany.

This combination provides enduring satisfaction in daily use and makes the Contact Lite Comfort

to one of the most popular dental units worldwide. Reliability is a top priority.

The longevity and solidity of the unit ensure minimal needs for service and maintenance. This is the guarantee for enthusiastic users!

E L E G A N C E





## Patient Chair

**Take a seat and relax: Patient comfort for a smooth treatment at any time.**

The patient chair of the Contact Lite Comfort provides excellent ergonomic and anatomical aspects for an optimal patient comfort and thus for a comfortable working situation.



## D E S I G N

- simultaneous movement (Trendelenburg) for separate control of the backrest and seat
- Safe and comfortable positioning, even in extreme treatment situations
- Seamless surfaces and upholstery for easy disinfection
- Flexible control via foot pedal and function displays
- Chair height 46-82 cm
- Optional: Right armrest movable
- Comfort is key: Contact Lite Comfort headrest
- Quick and easy positioning with the left hand
- Convenient positioning of the patient's head
- Movable, double-articulated headrest



# Dentist Elements

## Your individual choice:

Dentist element according to your personal preference.  
All versions contain a smooth swing arm with  
pneumatic break for the flexible positioning of the  
dentist element. (Exception: Cart version)

## FLEXIBILITY

CONTACT LITE COMFORT



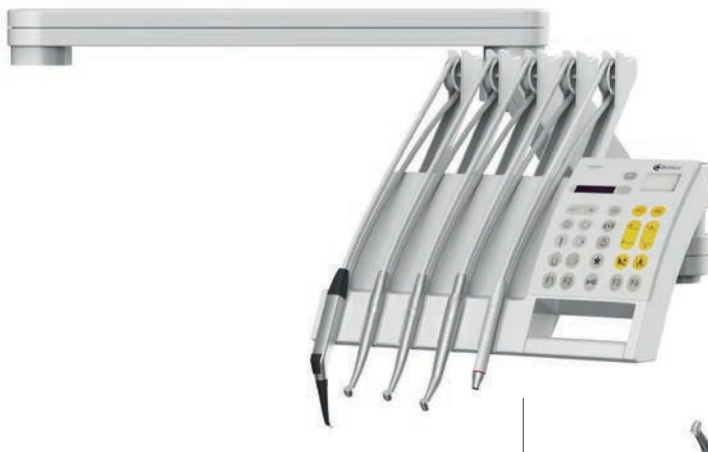
### HC-version with hanging hoses and cart head

- Up to 6 instruments
- Integrated double tray
- Optional implementation of multimedia components



### H-version with hanging hoses

- Up to 5 instruments
- Integrated double tray
- Optional implementation of multimedia components
- Perfect handling, even in small working environments



**S-version with swinging hoses**

- Up to 5 instruments
- Single or double tray possible
- Perfect handling, even in small working environments



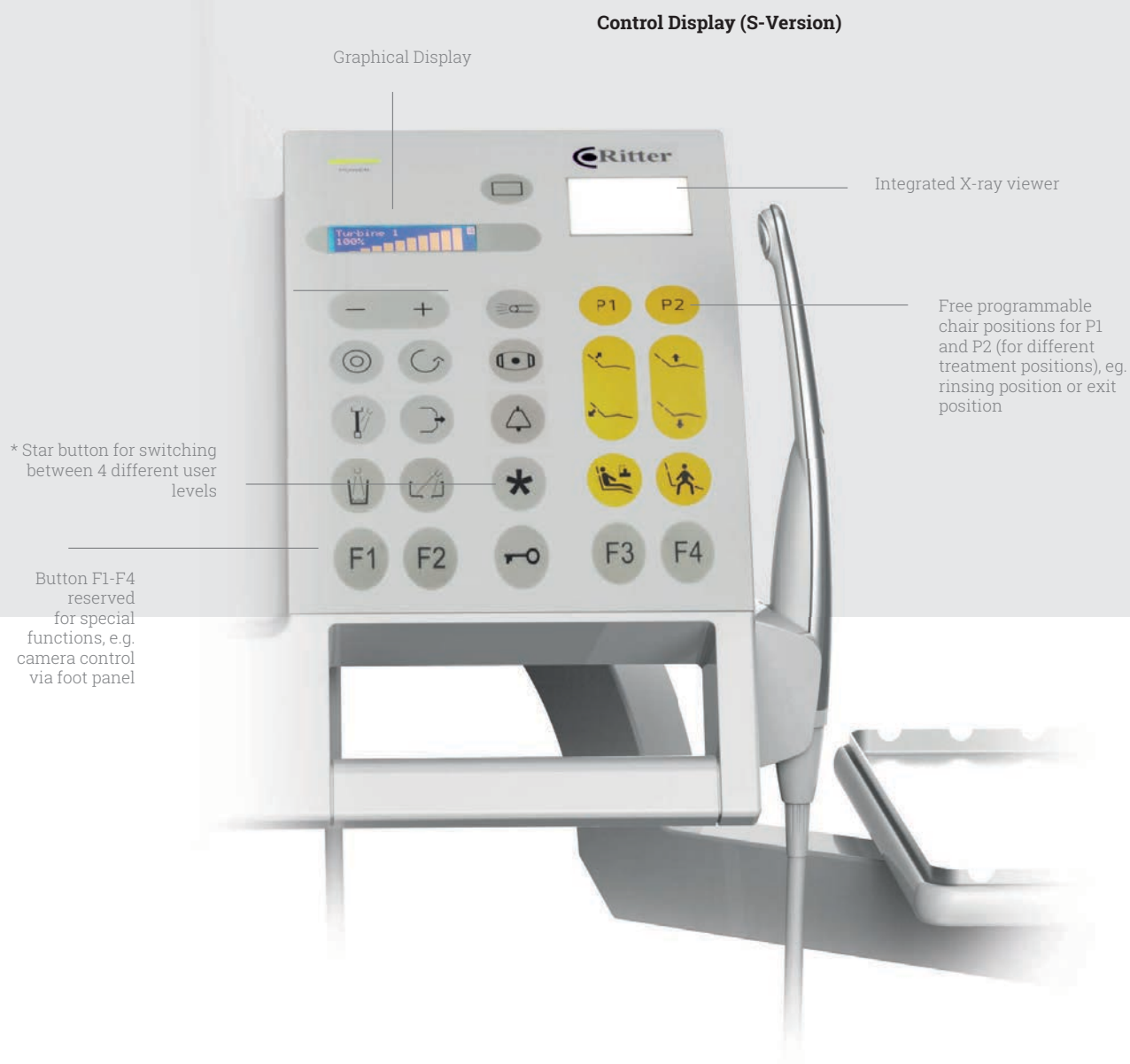
**C-version - The cart system**

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- Large steerable wheels
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- Silicone pad for two standard trays
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# Control Display

## Intuitive and user-friendly: Control of chair and instruments.

Easy and fast control of all functions of the treatment unit with a simple touch. Various user settings and memory functions ensure a perfect handling.



## Multi-function display (S-/ HC- / Cart-Version)

(valid for all displays: S-/H-/HC-/Cart-Version)

- Graphical display shows the instrument status
- All parameters are freely programmable, 4 chair positions, advance settings for up to 4 different users
- Prophylaxis function
- Timer
- 2. Instrument status

F1 - Activation Sprayheating

F2 - Activation multimedia mode

F3 - Activation Prophylaxis function

F4 - Security lock / sleeping mode

F1 & F2, if options are choosed

# Foot Controller



## P R A C T I C A B L E

**Backrest movement down\***  
+ speed mode / adjustment  
+ Endo Mode for Scaler

**Rinsing position**

**Patient Chair up\***  
+ speed mode / adjustment  
with water and spray

**Patient chair exit position**

**Backrest movement up\***  
+ chip blower for instruments

\* if all instruments are located in the holders

**Patient chair down\***  
+ speed mode / adjustment  
with water and spray



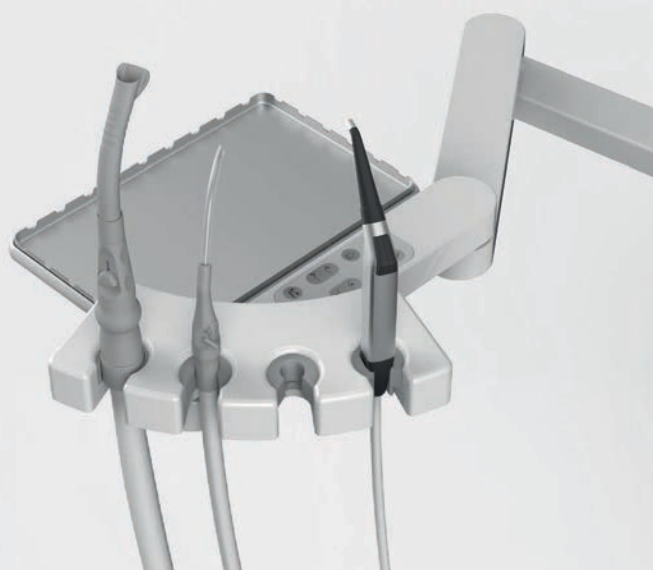
C O N T A C T   L I T E   C O M F O R T

## Assistant Side

### Comfort is key: The assistant element

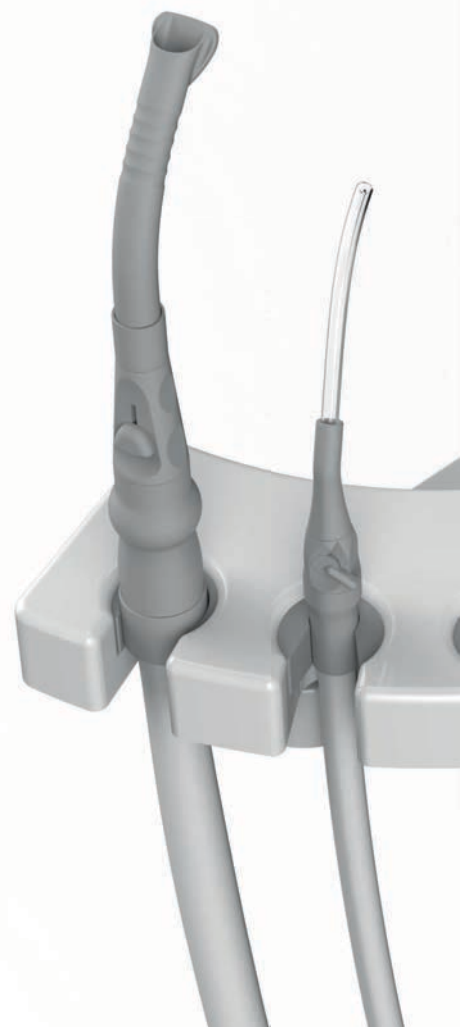
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Three parted instrument arm for more flexibility (option)

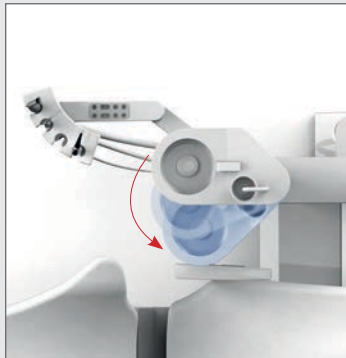


### Option: Instrument cleaning support

- For instrument cleaning
- Easy access to internal components
- Easy disinfection

