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Due to our policy of constant technological upgrading, technical specifications may be subject to change without prior notice.

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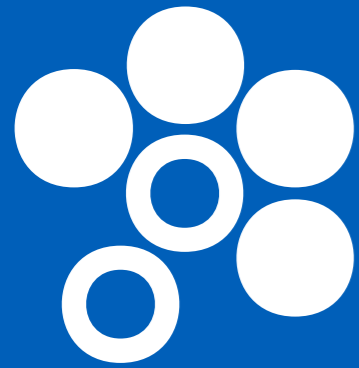
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# S320TR

PERFECT PROFESSIONALISM

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## CUTTING-EDGE TECHNOLOGY

The S320TR implements a series of advanced technologies to allow precision control of integrated systems and instruments, including specialised ones. New innovations for conservative dentistry, voice-controlled interaction and NFC devices form the technological heart of the model.

## INSPIRING ERGONOMICS

Compact design, lighter key elements, exclusive ergonomic concepts: the S320TR model provides the dental team with an array of benefits. Moreover, the patient chair - with its contemporary lines, independent or synchronised movements and Sliding function - ensures maximum comfort.

## HYGIENE AT ALL TIMES

Available on any configuration, the advanced hygiene systems have been perfected to offer simple, user-friendly control. Certified disinfection devices and built-in design features minimise risk and provide unprecedented effectiveness.

YOUR TALENT INSPIRES US









### Voice controls

To make interaction between staff and instruments even more agile, the virtual voice assistance system offers numerous workflow improvement opportunities. For example, assistants or dentists can manage the operating light via voice controls. These let users switch on, switch off or select "composite" mode. Speeds up tasks and enhances hygiene as there is no physical contact with the light. If the dental unit is connected to the PC, dentists can interact with the image management software via voice control. This lets them save the images that have just been captured by a camera or X-ray sensor.

Before managing a device with voice control, the system must be activated via the foot control on the base of the dental unit.



### Interactive LED Pack

As-standard application that makes dental unit design more appealing and provides user-friendly info on the status of the various integrated functions via LEDs. There are several warnings/indicators: their colour provides dentists with a range of useful information, from scaler mode to hygiene cycle progress on the dental unit. During root canal treatment with the apex locator on, the LED ring changes colour, passing from green to yellow to red according to the distance from the apex (this mirrors the on-panel bar colours).

After starting the stopwatch, the LED ring is gradually turned off, flashing briefly when the timer expires.







**The new 7" control panel with multitouch display is at the forefront of technological development in the dental industry**

The interface provides users with a clear, comprehensive array of information and plenty of scope for customization. New graphics improve the user experience and streamline interaction thanks to simple smartphone-like controls. Designed for clinical environments, it is resistant to impact and water and can be positioned to suit your needs. The control panel allows dental unit functions to be upgraded with ease as necessary. The control panel can also be used to customise the LED ring colour and the related activation areas.

**Multi-touch display**  
The large 7" touch screen ensures excellent visibility from any angle, offers HD resolution and displays images and videos.

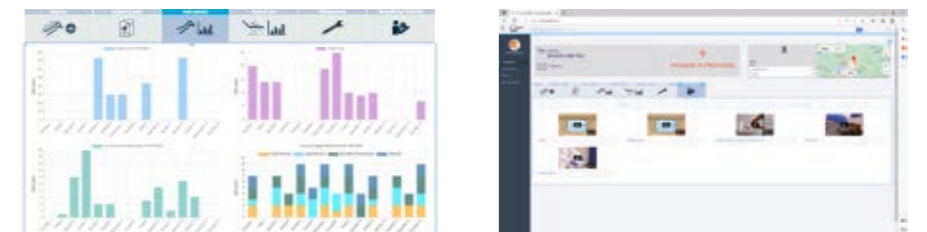


To keep pace with technological developments, the Stern Weber product range features Internet connectivity. This latest innovation provides access to optional digital services that improve dental surgery efficiency.

**Di.V.A. (Digital Virtual Assistant)**

With Di.V.A., a user-friendly dashboard lets dentists or surgery owners monitor dental unit use, instrumentation and the disinfection cycles performed. Data can be obtained quickly and easily as it's managed on a web portal, accessible from any browser.

Where a patient sensor is present, users can accurately quantify effective use of the patient chair. What's more, Di.V.A. gives direct access to video tutorials and the user manual for the model in question.



**easycheck**

When linked to the web via Easy Check, the dental unit can rely on real-time remote diagnosis and technical support: this valuable tool helps technicians speed up assistance and manage it more effectively.

**Wearable technologies and voice-activated controls**

Instant NFC connectivity to access custom settings. Just bring the silicone bracelet (which can be sanitised) close to the dentist's module to activate the previously saved work settings (i.e. parameters for instruments, patient chair, operating light, plus interface preferences). Voice control is also an option: this function recognises voice commands for the micromotor, scaler, operating light, patient chair positions, timers and user profile changeovers. Makes it easier to perform tasks when no assistant is available.