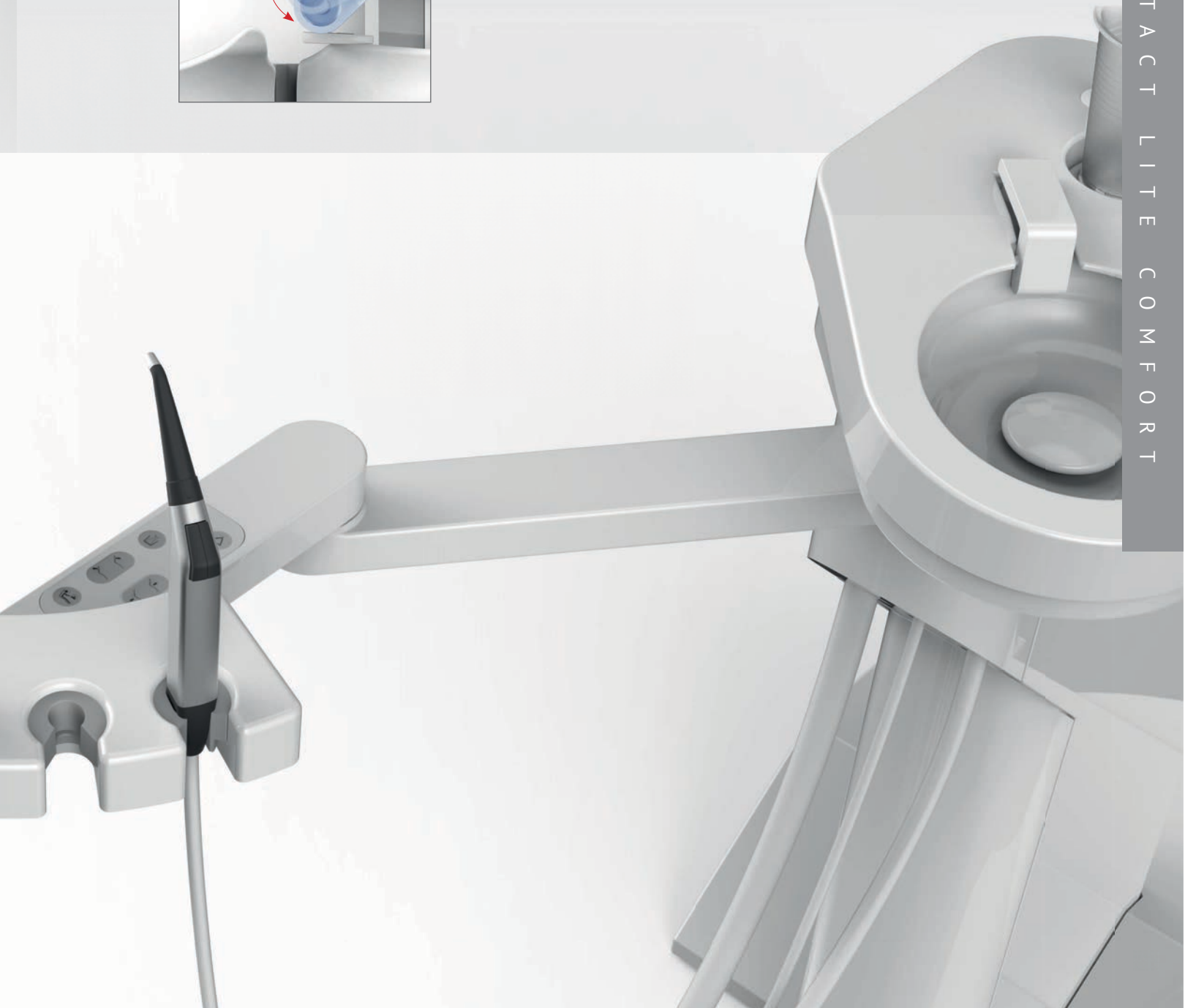


## Water Unit



### The spittoon element

- Porcelain cuspidor
- Optimum hygiene by simple removal of the components
- Optional: Swiveling cuspidor



# Hygiene

## **Your safety has priority: Hygiene made easy.**

The Ritter Contact World is designed for fast and effective cleaning.

All critical areas and components are easily accessible and disinfected. All surfaces are smooth and designed to prevent dirt zones and accumulations of germs / bacteria. Many components can be removed with just one hand.



### **Cuspidor**

- Made of porcelain
- Optional swivelling
- Critical, quickly contaminated components can be easily removed and disinfected

### **Surfaces**

All surfaces of the arm system are flat and very easy for disinfection and cleaning.

### **Option: Aqua-Bottle-System**

- Bottle solution
- Complete disinfection of the internal water lines



**CartLite**

- Removable cover plate
- Easy to disinfect



H Y G I E N E

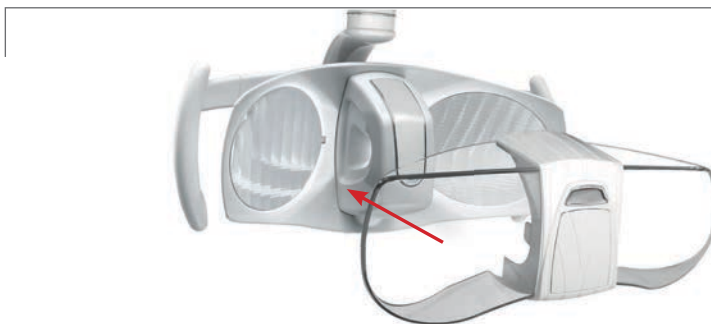
**Operating lamps**

- Removable handles
- Autoclavable

## Operating Lights

**Ritter operating lights - the high-end solution for a long life time cycle of daily work.**

The proven lighting system is the excellent combination between lightened working field and the optimum of color temperature, e.g. for the choose of the right tooth color.



### **Ritter MoonLite, LED**

- 2 LED lamps
- Intensity of light 60.000 lx
- Color temperature 5000K
- 2 brightness levels
- 3 hinged axis
- regular constant light spot at all lighting levels
- Power can be controlled by manual switch or sensor
- Grips are removable and autoclavable easily
- Protection shield with mirror (option)



## I L L U M I N A T I O N

### **Ritter SunLite, LED**

The perfect spotlighting:

- Precise illumination of the working field
- Color temperature 4.200 - 6000K
- Intensity of light 8.000 - 35.000 lx
- High quality for a long life time cycle



## X-ray Device

**Leadex 70: The Small x-ray device - mounted directly at the treatment unit.**

- Meets all needs of intraoral dental radiology
- Flexible, fast and safe solution in order to produce an excellent small x-ray image chairside
- Compatible with standard films and digital x-ray sensors
- Sharp and crisp images

# Multimedia

## Patient communication builds trust: Multimedia components.

Showing x-ray images and images of an integrated intra-oral camera creates trust when advising patients. The integrative Ritter concept facilitates a successful patient communication.

Intra-oral camera

CartLite with iPad holder

Big x-ray viewer

### Multimedia package, optional

- Integrated multimedia monitor
- Integrated intra-oral camera
- Complete system with camera and monitor
- High quality for a long life time cycle
- Ipad holder or big x-ray viewer

### Intraoral Camera

- Bright, clear image under all conditions
- 15 ° larger angle of view thanks to the curved design
- Illumination by 8 LEDs - reduces heat emission
- Aspherical lens - avoids distortions
- Maximum clarity - from portrait to tooth
- SoproTouch system handpiece control instead of foot switch
- Plug & Play Technology - install and operate



#### Monitor

- 22" TFT-Monitor with sealed glass front
- Specially designed for medical use
- Smooth surfaces in a special design provide easy disinfection



#### **Reliable and durable - proven in daily practice: The Ritter quality promise.**

Working with a Ritter unit means being ideally prepared for the daily challenges in dentistry. The solid construction is based on many years of experience. Ritter dental units are very reliable, robust and durable. We only use materials of highest quality. The Contact World is entirely made of metal and varnished completely. The high-quality construction and finish of Ritter units bears a commitment for life. Thanks to easy access and clearly arranged components, even installation, service and maintenance are very easy.

**Quality - Made in Germany: You can always rely on your Ritter unit!**

## Your favourite colors

Please choose your personal upholstery and varnish color:



Special coatings of unit parts as well as partly coatings for water unit or cart are available in **all RAL colors** or **metallic colors!** Standard color is RAL 9003 / signal white.

### Upholstery

- Seamless
- Colour proven and durable





### Upholstery colors



- 925 red / rot
- 924 berry / beere
- 923 dark red / dunkelrot
- 922 anthracite / anthrazit
- 921 gold / gold
- 920 blue glitter / blau glitter
- 919 light green glitter / hellgrün glitter
- 918 fuchsia glitter / fuchsie glitter
- 917 orange glitter / orange glitter
- 916 cream white glitter / cremeweiß glitter
- 915 silver / silber
- 914 black glitter / Schwarz glitter
- 913 black / schwarz
- 912 grey / grau
- 911 beige / beige
- 910 lilac / flieder
- 909 orange / orange
- 908 orange light / orangelight
- 907 cream white / cremeweiß
- 906 green / grün
- 905 aquamarine / aquamaringrün
- 904 sapphire / saphirblau
- 903 smoke blue / rauchblau
- 902 light blue / hellblau
- 901 sky blue / himmelblau

**MobiloLite 10 - Assistant stool**

- General-purpose working stools with backrest or with footring

## Stools

The MobiloLite series sets new standards in terms of ergonomics and fatigue-free work. The high level of comfort and the rapid adjustment of seat positions make these working stools to a real job aid - for the doctor and the assistant - for a long practice everyday.