**USB connection**  
Dentists can use the USB port to upload/download diagnostic images when the integrated multimedia system is present.



**Multi-profile management**  
Depending on specific clinical requirements, dentists can personalise all S320TR parameters and save them directly on the control panel or a USB storage device. Alternatively, users can opt for NFC connectivity.



**NFC connectivity**  
This uses a chip integrated in the dentist's module and an IP68-class bracelet. There are up to 20 memory slots, each containing a full set of work settings. An efficient, innovative solution for multi-operator clinics.

**New instruments for perfect conservative work**

In addition to a broad selection of turbines, contra-angles and ultrasonic scalers, the new brushless micromotors feature innovative FIT (Fluorescence-aided Identification Technique) technology. This highlights the presence of composite

materials thanks to the fluorescence emitted by the specific LED integrated in the instrument. Moreover, thanks to its broad emission spectrum, the new curing light is optimized for latest-generation composite materials.



**SC Scalers**

Ultrasound scalers suitable for supragingival prophylaxis and periodontal tasks. Also suitable for the preparation of small cavities and usable in endodontic root canal cleaning techniques. The LED ring indicates the current scaler mode: PARO – green; ENDO – orange; NORMAL – blue.



**i-XS4 FLUO micromotor**

Even lighter and quieter, this micromotor is now available with FIT technology to detect composite materials. Allows faster, more precise removal of old composite in teeth that need to be retreated. With orthodontic or aesthetic treatments, bracket removal is simple, safe and effective.



**Turbines and contra-angles**

Six silent yet powerful models of highly advanced turbine, plus a broad range of ergonomic contra-angles that meet all clinical needs, from conservative dentistry to implant surgery and endodontics. With the instrument (turbine, micromotor) extracted, the LED ring shows the activated spray mode.



**T-LED**

The new curing light has an emission spectrum that allows optimal activation even of latest-generation composites. Ergonomically advanced with the characteristic swivel grip, it features a new user-friendly interface.

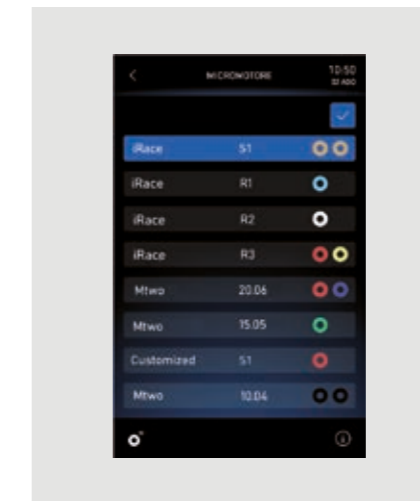
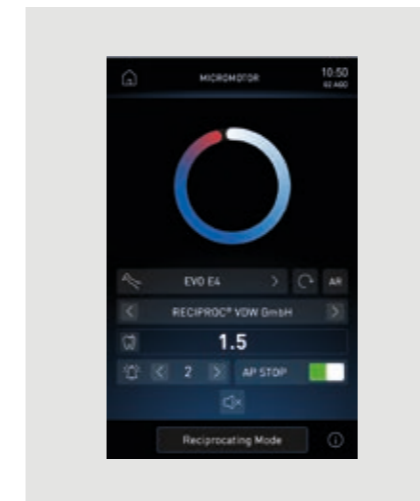






**Endodontics, at the peak of efficiency and effectiveness**

All the elements used for endodontic treatment - such as brushless micromotor, apex locator, databases listing nearly all commercially available endocanal burs, ENDO control mode - are integrated into the S320TR electronics and control software. During endodontic treatment, the display provides key data on a dedicated user-friendly display, making workflows faster and more efficient.



**ENDO database and reciprocating mode**  
Dentists are provided with an extensive, preloaded endodontic file library. They can also choose to perform, by using special files, treatment with instruments in reciprocating mode. In endodontics mode, if the selected file is in the database, the software automatically sets the torque/speed ratios; alternatively, these values can be freely set by the dentist. The endodontic file brand names are not owned by Cefla or any of its subsidiaries.



**Apex locator**  
With the dedicated contra angle, the apex locator allows the apex distance to be displayed during the root canal instrumentation phase. The nearing of the apex is also indicated by warning buzzers. To enhance safety, micromotor rotation is automatically disabled when it is reached. During root canal treatment, the LED ring changes from green to yellow to red according to the distance from the apex, thus mirroring the on-panel bar colours.

**EVO E4 contra angle**  
Featuring a 4:1 ratio specific for endodontics, the EVO E4 contra angle can be autoclaved and heat-disinfected. The miniaturised head makes access to the treatment zone easier. Recommended for endodontic treatment in reciprocating mode and with use of the integrated apex locator. The reciprocating movement of the i-XS4 micromotor, controlled by the pre-installed software, is an added bonus for endodontists.

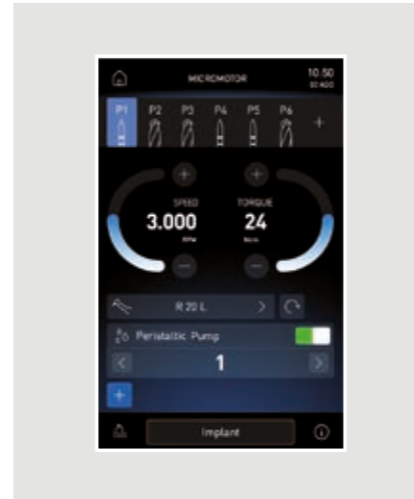


Perfect integration for implantology

We've created a made-to-measure solution for implantologists. Selecting IMPLANT mode turns the Full Touch control panel into a surgery-dedicated interface. Featuring graphics and functions similar to those on the classic display, the interface ensures the same user-friendliness. Implantologists are provided with everything needed to perform treatment, significantly speeding up workflows. Moreover, they can use the brushless micromotor, foot control and peristaltic pump incorporated in the dental unit without the workspace becoming obstructed by stand-alone devices.

Torque curves

Torque curve recording function available during treatment. In addition to monitoring the torque delivered by the micromotor, information on the entire curve constitutes a useful clinical tool for subsequent treatment on adjacent or contralateral teeth. The implant tightening torque completes the available data. It is possible (where an integrated camera is available) to view the curve also on the monitor integrated with the unit for an even clearer view during therapy; also an asset during academic and training activities.



EVO R20L contra-angle

The EVO R20L contra-angle, which has a 20:1 gear ratio specifically for surgery, can be autoclaved and heat-disinfected. It features an internal cooling system and external spray, plus LED lighting with an integrated generator. The software allows precise, safe control of speed and micromotor torque values. Maximum torque: 70 Ncm with EVO R20L.



Peristaltic pump

The peristaltic pump, controlled via the Full Touch control panel or the i-XS4 micromotor, is integrated into the dentist's module, eliminating the need for any additional modules or carts around the patient chair.

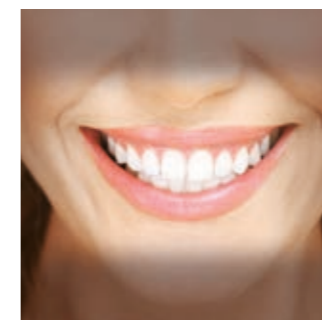




### A latest-generation light for every clinical need

The new LED light is a major step forwards in the development of clinical lighting. The colour rendering index (CRI) is above 95, allowing ultra-high colour fidelity, and the choice of 3 different colour temperatures enables users to select the right lighting for the specific clinical procedure. Light intensity is adjustable up to 50,000 Lux. A broad spotlight and excellent depth of field, from 55 to 85 cm, reduce the need for the dentist to reposition the lamp during treatment. What's more, "composite" mode can be activated quickly to prevent premature composite curing. With the optional virtual voice assistance system, the dentist can activate the

operating light with voice controls. These let users switch on, switch off or select "composite" mode. Speeds up tasks and enhances hygiene as there is no physical contact with the light.



#### Targeted lighting, advanced versatility

The Venus LED MCT has a specific setting for every need. There are three different settings, optimised for different circumstances: a 4300K warm light for surgical treatment, a 5000K neutral light for conservative dentistry and a 5500K cool light for realistic colour capture.

Working in "composite" mode ensures good visibility within the operating area without affecting composite curing.





**Slim, flexible and redefined to make the ergonomic benefits all-encompassing**

Before redesigning all the elements of the arm system and Continental module, each aspect of the dentist's work was carefully examined. Now lighter, with a more compact geometry, the dentist's module can reach any position with minimal effort. The pneumatic brake - activated and deactivated via the on-handle sensor - allows easy height adjustment. Instrument lever height has been reduced to minimise interference with the light in the work zone.

**Dentist's module**

Streamlined and light, the module never interferes with the operating light during treatment and can reach the transthoracic position thanks to extensive rotation of the arm system.

**SideFlex instrument levers**

Removable and equipped with swing joints that also allow lateral movement, the levers alleviate wrist fatigue and are self-balancing.

**Arm compactness**

The arm system has been designed to minimise the overall bulk of the S320TR and make module positioning easier. Lightness and fluidity of movement ensure exceptional handling.



**Assistant's module**

Module with touch screen featuring an extensive vertical excursion. The double articulated arm allows suitable positioning for every clinical situation. Available with 3 or 5 holders.