E R G O N O M I C



C O N T A C T   L I T E   C O M F O R T

**MobiloLite 30 - Dentist stool**

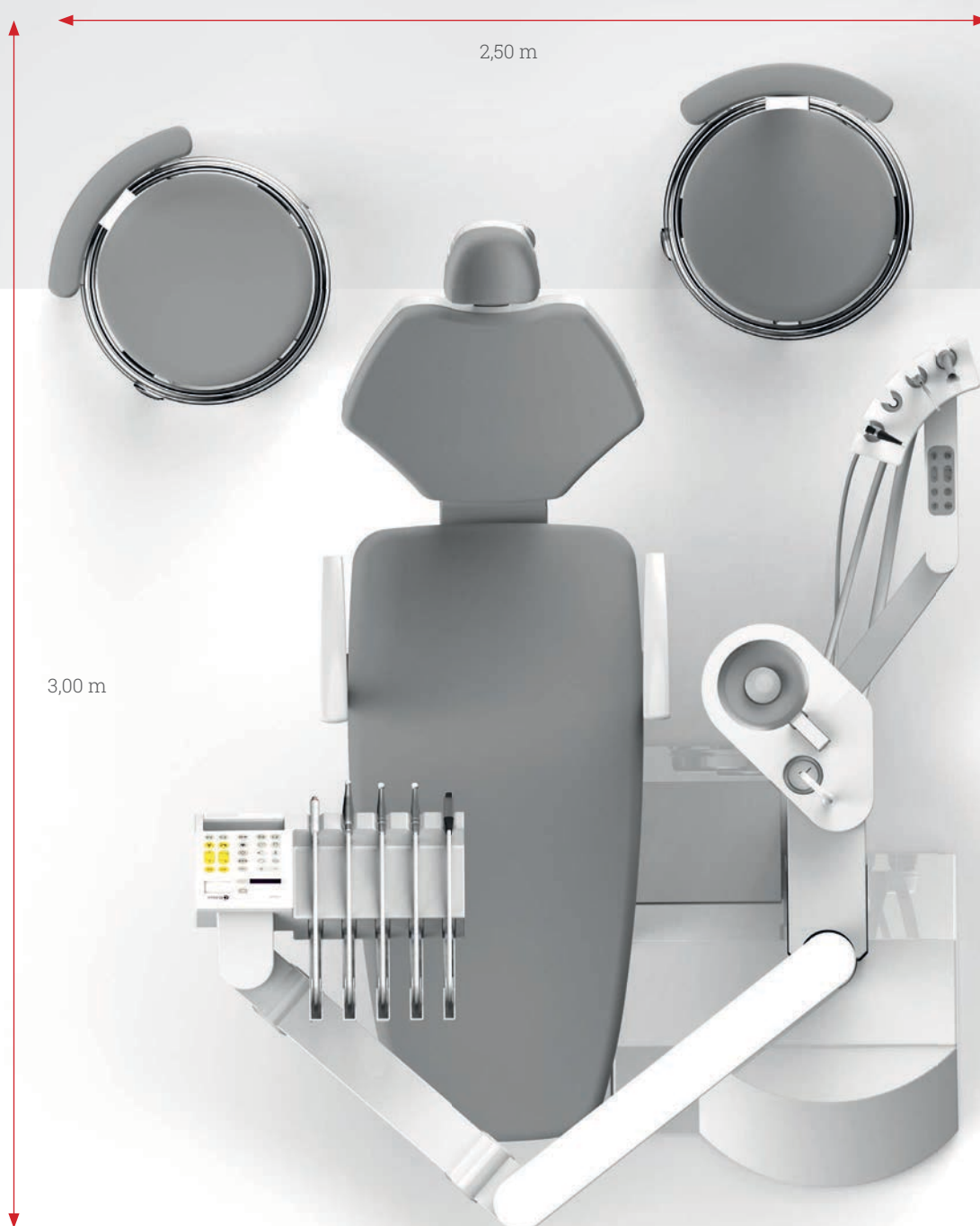
- Balanced and ergonomic backrest
- High quality, dual castors system
- With Footring available
- Hight adjustable backrest



# Dimensions

**Contact Lite Comfort has the right dimensions** - also for smaller practice rooms in all versions, whether as H-, S-, HC- or Cart-Version. With an operating range of approximately 2.5x3m, the slim unit perfectly adapts to every working environment. The operating lights can be ordered as ceiling- or unit-mounted version.

Information: A total of 2 connection points (1 standard / 1 alternative) offers additional flexibility, so that the unit can suit in every clinic room!



# Features and Options



● STANDARD     
 ○ OPTION     
 — NOT AVAILABLE

## C O N T A C T      L I T E      C O M F O R T

### Patient chair

- Trendelenburg movement
- Saving of positions
- Safety switch
- Double articulated headrest mechanically
- Double articulated headrest pneumatic
- Left armrest
- Right armrest, swiveling
- Seamless upholstery
- I-Panel

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### Dentist element

- 3 Functional syringe TopFlex
- 6 Functional syringe Luzzani
- 1. Turbine equipment
- 2. Turbine device \* 1
- 1. Motor RBL-15 LED
- 2. Motor RBL-15 LED
- 1 Motor Infinity brushless LED
- 2 Motor Infinity brushless LED
- ZEG Satelec with LED
- ZEG Kolibri S or E
- Graphical display
- Multifunction panel
- 4 user levels for instr. + Chair radio.
- Instrument spray heating
- Small x-ray film viewer
- Large x-ray film On tray or cart \* 6
- Absorption for 2 standard trays \* 2
- Pneumatic brake for arm system \* 4

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### Assistant element

- Instrument cleaning support
- 3 Functional syringe TopFlex
- 3 Functional syringe Luzzani
- 6 Functional syringe Luzzani
- Large suction hose
- Small suction hose
- LED polymerization handpiece
- 2-part arm with control panel
- 3-part arm with control panel
- Selective holder

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### Water unit

- Porcelain rinsing bowl
- Swiveling spittoon
- ABS Aqua Bottle System
- Cup heating
- Dürr Bowl Rinse Valve for wet suction
- Amalgam separator MST1 Metasys
- Amalgam Separator CAS1 Dürr (Separation system)
- MST1 ECO Light Metasys
- Automatic separation CS1 Dürr
- Double tray support \* 3

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### Small X-ray equipment

- LEADEX 70 AC or DC \* 7

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### Operating lights

- Ritter LED Sunlite / or
- Ritter LED MoonLite

- 

### Stools

- MobiloLite 10/30
- with footring

- 
- 

### Multi media

- Intraoral camera with USB connection
- Monitor Neovo \* 5

- 
- 

\* 1 Max. 3 drilling instruments (2 turbines / 1 motor or 1 turbine / 2 motors), if without scaler, 2 turbines / 2 motors possible  
 \* 2 In the case of a swinging version, it is standard for 1 norm tray / optional for 2 norm trays  
 \* 3 Only for C-, HC- and H version (S-version optional)  
 \* 4 Only for S-, H- and HC version  
 \* 5 Monitor on the cart or on the lamp pole  
 \* 6 On Cart not in combination with monitor  
 \* 7 Not possible with C-version or swiveling spittoon



## I N D I V I D U A L I T Y



Ritter  
Made in Germany

R I T T E R R 4 0 0

# Ritter R400

### **Aesthetics and individuality - not only in preventive care**

The Ritter R400 combines efficiency and userfriendly handling with pure aesthetics and individuality.

It improves the productivity in the dental office with simple and practical solutions.

The careful selection of high-quality materials, a very attractive design and outstanding functionality guarantee fantastic results.

In terms of design the Ritter R400 amazes with elegant glass elements in fresh colours that can be customized according to the personal taste.

The Ritter R400 is not only the ideal unit for preventive care, but also the favourite for every modern practice and every treatment!

C O M F O R T

## Patient chair

**Ergonomics and Wellness: Take a seat and relax. The stylish and ergonomically shaped patient chair ensures maximum comfort for patients and users.**

- Simultaneous movement (Trendelenburg) of backrest and seat
- Safe and comfortable positioning, even in extreme treatment situations
- Powerful and smooth running motors for seat and backrest
- Smooth, seamless upholstery, easy to clean and disinfect
- Flexible regulation via foot control and operating elements
- 3 automatic positions
- Rinsing position/last position
- Safety switches: Backrest, deepest position, assistant element
- Optional: Right armrest, movable

### Upholstery

- Seamless or with stitches ViscoSoft (similar to Tempur®)

**Double-articulated headrest:  
Relaxed patients - relaxed treatments**

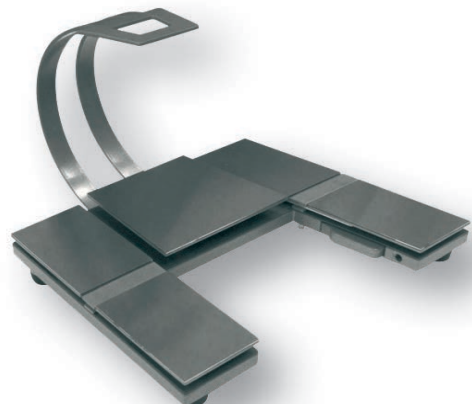
- Easy and comfortable positioning with the left hand
- Comfortable positioning of the patient's head in every treatment position
- Optimal for children and elderly patients



## Multi-function foot-controller

**Comfortable & time saving**

- One of the most ergonomic foot-controller in the market
- Activation via photo sensor – relaxed foot position
- Continuous speed regulation of the instruments
- Fast & easy activation of all functions



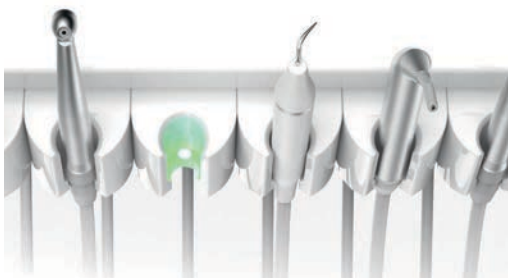
## Dentist elements

Easy handling and efficient treatments: According to the personal preference, two different versions are available, which allow an easy adjustment of the instruments, some of them even visualize the performance potential.

### FLEXIBILITY

#### „H“ Version with hanging hoses

- Comfortable instrument removal and replacement
- Perfect treatment in all positions
- Perfect ergonomics at any time
- 6 instrument holders



#### Sensor technology

##### The instrument holders:

- Activation via sensor technology
- No ingress of dirt & liquids, therefore no influence on electronics & other parts
- Easy cleaning & disinfection
- High-quality, special plastic without wear-out effect
- No deformation/material fatigue due to disinfectants



### „S“ Version with swinging hoses

- Instrument placement without eye contact
- Perfect treatment in all positions (even without assistant)
- Very good guidance when taking and placing-back the instrument
- No „pullback-effect“ during the treatment due to an optimal weight balance between instrument and hosing system
- Comfortable and convenient working
- 5 instrument holders



### Motor technology

The new generation of brushless micro-motors

- Precise, durable, wear-free, sterilizable
- Great speed range 100 - 40.000 r/min - new versatility
- Optimal balance of instrument & motor





## Operating light

**Best illumination where it is needed:**

**The Ritter LED SunLite operating light**

- Precise adaption to the working area
- Light intensity max. 35.000 lx
- Color temperature 4.200 K - 6.000 K
- Long lifespan

## Hygiene

**Safety for users and patients: Hygiene made easy**

The Ritter R400 is made for fast and effective cleaning. All critical parts and components are easily accessible and disinfectable. The surfaces are smooth and designed to prevent dirt zones and accumulations of germs and bacteria. Many components can be removed in just one simple step.

## A E S T H E T I C S

### Assistant element

#### Flexibility for maximum efficiency

- Treatment with 2 hands without losing contact to the patient
- Quick instrument change without new positioning of the users
- Max. 4 holders: 2 cannulas, syringe, curing light
- Control-buttons for water glass, spittoon-bowl and chair
- Basic equipment: Surgical suction, saliva ejector, 3F syringe

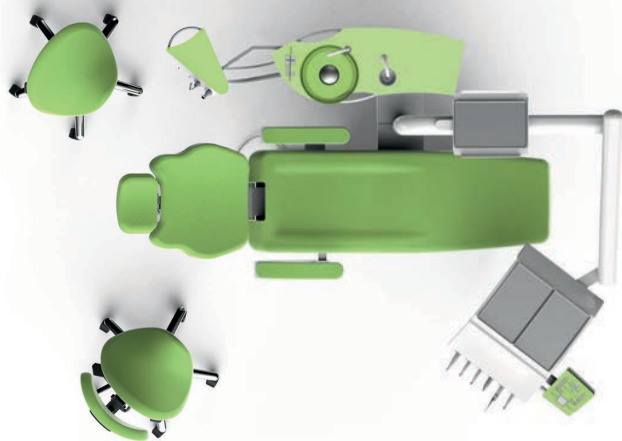


# Water unit

## Optimal hygiene and maintenance

- Chair mounted water unit
- Water bottle or tap water connection
- Ritter selective controller for suction hoses
- Optional amalgam & separator solutions
- Easy solutions - perfect efficiency & processes
- Cover made of glass
- Easy to clean and disinfect
- Movable water unit with integrated spittoon

## W O R K F L O W



### Our quality commitment

The surface-parts of the Ritter R400 Smart treatment units are made from pure metal and polyester with a highquality gelcoat-coating. No regular plastic parts being used. Extraordinary stability and a long-term consistent appearance (free of any yellowing) are the clear advantages of this combination. The parts are of the highest quality.