**SideFlex: freedom of movement**

Thanks to supple lever joints the instruments follow the dentist fluidly, giving them an ultra-light feel. Balance and effective traction during return can both be adjusted.

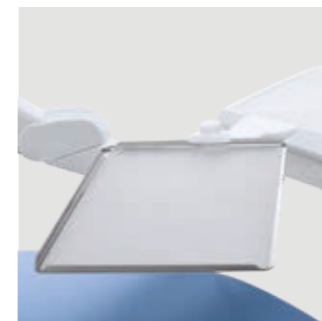


**Compact and perfected for those who need maximum working flexibility**

Featuring a modern design that combines a large, easy-to-read display with an ergonomic, easy pick-up instrument layout, the International module provides lightness and easy handling. The new arm system allows dentists to position the module according to their specific needs. The practical handle can be removed to facilitate cleaning.



**Sixth instrument**  
An intraoral camera or curing light can be added as the sixth instrument.



**Adjustable tray holder**  
Easy to position, the optional tray holder module can be adjusted horizontally to suit a full range of treatment requirements.

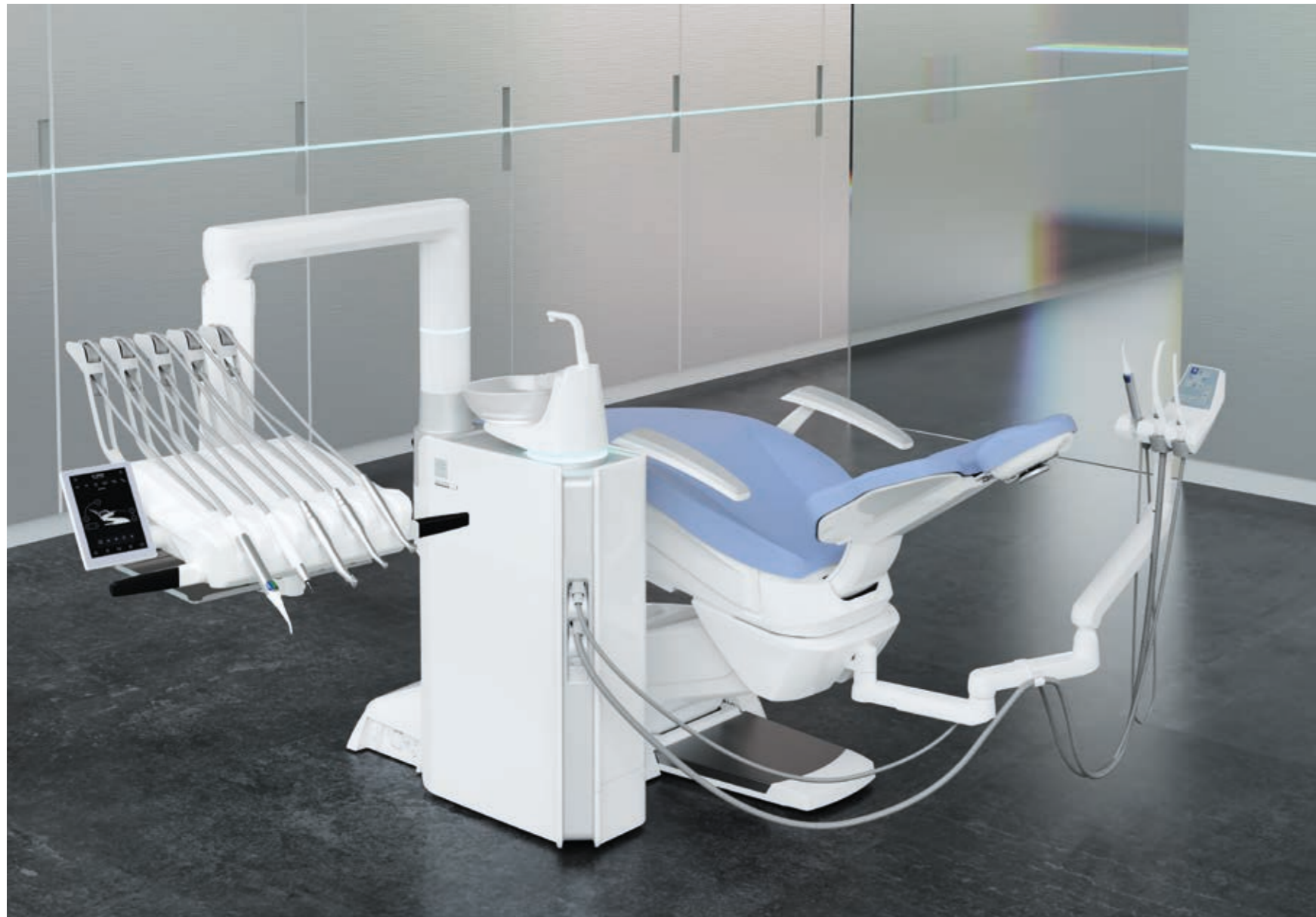


**Motor-driven cuspidor bowl**  
The cuspidor bowl rotates when the rinse or home position is selected. Automation speeds up the workflow and prevents any interference between the cuspidor bowl and the patient chair.



**Integrated sensor**  
Incorporated in the stylish cup and bowl fill unit, the optical sensor automates cup filling.





**S320TR Hybrid**

Equipped with a dentist's module that can be positioned anywhere around the treatment area, the Hybrid model - available as a Continental version only - features an assistant's module that can be shifted right or left, always remaining independent from dentist module rotation. A repositionable control panel completes adaptability for left-handed dentists. All the user needs to do is detach it, rotate the quick coupling 180° and reposition the panel on the other side of the module. A compact arm system also makes it suitable where space is restricted.

**S320TR Side Delivery**

Compact and made of materials that make the dental unit structurally stable, the S320TR Side Delivery retains the geometry of the International module. Fitted on the cast aluminium column, the dentist's module can be height-adjusted via the control panel. Access to the patient chair is smooth and comfortable and, prior to treatment, the instruments remain outside the patient's field of view.

**S320TR Cart**

The Cart version, which always features hanging-tube instruments, offers more freedom of movement and greater surgery layout flexibility. The height-adjustable dentist's module can mount the usual optional applications for implantology or endodontics practitioners.







**Wellbeing for the patient, a streamlined workflow for the dental team**

The patient chair horizontal Sliding movement can be synchronised with backrest movement or executed independently of it. Where synchronised with backrest movement, horizontal sliding minimises any compression or stretching of the patient's back and provides extra operating space for dentists who work in the 12 o'clock position. Horizontal displacement of the seat sees the dentist gain an equal amount of operating space behind the patient's head, a considerable advantage where space is at a premium. Moreover, no repositioning of the light is needed to keep the beam over the operating zone. This synchronised movement allows adjustment of the backrest height while keeping the oral cavity under the operating light beam. It also streamlines use of the microscope. An optional sensor located between backrest and seat detects the presence of the patient for the purpose of statistics, processed by the Di.V.A. virtual assistant.

Where the patient sensor is present, the LED light ring provides info relating to the patient's entry/exit. Additionally, the sensor contributes to sustainability by automatically setting the device to stand-by a set time after the patient leaves and by activating the automatic operating light switch-on/switch-off mechanism.



**Memory Foam**  
Exceptional comfort and proper anatomical support thanks to special upholstery options.



Patient chair design maximises comfort and support. Key features include hard-wearing upholstery, a lift capacity of 190 kg, a silent-running soft-start/soft-stop motor and the Sliding function. Gentle, vibration-free movement relaxes the patient and helps dispel any anxiety about treatment.





**Choices that match the way you work**

Setting limitations on the way you work has no place in our philosophy. Stern Weber offers a wide range of customised ergonomic solutions designed to make the most of your talents in every situation: from multi-function foot controls to the sturdy cast aluminium backrest and Atlaxis headrest with pneumatic-release orbital movement. In addition to the cable version, a wireless foot control is also available to reduce the presence of floor-level cables. The batteries have an exceptionally long life. The supplied cable can be used to charge the foot control or to connect it to the dental unit.



**Standard backrest**  
Shaped to provide dental staff with a comfortable approach to the patient during treatment. Suitable for adults, children and all types of treatment.



**Nordic backrest**  
Ensures lasting comfort during protracted treatment sessions and is shaped to aid dentists working in 'indirect vision' mode.



**Atlaxis**  
The headrest that follows the patient's anatomy. Ultra-simple fingertip release of the pneumatic lock allows orbital movement to achieve perfect positioning, vertical adjustment included.



**Multi-function foot control**  
Cutting-edge device with ergonomic lateral-slide control that lets dentists activate Chip Air and Chip Water functions on the instrument in use, invert micromotor rotation (when extracted), control patient chair movement and recall saved positions. Also available in a wireless version.



**Pressure-operated foot control**  
Offering the same performance as the multi-function foot control, this unit offers different ergonomics for those who prefer a pressure-operated approach. Both devices have peristaltic pump on/off controls in surgery mode. Also available in a wireless version.



**Power Pedal**  
This third foot control model offers different design and ergonomics. It provides the same functions as the more conventional models. Also available in a wireless version.

The efficiency and effectiveness of an X-ray diagnosis system in a single treatment area

The integration of a complete system increases diagnostic potential while shortening treatment times. The system features advanced technology, including the X-ray unit with digital wireless handheld controller, an LED monitor with optional touch-screen function and a latest-generation digital sensor. The X-ray image can be shown in mere seconds on both the 22" monitor and the 7" display on the Full Touch control panel.