**Spittoon element: Aesthetics pure**

- Removable & autoclavable
- Chair mounted spittoon & water unit, therefore synchronic movement with chair
- Comfort and efficiency, up to the very detail



## ERGONOMICS



## Stools

GIRA-FLEX D & D-PLUS for dentists

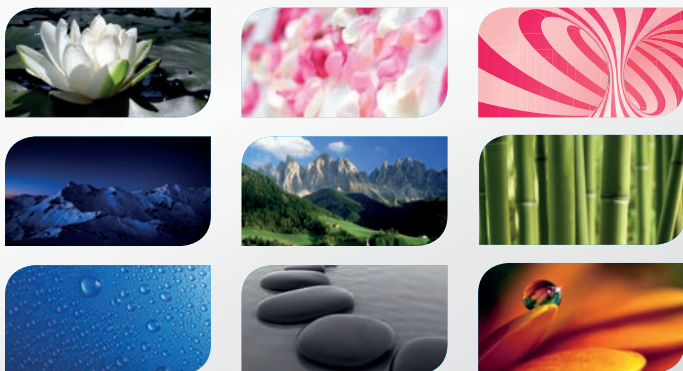
- High-quality upholstery
- Made in Germany
- Very ergonomic
- Saddle seat tilts up to 5°
- Soft substructure
- Long lifespan
- „PLUS“: Height-adjustable backrest



GIRA-FLEX A & A-PLUS for assistants

- High-quality upholstery
- Made in Germany
- Consistent weight distribution
- Seating core of PUR foam element
- „PLUS“: Height-adjustable backrest





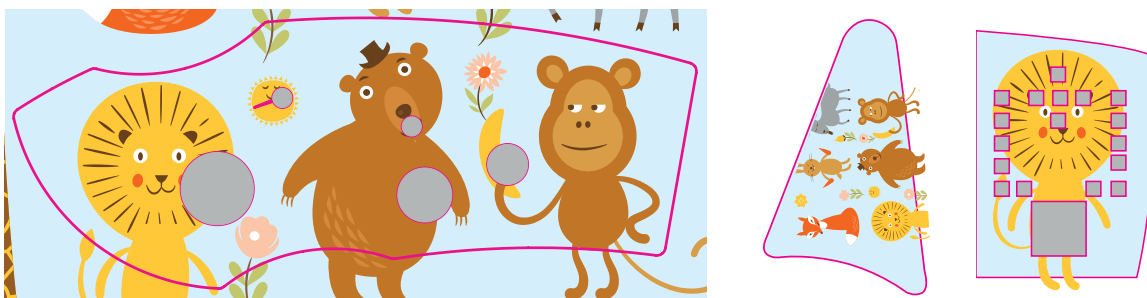
## Individual design of the glass elements

### Individuality meets personality: Individual design of glass surfaces

All glass elements of the Ritter R400 can be designed according to your personal preferences with an attractive selection of images or personal motifs.

Ask your dental dealers for examples and ideas.

Samples of individual glass elements: Water Unit, Assistant- and Doctor's touch panel



### NOTE: Requirements for own picture motifs


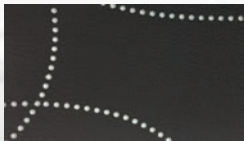
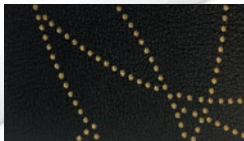

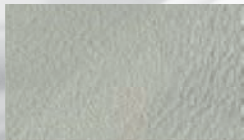
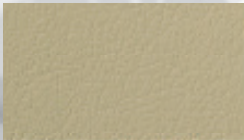



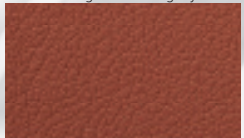



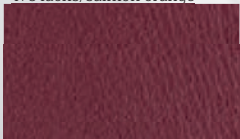
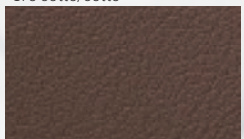
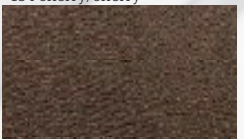
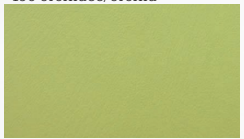
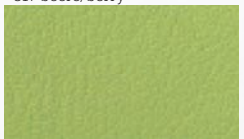
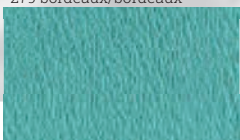
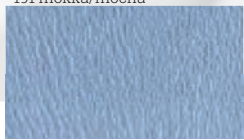
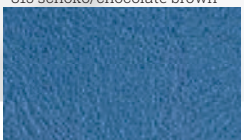
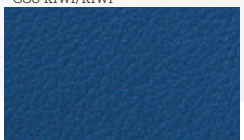
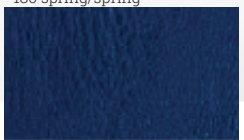




All own motifs or image files must be present in a high resolution of at least 300 DPI at 1:1 size.

For the glass surface of the water unit, the file width would be e.g. 90 cm.

Logos should be submitted as vector .EPS. In principle, all image and copyrights must be available and acquired. Ritter offers you a variety of sample motifs in a sample book - ask us!

# Upholstery colours

Ask your dental dealer for the R400 pattern folder.

				
		*ED3 grün/green	*ED1 anthrazit/anthracite	*ED2 schwarz/black
				
264 dental weiss/dental white	265 basic grau/basic grey	178 champagner/ginger	101 gelb/yellow	280 safrangelb/saffron
				
478 lachs/salmon orange	175 cotto/cotto	184 cherry/cherry	190 orchidee/orchid	817 beere/berry
				
279 bordeaux/bordeaux	191 mokka/mocha	815 schoko/chocolate brown	CS3 kiwi/kiwi	180 spring/spring
				
274 aquamarin/aquamarin	262 horizonlight/light horizon	283 pastellblau/pastel blue	189 saphir/saphir	278 saphirblau/sapphire
				
	187 basalt/basalt	316 anthrazit/anthracite	172 carbon/carbon	270 schwarz/black

Shown samples may appear different in structure and colour due to the printing process.  
 \* Not available in ViscoSoft

## Glass colours

All glass elements such as spittoon, surfaces of the water unit as well as the control panel of the dentist element can be ordered within the range of the standard glass colours. Combinations are also possible. The rinsing bowl is also available in milk glass. Caution: On colored spittoons may occur small irregularities in the glass material!

				
CS-2 YELLOW	CS-3 KIWI	E-11 ANTHRACITE	N-05 GREEN	CS-1 ORANGE
				
N-01 COPPER	N-03 BORDEAUX	N-08 BLUE	E-10 SILVER	

## V A R I A B I L I T Y

### Features and options Ritter R400

● STANDARD    ○ OPTION    — NOT AVAILABLE

#### Patient chair

Trendelenburg movement	●
Storage of positions	●
Safety switch	●
Articulated headrest mechanically	○
Double articulated headrest mechanically	●
Left armrest	●
Right armrest, swiveling	○
Seamless upholstery	●
ViscoSoft upholstery set	○
Multifunctional foot controller	●
External device connection	○

#### Dentist element

3 Functional syringe Luzzani	●
6 Functional syringe Luzzani	○
1. Turbine outlet F.O.	●
2. Turbine outlet F.O.	○
1. Motor RBL-15 LED, brushless	●
2. Motor RBL-15 LED, brushless	○
EMS no pain LED Scaler	○
Kolibri S or E Scaler	○
Control panel made of glass	●
Instrument spray heating	○
Small x-ray film viewer	●
Place for 2 standard trays	●
Manual brake for arm system	●

#### Assistant element

Operating panel	●
Extendable Assistant Element	●
3 Functional syringe Luzzani	●
6 Functional syringe Luzzani	○
Big suction hose	●
Small suction hose	●
LED Polylight	○
Selective holder	●

#### Water unit

Glass bowl	●
ABS Aqua Bottle System	●
Water disinfection system Metasys	○
Cup heating	○
Dürr spittoon valve for wet suction	●
Amalgam sep. Compact Dynamic Metasys	○
Amalgam sep. CASI Dürr	○
Automatic separation system MST1	○
Automatic separation CS1 Dürr	○
Double tray support *	○

#### Operating light

Ritter LED SunLite	●
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#### Stools

GIRA-FLEX A (with backrest / foot ring)	○
GIRA-FLEX D (with backrest / foot ring)	○

#### Multi-media

Intraoral camera with USB connection	○
Monitor Neovo	○

\* only with „S“ version



## A E S T H E T I C S



## Ritter R400 Smart

**Aesthetics and individuality -  
not only in preventive care**

Efficient & user friendly handling.  
Practical solutions. High-quality materials.  
Attractive design. Outstanding functionality.  
Elegant glass elements in fresh colours.  
Individual design, according to your taste.  
Ideal unit for every modern clinic.  
Simply smart.

C O M F O R T

## Patient chair

**Ergonomics and Wellness: Take a seat and relax. The stylish and ergonomically shaped patient chair ensures maximum comfort for patients and users.**

- Simultaneous movement (Trendelenburg) of backrest and seat
- Safe and comfortable positioning, even in extreme treatment situations
- Powerful and smooth running motors for seat and backrest
- Smooth, seamless upholstery, easy to clean and disinfect
- Flexible regulation via foot control and operating elements
- 3 automatic positions
- Rinsing position/last position
- Safety switches: Backrest, deepest position, assistant element
- Optional: Right armrest, movable

### Upholstery

- Seamless, optional with ViscoSoft (similar to Tempur®)

**Double-articulated headrest:**  
**Relaxed patients - relaxed treatments**

- Easy and comfortable positioning with the left hand
- Comfortable positioning of the patient's head in every treatment position
- Optimal for children and elderly patients



## Multi-function foot-controller

**Comfortable & time saving**

- One of the most ergonomic foot-controller in the market
- Activation via photo sensor – relaxed foot position
- Continuous speed regulation of the instruments
- Fast & easy activation of all functions



## Dentist elements

Easy handling and efficient treatments: According to the personal preference, two different versions are available, which allow an easy adjustment of the instruments, some of them even visualize the performance potential.