**RXDC - HyperSphere technology**

Incorporated on the dental unit, the X-ray unit and handheld control unit require no additional installation points. Thanks to a combination of 30 cm collimation and a 0.4 mm focal spot, parallelism is excellent and images are pin sharp. Locked and unlocked by touch-sensitive pads, the tube head rotates freely around the spherical joint.



**Zen-X X-ray sensor**

Extractable sensor with USB lead located on the dentist's module, can capture high-resolution images with minimal radiation dosage. Able to be sanitised, the sensor comes in two different sizes and is IP67 certified against water and dust infiltration.







**Sharing information makes patients feel reassured and more cooperative**

Coupled with a latest-generation HD video camera, the Full HD 16: 9 tilt-adjustable 1920 x 1080 pixel flat screen medical monitor can be connected via cable to a PC. The LED light sources ensure high levels of contrast and brightness, while the IPS panel, which significantly broadens the screen viewing range, allows images to be comfortably viewed from any angle. The video camera aids dentist-patient communication and, thanks to the slender

handpiece design, it can reach distal zones with ease. Excellent depth of field eliminates any need for manual focusing.



**Full Touch Multimedia**  
The Full Touch Multimedia panel lets users display X-rays, images and videos. Touchscreen functionality lets dentists scroll through files and enlarge images via the 7" display



**C-U2 HD camera**  
Streams HD images directly to the Full Touch control panel or the integrated monitor. Speeds up diagnostics and generates material for documenting the treatment and completing clinical reports.



**Macro Cap**  
Macro Cap can magnify up to 100x in ultra-high resolution. Three additional, high purity glass lenses optimise lighting of details located close to the optical unit.



**22" LED Monitor**  
The Full HD monitor is also available in a multitouch version that allows the screen to be positioned as desired.



Scientifically certified hygiene systems



With the freedom to configure their dental units with a broad range of active devices, dentists can control every aspect with ease via the Full Touch control panel. The user-friendly interface helps users manage the maintenance and daily disinfection of the water circuits. Although the W.H.E. - a continuous sanitisation system compliant with European standards and DVGW certified - is automatic, the settings for all the other devices can be customized. The BIOSTER system carries out automatic end-of-session spray water circuit disinfection cycles. Tests performed by the **Sapienza University of Rome** and the Department of Public Health and Paediatrics of the **University of Turin** have shown that combining execution of a daily **BIOSTER** intensive disinfection cycle with use of the **W.H.E.** system results in the complete absence of bacterial load in the cooling liquids delivered by the instruments.

Unit body design provides for insertion of instruments in integrated holders. This reduces the time needed to start the selected cycle and eliminates the need for other accessories. Furthermore, the disinfectant tank can easily be top-loaded without having to open the hatch or access the dental unit interior.



**A.C.V.S.**  
Automatic system that carries out suction system sanitisation cycles between one patient and another. Practical and fast.



**I.W.F.C.**  
Activated via the control panel, the device ensures tubing is automatically rinsed after the machine has remained idle for some time. Included in the BIOSTER system or available separately.



**W.H.E.**  
Continuous **Peroxy Ag+** (H<sub>2</sub>O<sub>2</sub>) based disinfection system and air gap separation device between mains water and dental unit circuits. Acts against all water-borne contaminants, including Legionella.



**SANASPRAY**  
Tank with distilled water as an alternative to mains water.



**Touchpad**  
The assistant has a glass touchpad with disposable cover to enhance dental unit hygiene.



**LED indicators**  
Hygiene cycle stages (start, contact pause and end of cycle) are immediately highlighted by LED colour changes.

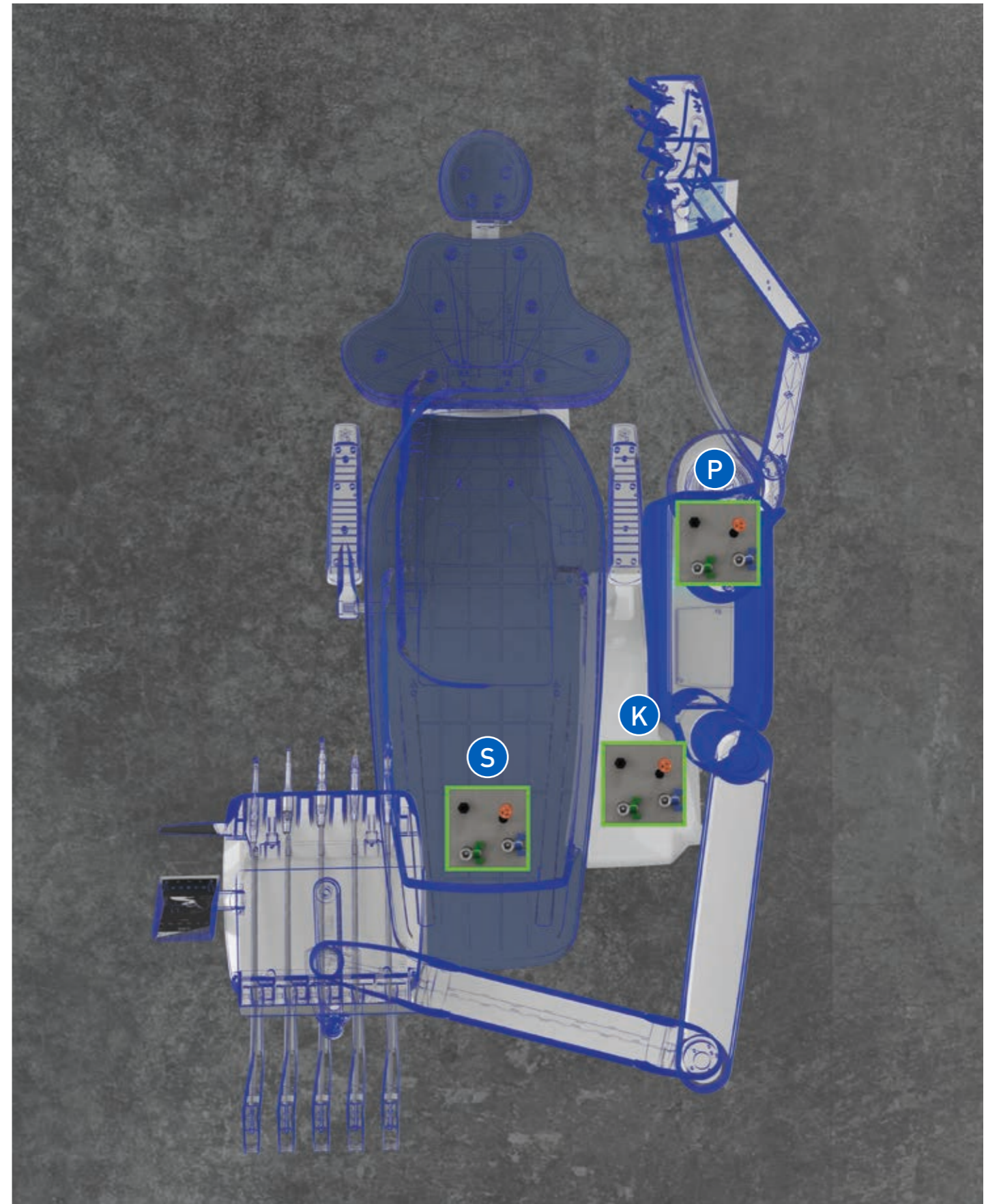


Flexible dental practice layouts

Thanks to the multi-connection concept, it's possible to maintain the previous dental practice layout even when an existing dental unit is being replaced. When installing the new unit, the already-present floor-mounted connections will be suitable as the Stern Weber model allows for their connection without any need for construction work. Utilities are always covered stylishly and efficiently, thus minimising any structural intervention in the practice.