F L E X I B I L I T Y



### **„H“ Version with hanging hoses**

- Comfortable instrument removal/  
replacement
- Perfect treatment in all positions
- Perfect ergonomics
- 5 instrument holders

### „S“ Version with swinging hoses

- Instrument placement without eye contact
- Perfect treatment in all positions
- Very good guidance during take-away/  
placement of the instruments
- No pullback-effect
- Optimal weight balance between instrument  
and hosing system
- Comfortable, convenient working
- 5 instrument holders



### Motor technology

The new generation of brushless micro-motors, optional:

- Precise, durable, wear-free, sterilizable
- Great speed range 100 - 40.000 r/min -  
new versatility
- Optimal balance of instrument & motor





## Operating light

**Best illumination where it is needed:**

**The Ritter LED CoolLite operating light**

- 3.000 - 35.000 lx
- Shadow-reducing effect
- Removeable, sterilizable handles
- Realistic color match
- Colour temperature 5.000 K

## Hygiene

**Safety for users and patients: Hygiene made easy**

The Ritter R400 Smart is made for fast and effective cleaning. All critical parts and components are easily accessible and disinfectable. The surfaces are smooth and designed to prevent dirt zones and accumulations of germs and bacteria. Many components can be removed in just one simple step.

## H Y G I E N E

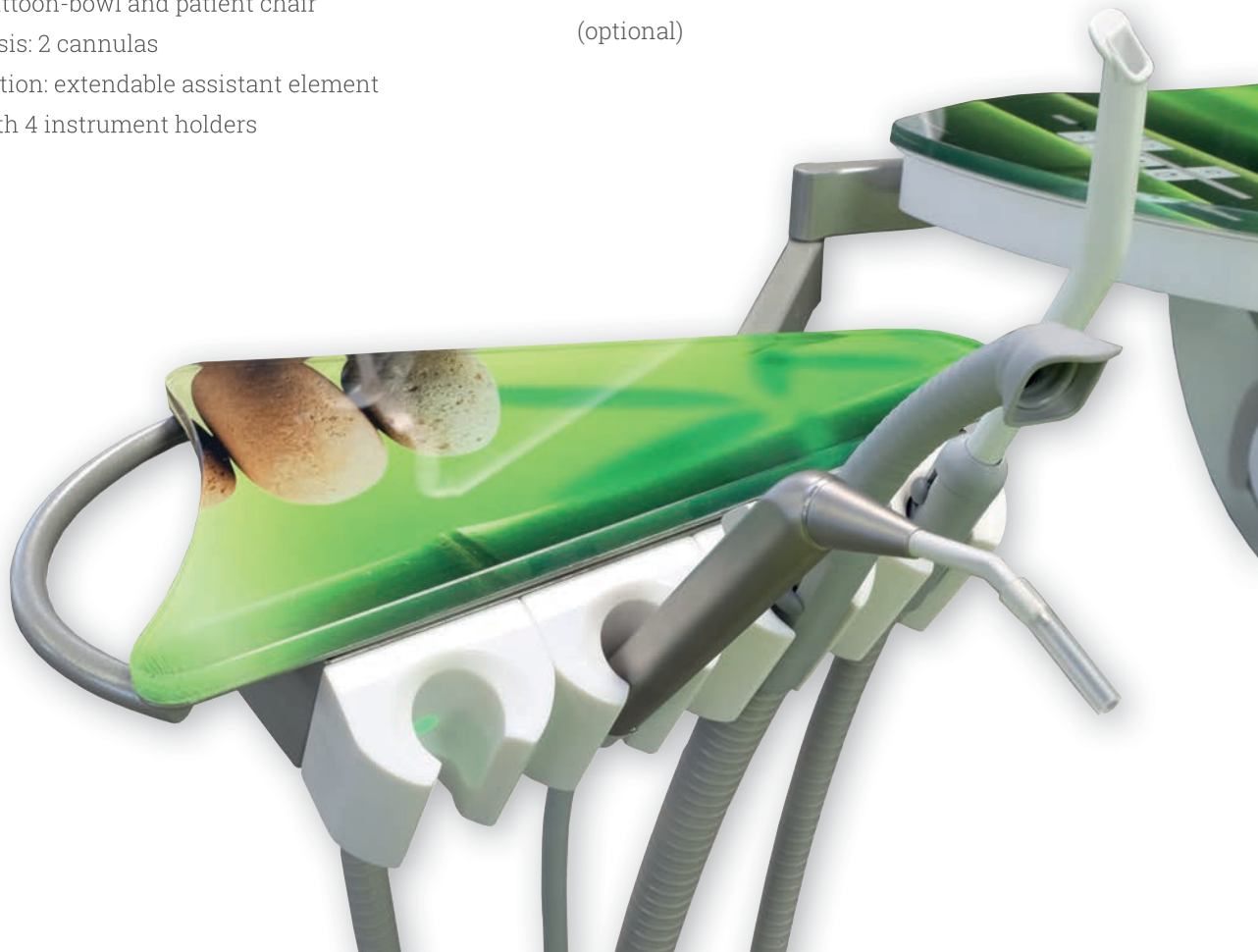
### Assistant element

#### Flexibility for maximum efficiency

- Flexibility and efficiency
- Quick instrument change
- Up to 3 instrument holders
- Control-buttons for water glass, spittoon-bowl and patient chair
- Basis: 2 cannulas
- Option: extendable assistant element with 4 instrument holders



Extendable assistant element  
(optional)



## D E S I G N



### Water unit

#### Optimal hygiene and maintenance

- Chair mounted water unit
- Aqua bottle system or automatic disinfection system
- Ritter selective controller for suction hoses (optional)
- Optional amalgam & separator solutions
- Easy solutions - perfect efficiency & processes
- Cover made of glass
- Easy to clean and disinfect
- Removable and autoclavable spittoon element



#### Our quality commitment

The surface-parts of the Ritter R400 Smart treatment units are made from pure metal and polyester with a highquality gelcoat-coating.

No regular plastic parts being used. Extraordinary stability and a long-term consistent appearance (free of any yellowing) are the clear advantages of this combination. The parts are of the highest quality.



**Spittoon element: Aesthetics pure**

- Removable & autoclavable
- Chair mounted spittoon & water unit, therefore synchronic movement with chair
- Comfort and efficiency, up to the very detail



## E R G O N O M I C S

## Stools

GIRA-FLEX D Smart for dentists

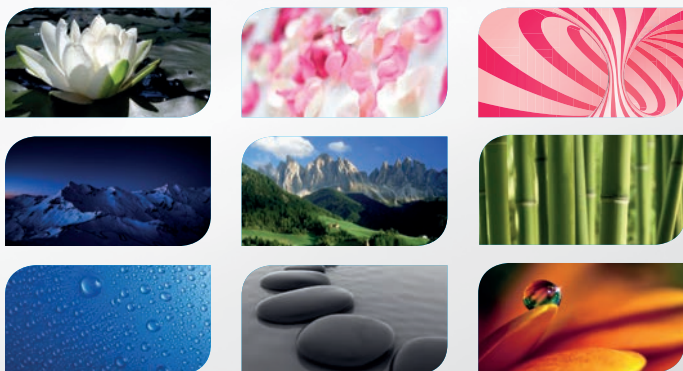
- High-quality upholstery
- Made in Germany
- Very ergonomic
- Saddle seat tilts up to 5°
- Soft substructure
- Long lifespan
- „PLUS“: Height-adjustable backrest



GIRA-FLEX A Smart for assistants

- High-quality upholstery
- Made in Germany
- Consistent weight distribution
- Seating core of PUR foam element
- „PLUS“: Height-adjustable backrest





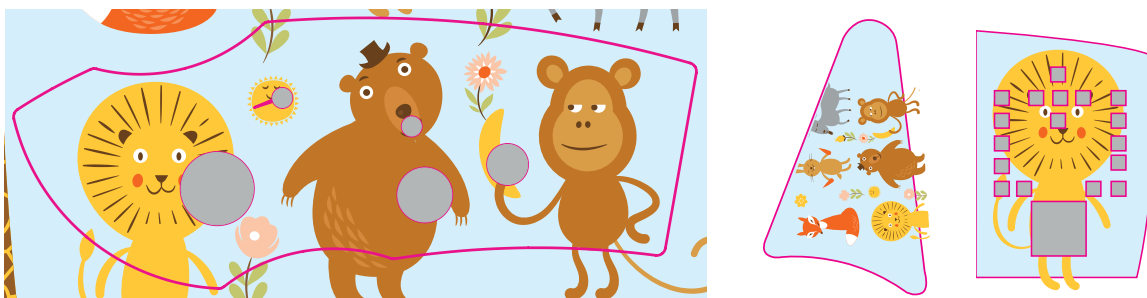
## Individual design of the glass elements

### Individuality meets personality: Individual design of glass surfaces

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Ask your dental dealers for examples and ideas.

Samples of individual glass elements: Water Unit, Assistant- and Doctor's touch panel



### NOTE: Requirements for own picture motifs



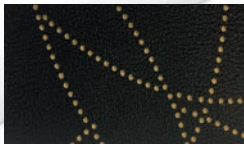


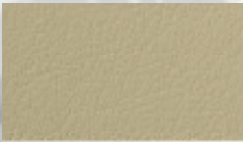



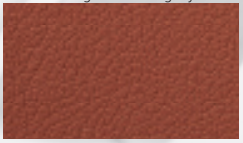



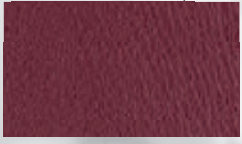
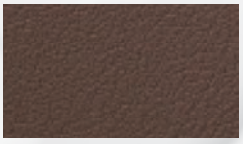

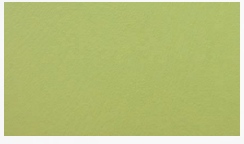
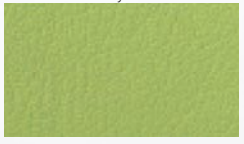

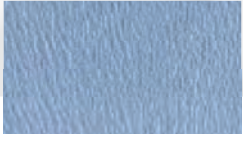



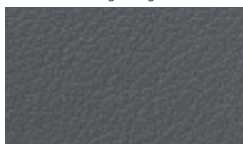
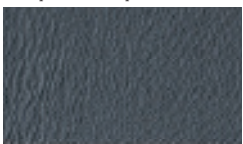
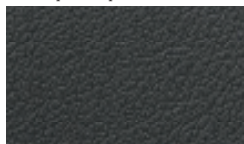
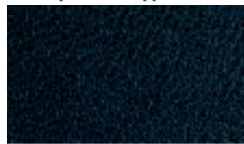
All own motifs or image files must be present in a high resolution of at least 300 DPI at 1:1 size.

For the glass surface of the water unit, the file width would be e.g. 90 cm.

Logos should be submitted as vector .EPS. In principle, all image and copyrights must be available and acquired. Ritter offers you a variety of sample motifs in a sample book - ask us!

# Upholstery colours

Ask your dental dealer for the R400 Smart pattern folder.

				
		*ED3 grün/green	*ED1 anthrazit/anthracite	*ED2 schwarz/black
				
264 dental weiss/dental white	265 basic grau/basic grey	178 champagner/ginger	101 gelb/yellow	280 safrangelb/saffron
				
478 lachs/salmon orange	175 cotto/cotto	184 cherry/cherry	190 orchidee/orchid	817 beere/berry
				
279 bordeaux/bordeaux	191 mokka/mocha	815 schoko/chocolate brown	CS3 kiwi/kiwi	180 spring/spring
				
274 aquamarin/aquamarin	262 horizonlight/light horizon	283 pastellblau/pastel blue	189 saphir/saphir	278 saphirblau/sapphire
				
	187 basalt/basalt	316 anthrazit/anthracite	172 carbon/carbon	270 schwarz/black

Shown samples may appear different in structure and colour due to the printing process.  
 \* Not available in ViscoSoft

## Glass colours

All glass elements such as spittoon, surfaces of the water unit as well as the control panel of the dentist element can be ordered within the range of the standard glass colours. Combinations are also possible. The rinsing bowl is also available in milk glass. Caution: On colored spittoons may occur small irregularities in the glass material!

				
CS-2 YELLOW	CS-3 KIWI	E-11 ANTHRACITE	N-05 GREEN	CS-1 ORANGE
				
N-01 COPPER	N-03 BORDEAUX	N-08 BLUE	E-10 SILVER	

# V A R I A B I L I T Y

## Features and options Ritter R400 Smart

● STANDARD    ○ OPTION    — NOT AVAILABLE

### Patient chair

Trendelenburg movement	●
Storage of positions	●
Safety switch	●
Articulated headrest mechanically	-
Double articulated headrest mechanically	●
Left armrest	●
Right armrest, swiveling	○
Seamless upholstery	●
ViscoSoft upholstery set	○
Multifunctional foot controller	●
External device connection	-

### Dentist element

3 Functional syringe standard	●
1. Turbine outlet F.O.	●
2. Turbine outlet F.O.	○
1. Motor Infinity brushless	○
2. Motor Infinity, brushless	○
1. Motor RBL-15 LED, brushless	○
2. Motor RBL-15 LED, brushless	○
Kolibri S or E Scaler LED	○
Control panel made of glass	●
Instrument spray heating	○
Small x-ray film viewer	●
Place for 2 standard trays	●
Manual brake for arm system	●

### Assistant element

Operating panel	●
Extendable Assistant Element	○
3 Functional syringe	○
Big suction hose	●
Small suction hose	●
LED Polylight	○
Selective holder	○

### Water unit

Glass bowl	●
ABS Aqua Bottle System	●
Water disinfection system Metasys	○
Cup heating	○
Dürr bowl rinse valve for wet suction	○
Amalgam sep. Compact Dynamic Metasys	○
Amalgam sep. CAS1 Dürr	○
Automatic separation system MST1	○
Automatic separation CS1 Dürr	○
Double tray support *	○

### Operating light

Ritter LED CoolLite	●
---------------------	---

### Stools

GIRA-FLEX A Smart (with backrest / foot ring)	○
GIRA-FLEX D Smart (with backrest / foot ring)	○

### Multi-media

Monitor preparation	○
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\* only with „S“ version

# Ultimate Comfort left/right

U  
L  
T  
I  
M  
A  
T  
E  
C  
O  
M  
F  
O  
R  
T



## C O M F O R T

### **Left and right swivable**

The left and right swivable unit can be switched from right hand use to left hand use very easily.

The patient chair is synchronized - available as electric- or hydraulic version and has a 30° chair movement for easy access.

The unit has a memory-system

- spittoon position
- last position
- light off / light on

The water unit has a self-contained clean water system. The multifunctional foot pedal control system is easy to use and supports an excellent workflow.

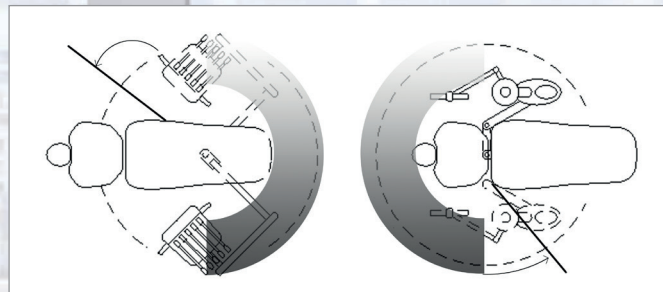
The Ultimate Comfort is outstanding ergonomic and efficient for the daily use.



# Patient chair

Changeable on the fly:

Swivel points and centers of rotation



## V A R I A B I L I T Y

### Patient chair

- Electric or hydraulic chair movement for fast and quiet movements
- Ergonomic design for comfortable seating also during long treatments
- Broad space for dentist's legs
- High-quality leather upholstery
- Chair swivel 30° left/right
- 4 programmable chair positions, plus last position
- Auto return function :  
If the safety switch is activated, the chair automatically goes up for a few cm
- Safety switches
- Trendelenburg movement:  
Seat and backrest movement synchronized
- Left and right armrest
- Double-articulated headrest

U L T I M A T E C O M F O R T

# Dentist elements

## S-Version, swinging version

- Traytable available
- Pneumatic arm brake mechanism
- Up to 5 instruments
- 2 touchpanels with x-ray viewer
- 4 programmable patient chair positions, plus last position
- Optional brushless motors with LED

## H-Version, hanging version

- Traytable available
- Pneumatic arm brake mechanism
- Up to 5 instruments
- 2 touchpanels with x-ray viewer
- 4 programmable patient chair positions, plus last position
- Optical sensors in instrument holders
- Optional brushless motors with LED

## Control panel

- Touchpanels with x-ray viewer
- 4 programmable patient chair positions, plus last position

Equipped with 2 touch panels!



- Removable silicon pad for easy cleaning and disinfection (S-Version)

# Operating Light

## Ritter SunLite LED

- Intensity of light 8.000 - 35.000 lx
- Colour temperature 4.200 - 6.000 K
- Adjustable temperature color
- Adjustable light intensity
- Low heat emission
- Long lifetime cycle
- Precise illumination of the working field



Q U A L I T Y

U L T I M A T E  
C O M F O R T

## Assistant Element

- Integrated touch panel
- Up to 4 instruments
- Large and small suction hose
- Assistant syringe
- Double-articulated and adjustable arm movement



Double articulated assistant arm,  
hight adjustable

# Foot controller

Modern design for chair movement and instruments:

- Large foot handle for easy repositioning
- Manual control of chair movements
- Up/down of backrest and chair

Program control of chair movements:

- Spitting position/last treatment position
- Free programmable chair positions
- Entry / Exit position

Control of instruments:

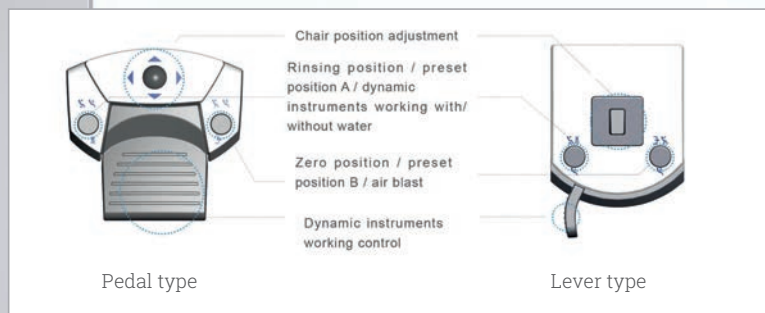
- Speed/power control for the active instrument
- Individual water on/off mode for each instrument line

Buttons:

- Spray water at instrument
- Chip blower function

Versions:

- Standard lever type
- Optional pedal type



# Stool



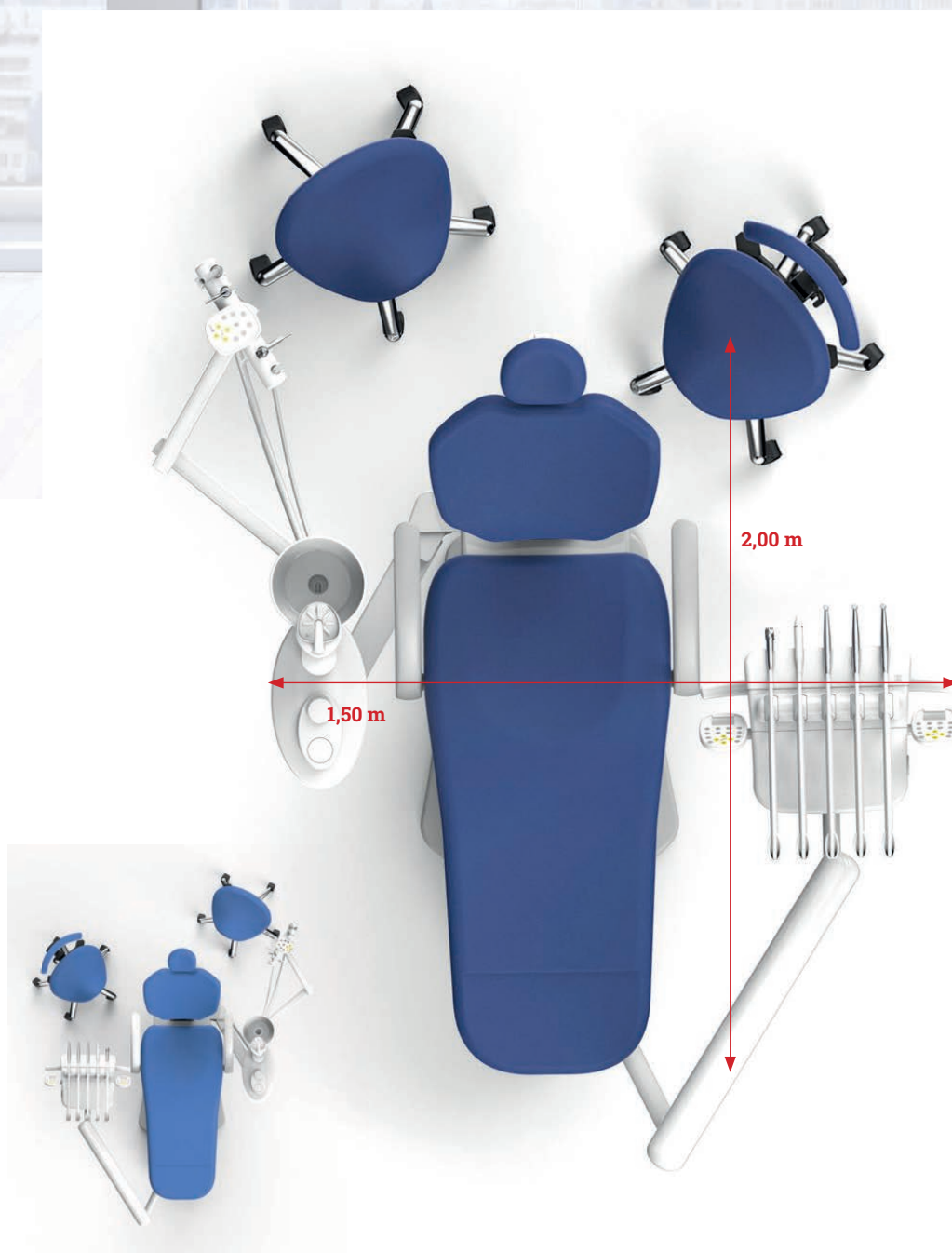
- Backrest with fixed position or dynamic movement
- Ergonomic and comfortable seating
- Symmetrical backrest
- Gas lift cylinder
- Chrome legs
- Five dual castors for stability
- Colour-matching upholstery available in multiple colours
- Available with or without footring

## Optimum use of room

The Ultimate Comfort is also very well suited for smaller clinic rooms, in which only limited space is available.