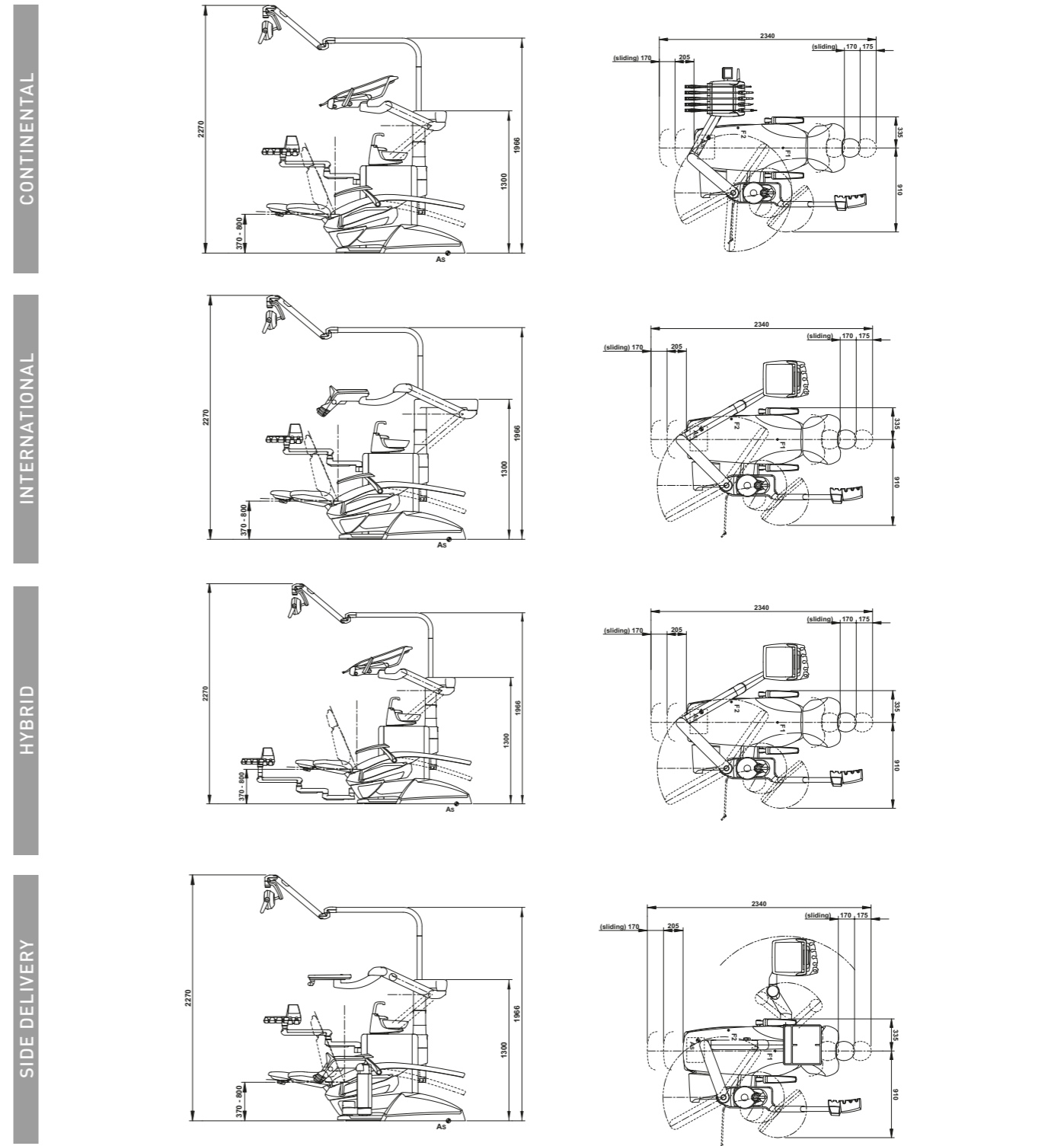
Plenty of dental unit installation options

Standard connection (S or K) – allows for connection to existing floor outlets; under the patient chair leg rest or under the front part of the unit body  
Optional connection kit (P) – connections are located under the rear of the unit body



S320TR	CONTINENTAL	INTERNATIONAL	HYBRID	SIDE DELIVERY	CART
<b>HYGIENE SYSTEMS</b>					
BIOSTER	*	*	*	*	*
A.C.V.S.	*	*	*	*	*
SANASPRAY	*	*	*	*	*
W.H.E.	*	*	*	*	*
I.W.F.C.	*	*	*	*	*
<b>DENTIST'S MODULE</b>					
LEFT SIDE PACK	*	-	●	-	-
Voice Control system	*	*	*	*	*
Multimedia 7" Full Touch display	●	●	●	●	●
i-XS4 Micromotor with fibre optics (100 – 40,000 rpm, 5.3 Ncm)	●	●	●	●	●
i-XR3 L FLUO micromotor for conservative dentistry	*	*	*	*	*
i-XS4 FLUO micromotor	*	*	*	*	*
LED PACK	●	●	●	●	●
Peristaltic pump kit	*	*	*	*	*
"Torque Curve" implant function	*	*	*	*	*
6-way syringe with f.o.	*	*	*	*	*
Sixth instrument	*	*	-	*	*
Integrated X-ray sensor	*	*	*	*	*
Reciprocating mode module	*	*	*	*	*
Integrated Apex Locator	*	*	*	*	*
NFC System	●	●	●	●	●
<b>UNIT BODY</b>					
Glass cuspidor bowl	●	●	●	●	●
Ceramic cuspidor bowl	*	*	*	*	*
Cuspidor bowl drive system	●	●	●	●	●
Cup fill sensor	●	●	●	●	●
Water-to-cup heater	●	●	●	●	●
Spray heating	*	*	*	*	*
Assistant's tray holder	*	*	-	*	*
Assistant's module with 3 holders	●	●	●	●	●
Assistant's module with 5 holders	*	*	*	*	*
Venus LED MCT lamp	●	●	●	●	●
<b>PATIENT CHAIR</b>					
SOFT-MOTION movements and Sliding function	●	●	●	●	●
Patient presence sensor	●	●	●	●	●
Atlaxis headrest	●	●	●	●	●
Adjustable right armrest	*	*	*	*	*
Left armrest	●	●	*	●	●
Multi-function foot control	●	●	●	●	●
Wireless multi-function foot-control	*	*	*	*	*
Pressure-operated foot control	*	*	*	*	*
Wireless pressure-operated foot control	*	*	*	*	*
Power Pedal foot control	*	*	*	*	*
Wireless Power Pedal foot control	*	*	*	*	*

● as standard \* optional - not available



The measurements shown in the drawings are in mm.