Measurements in mm

E F F I C I E N C Y



U L T I M A T E  
C O M F O R T

# Upholstery colours

## Upholstery colours:

Multiple fresh and modern colours are available.

D I V E R S I T Y



U L T I M A T E   C O M F O R T



0# (PEA)	green
1# (PEB)	skyblue
5# (PEC)	orange
9# (PED)	light green
11# (PEE)	silver
13# (PEF)	grey
14# (PEG)	black
15# (PEH)	rose red
16# (PEI)	red
17# (PEK)	lemon
18# (PEL)	dark red
19# (PEM)	night blue

Shown samples may appear different in structure and colour due to the printing process.

## Features and options

● STANDARD    ○ OPTION    — NOT AVAILABLE

### Patient chair

Trendelenburg movement  
Storage of positions  
Safety switch  
2 articulated headrest mechanically  
Left and right armrest  
Seamless upholstery  
Multifunctional control  
30° chair movement

### Dentist element

3 Functional syringe  
3 outlets for turbine or air motor without light  
Fibre optic outlets  
Motor Infinity brushless LED  
ZEG Kolibri S or E  
Small x-ray film viewer  
Recording for 2 standard trays

### Assistant element

Operating panel  
Adjustable assistant element  
3 Functional syringe  
Large suction hose  
Small suction hose  
LED polymerization handpiece

### Water unit

Moveable ceramic cuspidor  
ABS Aqua Bottle System  
Heating for cup filler  
Connection for external suction  
Place selection valve  
Venturi System

### Operating light

Ritter SunLite LED  
Ritter CoolLite LED

### Stools

Mobilo Flex 50  
Mobilo Flex 50 with footring

### Multi-media

Intraoral camera

U L T I M A T E C O M F O R T



Also available with seamed and soft comfort upholstery.

# Ultimate Comfort Smart

U L T I M A T E   C O M F O R T   S M A R T



S M A R T Q U A L I T Y

Made by Ritter Germany

U L T I M A T E C O M F O R T S M A R T

## Comfort and Quality

The patient chair is synchronized and is electric driven. An ergonomic chair height guarantees easy access. The water unit has a self-contained clean water system. The multifunctional foot pedal control system is easy to use and supports an excellent workflow.

The unit has a memory-system:

- spittoon position
- last position
- light off / light on

The Ultimate Comfort Smart is outstanding ergonomic and efficient for the daily use.



## S M A R T   C O M F O R T

### Patient chair

- Electric chair movement  
for fast and quiet movements
- Ergonomic design for comfortable seating  
also during long treatments
- Broad space for dentist's legs
- High-quality leather upholstery
- 4 programmable chair positions, plus  
last position
- Auto return function :  
If the safety switch is activated, the chair  
automatically goes up for a few cm
- Safety switches
- Trendelenburg movement:  
Seat and backrest movement synchronized
- Left and right armrest
- Double-articulated headrest



## Dentist elements

Easy handling and efficient treatments: According to the personal preference, two different versions are available, which allow an easy adjustment of the instruments.

### „S“ Version with swinging hoses

- Traytable available
- Pneumatic arm brake mechanism
- Up to 5 instruments
- 4 programmable patient chair positions, plus last position

### Control panel

- Touchpanels with x-ray viewer
- 4 programmable patient chair positions, plus last position
- Removable silicon pad for easy cleaning and disinfection (S-Version)

### „H“ Version with hanging hoses

- Traytable available
- Pneumatic arm brake mechanism
- Up to 5 instruments
- 4 programmable patient chair positions, plus last position
- Optical sensors in instrument holders

## S M A R T I L L U M I N A T I O N



### Operating light

**Illumination where it is needed:**

**The Ritter LED operating light**

- Intensity of light 8.000 - 30.000 lx
- Sensor switch - rear side - by hand movement
- Colour temperature 5.000 K
- Adjustable temperature color
- Adjustable light intensity
- Low heat emission
- Precise illumination of the working field

Made by Ritter Germany 

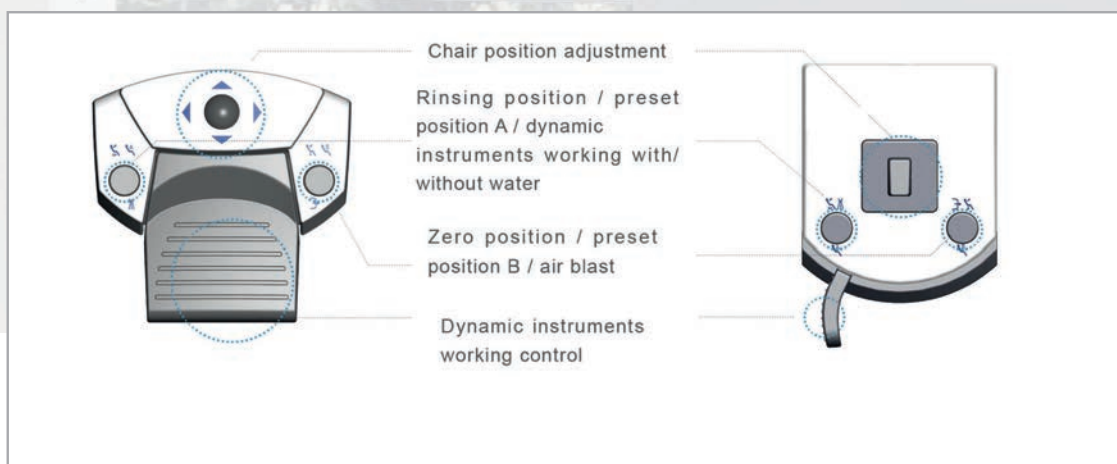
# S M A R T   A S S I S T A N C E

## Assistant element

### Flexibility for maximum efficiency

- Integrated touch panel
- Up to 4 instruments
- Large and small suction hose
- Assistant syringe





## Foot controller

### Modern design for chair movement and instruments:

- Large foot handle for easy repositioning
- Manual control of chair movements
- Up/down of backrest and chair
- Program control of chair movements:
- Spitting position/last treatment position
- Free programmable chair positions
- Entry / Exit position

### Control of instruments:

- Speed/power control for the active instrument
- Individual water on/off mode for each instrument line

### Buttons:

- Spray water at instrument
- Chip blower function

### Versions:

- Standard lever type
- Optional pedal type



Standard lever type



Optional pedal type

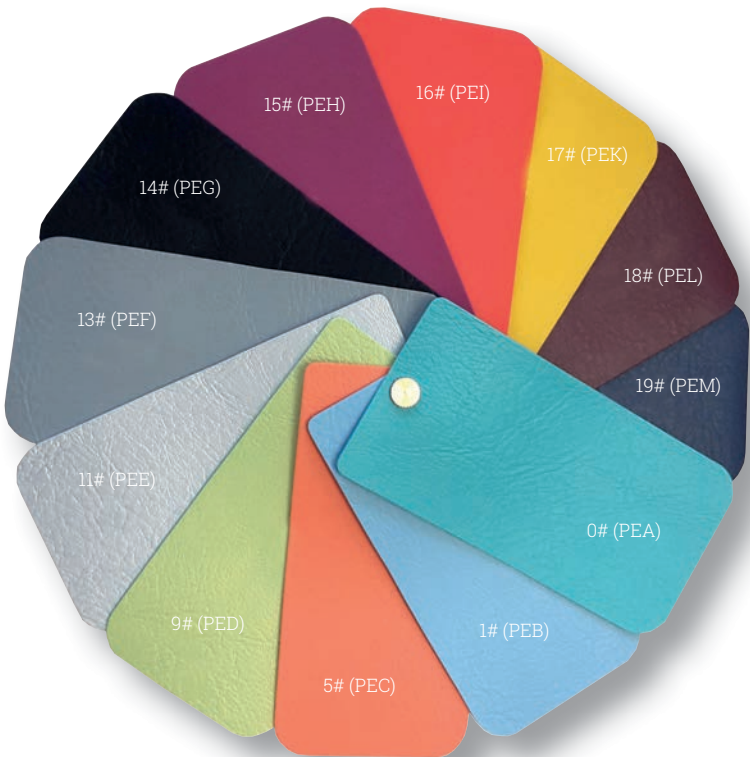
# Stool

- Backrest with fixed position or dynamic movement
- Ergonomic and comfortable seating
- Symmetrical backrest
- Gas lift cylinder
- Chrome legs
- Five dual castors for stability
- Colour-matching upholstery available in multiple colours
- Available with or without footring



# Upholstery colours

For stool and patient chair. Ask your dental dealer for the Ultimate Comfort Smart pattern folder.



0# (PEA)	green
1# (PEB)	skyblue
5# (PEC)	orange
9# (PED)	light green
11# (PEE)	silver
13# (PEF)	grey
14# (PEG)	black
15# (PEH)	rose red
16# (PEI)	red
17# (PEK)	lemon
18# (PEL)	dark red
19# (PEM)	night blue

Shown samples may appear different in structure and colour due to the printing process.

## SMART OPTIONS

### Features and options Ultimate Comfort Smart

● STANDARD      ○ OPTION      — NOT AVAILABLE

#### Patient chair

Trendelenburg movement	●
Storage of positions	●
Safety switch	●
2 articulated headrest mechanically	●
Left and right armrest	●
Seamless upholstery	●
Multifunctional control	●

#### Dentist element

3 Functional syringe	●
3 outlets for turbine or air motor without light	●
Fibre optic outlets	○
Motor Infinity brushless LED	○
ZEG Kolibri S or E	○
Small x-ray film viewer	●
Recording for 2 standard trays	●

#### Assistant element

Operating panel	●
Moveable assistant element	●
3 Functional syringe	●
Large suction hose	●
Small suction hose	●
LED polymerization handpiece	○

#### Water unit

Moveable ceramic cuspidor	●
ABS Aqua Bottle System	●
Heating for cup filler	●
Connection for external suction	○
Place selection valve	○
Venturi System	●

#### Operating light

Ritter LED	●
Ritter SunLite LED	○

#### Stools

Mobilo Flex 50	●
Mobilo Flex 50 with footring	○

#### Multi-media

Intraoral camera	○
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# S T E R I L I Z A T I O N



**Ritter Autoclave Class B**

Made by Ritter Germany 

### LCD display & integrated printer

The user-friendly, multi-language LCD display indicates temperature, pressure, time and cycle status. It allows an easy selection of the 13 different programmes. Any deviation or errors are shown in the display and are partially accompanied by an acoustic signal. CleanTec CB23 includes an internal printer for documentation. Also a USB 3.0 connection for easy data saving is integrated.



#### Technical Specifications

Overall dimensions (L x H x D)	505 x 400 x 650 mm
Weight (with empty tanks)	50 kg
Weight (with full tanks)	55 kg
Weight per unit area of support:	Max. 32.46 N/cm <sup>2</sup>
Colour:	RAL9002
Material:	SUS304 Steel FeP01 Steel (Cover)
Noise level at 1 m distance:	54 dBA
Noise level in front of the display:	63 dBA
Max. transmitted heat	6.3 MJ/h (1506 kcal/h)

#### Electrical specifications

Rated voltage:	230 V ~ 50/60 Hz
Rated input:	1750 W
Supply cable	(L 1.5 m) 2+1 x 1.5 mm <sup>2</sup>
	Fuses T6A
Insulation	Class I

#### Chamber specifications

Max. working pressure:	0.21 MPa (relative)
Max. working vacuum:	-82 kPa (relative)
Max. vacuum (drying process):	-94 kPa (relative)
Max. working temperature:	137°C
Material:	Stainless steel SUS 304
Dimensions: ØxP	250 x 450 mm

#### Clean water tank + Dirty water tank specifications

Max. capacity:	4.5 l
Cycles per tankful	~4
(before the min. level indicator lights up)	
Material:	Stainless steel

#### Bacterial filter data

maximum diameter	56 mm
max. allowed filtering capacity	0.3 µm
No. of cycles before replacement	~150



## CleanTec CB23 with LCD Display

Patented autolock system

The CleanTec CB23 is the ideal autoclave for all dental clinics that demand an effective and reliable autoclave with more space for instruments, thanks to the 23 liter chamber.



### Sterilizable products:

Solid instruments



Hollow instruments



Wrapped instruments

Porous loads

# S T E R I L I Z A T I O N

LCD-Display



## High-Quality Components & Reliability

The high performance pump has a very long lifespan and a 2-year warranty.

Also it guarantees a low operation noise level (<54 dBA in 1 m distance). The premium valves even come with a 4-year warranty.

The stainless steel tank is robust and easy to clean. Revised electronic components and software updates correspond to the latest standards.

Due to the high quality of the components, CleanTec CB23 requires only little maintenance.

**The CE-certified device is also available in an 80 liter version for big clinics.**

Including internal printer

Made by Ritter Germany



## Performance & Efficiency

CleanTec CB23 fully corresponds to the requirements of class B autoclaves. The high performance double stage vacuum pump creates a fractionated pre- and post vacuum, which guarantees efficient sterilization and drying processes. The optimum heat retention ensures a low level of energy consumption.

Also the CleanTec CB23 facilitates the quick availability of instruments and textiles after 23 minutes (unwrapped solid cycle) and only 13 minutes (quick cycles). The patented autolock door-system provides extra safety. CleanTec CB23 contains a built-in water storage tank and can optionally be connected to the demineralisation system and the drain.

## Leadex 70

The Leadex 70 is designed for all needs of intra-oral dental radiology in the modern dental practice. Integrated directly at your Ritter dental unit, Leadex 70 is a flexible, fast and safe solution to produce an excellent small x-ray image chairside. Compatible with standard films and digital x-ray sensors, it guarantees sharp and high-contrast images at an attractive price.

The control unit is easy and intuitive to use. It can be mounted directly on the wall in the treatment room or in a side room (cables from the unit in the ground). The x-ray procedure is effected via the control panel or via the included remote control unit.

### X - R A Y   D E V I C E



## Technical Data

Dental x-ray Leadex 70 – Intraoral x-ray for analog and digital x-ray

	AC	DC
Tube head:		
Voltage:	220 V; 230 V; 240 V; 115 V -5%+10%	230; 115 V +/-15%
Frequency:	50/60 Hz	50/60 Hz
Main resistance:	0.5 Ohm; 0.2 Ohm	0.5 Ohm; 0.2 Ohm
Current:	3,5 A; 3,2 A; 3 A; 5,5 A	6 A; 11 A
Fuse:	6,3 AF; 8 AF-250 V	8;12,5 AF-250 V
Focal spot:	0.7	0.7
Connection:	coaxial plug, free rotation in horizontal plane	same as AC
High Voltage		
Potential:	70 kV 8mA	60-70 kV
Anodic Current:	8 mA	4-8 mA
Duty Cycle:	1:32	1:32
Total Filtration:	2.0 mm Al	2.0 mm Al
Half layer value:	2,0 mm Al@70 kV	2,0 mm Al@70 kV
Radiation leakage:	< 0,25 mGy/h@1 m	< 0,25 mGy/h@1 m
Exposure time:	0,08 s + 3,2 s (17 Steps)	0,02 s-3,2 s (28 Steps)
AC/DC all:		
Beam limiting device		
Output section:	round ; rectangular	
Focus Skin Distance:	20cm; 30cm	
Mounting		
System:	Wall /Mobile/Unit mounting	
Extension arms:	41, 82 and 110cm	
Useful reach:	143cm with 41cm ext. arm 184cm with 82cm ext. arm 212cm with 110cm ext. arm	
Total weight	29 kg	19,5 kg



# Compressors and Suctions

## OUR COMPRESSORS ARE UNIQUE

During normal daily operations, especially in sensitive settings such as scientific labs, as well as medical and dental offices, it is crucial not to have equipment malfunction and failure. Interruptions of this nature adversely impact quality, timing, and cost – essential elements in today's

highly competitive market. For this reason Ritter Gentilin tends to be a source of information in a segment increasingly large and elaborate, where it becomes all too easy to get lost among its numerous and diverse options.

**Ritter offers compressor systems for one or multiple units.**



## OUR SELLING POINTS



64 Dba:  
EXCEPTIONAL LOW NOISE ACROSS THE  
BOARD, INCLUDING STANDARD MODELS



A FURTHER DROP OF 10-15 Dba  
BY MEANS OF NOISE REDUCTION  
FEATURES



PATENTED TECHNOLOGY  
AND LOW MAINTENANCE



EFFICIENCY +20%  
INCREASED AIR DELIVERY



CONTAMINATION-FREE AIR WITH  
FILTERS UP TO 0,01 micron



100% DUTY CYCLE  
CONTINUOUS OPERATION



10 BAR  
OPERATION



LOW-ABSORPTION MOTORS -  
NO OVERHEATING CONCERNS

# S U C T I O N

## **The innovative single unit, semi-wet suction system with integrated air-water separation**

Cost reduction effect:

The optimal integration of the semi-wet suction unit and the air-water separation enables cost savings regarding installation, operation and maintenance.

Powerful and reliable:

EXCOM hybrid 1s convinces with high suction power at the cannula and therefore is an absolutely reliable system for each practice.

Maximum safety while operating:

The dynamic separation of the EXCOM hybrid 1s guarantees maximum functionality. This ensures an absolutely trouble free operation and therefore also a substantial stress reduction for the user and the team.

User-friendly maintenance and easy servicing:

Provided by the compact modular building method of the EXCOM hybrid 1s.

Eco-friendly:

Thanks to the semi-wet suction system, no precious and expensive fresh water is wasted.

### **Technical data**

- Main voltage 230 V AC
- Frequency 50/60 Hz
- Max. current consumption 3.3/4.1 A
- Max. electrical shaft power 0.75/0.9 kW
- Max. ambient temperature 40°C
- Air Flow Rate 1.100 l/min
- Negative pressure regulated 120 mbar
- Operating time 100%
- Weight 15 kg
- Noise level 63 dB(A)
- Dimensions (HxWxD) 530x320x350 mm



# Girardelli Developing Machines

G I R A R D E L L I X - 3 D



**The GIRARDELLI X-3D immersion x-ray processor with integrated daylight attachment fulfils all present requirements of a modern and efficient developing automat:**

**Integrated daylight attachment**

Processing under daylight conditions. A dark-room is not necessary.

**Auto-activator**

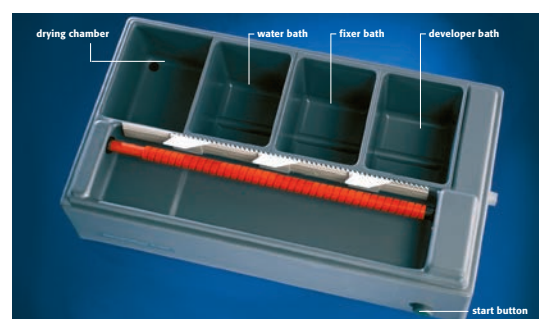
When pressing the start button, the transport shaft and the dryer-blower are now operative. At the end of the development process, the appliance will be switched off by pressing the start button again.

**Electronical bath heating**

The electronically regulated bath heating guarantees a steady temperature at all times. This way an optimal picture quality and life span of the GIRARDELLI developing concentrate (up to 12 weeks per batch) is achieved.

**Automatic film drying**

Very powerful dryer-blower for fast and efficient film drying.



## G I R A R D E L L I X - 1



**The GIRARDELLI X-1 table darkroom meets all today's requirements of an efficient hand-developed device.**

### Technical data

Dimensions:

46 x 32 x 30 cm (W x D x H)

Contents of the cups:

4 x 0.225 litres

Weight: approx. 2.3 kg

Standard equipment:

detachable red light lens, 3 film holders for single films, 4 x 0.225 litre plastic cups with screw lid closure

- Each part used is extremely stable and chemically resistant
- Minimal service costs over many years
- Ideal cup size
- Allows the development of intraoral film sizes
- Even occlusal films can be developed
- Minimal maintenance
- Only short cleaning of the cups necessary when changing the used GIRARDELLI powder development concentrate.
- Simplest operation
- The film holders can be loaded and the films can be developed via the manual interventions.
- Slanted top allows for excellent visibility

## G I R A R D E L L I D A - 1

The purpose of the GIRARDELLI DA-1 disinfection automat is the hygienic and surgical hand disinfection in the entire medical- and food-industry.

Efficient and sparing.



## Dental Accessories

### C U R I N G   L I G H T



**Basic Curing Light - built in** - Curing light LED

- Three working modes: Full, Ramping, Pulse
- Curing light from 10 seconds up to 50 seconds
- Autoclavable Optic Fiber
- Light protector
- Led Source 3 watts
- Wave length power over 1000mW/cm<sup>2</sup>



# SCALER



## Ritter Scaler Kolibri - built in or stand alone

- Detachable handpiece
- PC control
- Automatic frequency tracking
- Output power: 3W-20W
- Output tip vibration frequency: 28kHz+/-3kHz
- Scaler tips available



## Scaler Tips

scaling, periodontics, and endodontics

Ritter offers a wide range of scaler tips for most of scaler systems, as Satelec/EMS for a very resonable price.



## Implants - Made in Germany

1. A predictable experience
2. 3-in-one initial drill
3. Built-in stoppers
4. Grade 5 Titanium
5. Tapered & self tapping Implants
6. SB/LA surface treatment
7. Length specific drills
8. Platform-shifted abutments
9. Streamlined surgical site preparation
10. Reduced osteotomy prep time
11. Tissue margin ring on final drills
12. Wide range of prosthetics
13. Narrow Line platform 2.9mm fit 3.0, 3.3 (mm) implants
14. Standard Line platform 3.75mm fit 3.75, 4.2, 5.0 & 6.0 (mm) implants



### Surgical Kits

Ritters Surgical Kits are very clearly arranged and self explanatory - very easy to use. Available as **Advance Kit** (6 straight drills with stopper sleeves) or beginners **Professional Kit** (complete sequence of conical drills incl. stopper function).

## Wide range of prosthetic components

The Ritter Implant System offers a wide range of prosthetic components. This includes the Platform Shifting feature for many abutments to assist a perfect soft tissue management.



Analogue and digital  
Impression Transfer



Angled Abutments  
from 15° up to 25°



Healing Caps



Straight Abutments



Casting and restoration Abutments  
Gold / Peek / Zirconia





 Ritter  
Made in Germany

W O R L D W I D E



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**Your Ritter Partner**