



**Sede Legale ed Amministrativa / Headquarters**  
CEFLA s.c.  
Via Selice Provinciale, 23/a  
40026 Imola (BO) - **Italy**  
**t.** +39 0542 653111  
**f.** +39 0542 653344  
sternweber@sternweber.com  
sternweber.com

**Stabilimento / Plant**  
Via Bicocca, 14/C  
40026 Imola (BO) - **Italy**  
**t.** +39 0542 653441  
**f.** +39 0542 653601

02/2019

S220GB191S00

Our policy of constant technological upgrading means that technical specifications may be subject to change without prior notice. According to the regulations in force, some products and/or features may have different availability and characteristics in areas outside of the European Union. Please contact your local distributor.

VERSATILITY  
AT ITS VERY BEST

STERNWEBER.COM



S220TR





**YOUR  
TALENT  
INSPIRES  
US**

### **MADE-TO-MEASURE ERGONOMICS**

Integrated treatment centre with floor-mounted unit body, with five different models providing five different ergonomic solutions. Designed for dentists who want a flexible, reliable, dental unit equipped with systems, functions and high-end accessories to meet their every need, the S220TR provides outstanding versatility.

### **PERFORMANCE CONTROL**

Instrument control panel with LCD touch screen for user-friendly control of instruments and dental unit functions. Settings can be read and controlled immediately and easily; what's more, the sheer abundance of data/functions lets users perform advanced endodontic dentistry.

### **THE POWER OF INTEGRATION**

The S220TR has a broad array of exclusive accessories to maximise comfort for both patient and dentist, advanced hygiene systems to ward off the risk of contamination and an integrated system consisting of cutting-edge X-ray diagnosis devices.











## ALWAYS CONNECTED

To keep up with the latest technologies, Stern Weber has provided web connectivity for its product range. This recent innovation gives access to optional digital services - which will improve efficiency at dental surgeries.

When connected to the web through Easy Check, a dental unit can rely on real time remote troubleshooting and technical support service. In addition, Di.V.A.\*, the digital virtual assistant, optimises the workflow of technologically advanced dental surgeries and, via a dashboard, helps dentists monitor their use of the available instruments, analysing surgery efficiency. In larger facilities, it is an excellent tool for managing workloads and for planning maintenance.

\*Digital Virtual Assistant





Arms, modules and instruments that ensure working flexibility and comfort

Everything on the Continental model has been designed to provide the dentist with an extremely flexible system. From the compactness and lightness of the dentist's module to the swing joints that allow instrument levers to move laterally without causing wrist fatigue, every single ergonomic aspect is designed to optimise mobility. The dentist's module is light and compact. Instruments are easy to use thanks to generous tubing excursion and a tubing recovery arm system minimises interference with the operating light. The handle incorporates a pushbutton to release the pneumatic lock on the module,

helping the dentist position it perfectly after vertical adjustment. All this ensures the dentist can always count on perfectly positioned instruments and, therefore, maximum working comfort.



**Compact tray**  
The stainless steel tray is conveniently housed under the module. Position-adjustable, it can easily be used by either dentist or assistant. A compact tray of minimum size and bulk is available as an alternative.



**Instrument excursion**  
Generous instrument tubing excursion ensures improved comfort in all operating positions around the patient.



**Transthoracic position**  
The arm system has been designed to allow transthoracic rotation so the dentist's module can be positioned on the assistant's side.



**SideFlex instrument levers**  
Removable and equipped with swing joints that also allow lateral movement, the levers alleviate wrist fatigue and are self-balancing. SideFlex instrument levers are available as an optional.



Everything within reach  
to optimise organisation  
and productivity

Thanks to the broader arm system on the hanging-tube instruments model, the dentist's module can reach all the usual working positions around the patient. Made of light cast aluminium, the fixed arm can pass over the patient whatever the situation. A broad handle running the full width of the module makes module movement even easier. The handle can be removed for cleaning purposes. When placed in their holders, instruments are supported securely and arranged diagonally to optimise ergonomics. The syringe is positioned vertically at the start of the handpiece holder, ensuring a good grip. A large easy-to-read LCD touch screen is

positioned above the instruments. Dentists can control patient chair movements, hygiene systems and other integrated devices. Where the i-XS4 micromotor is present the instrument control panel also provides a full complement of endodontic functions (including control of the apex locator, with data display during canal treatment).



**Tray holder**  
Large transthoracic tray holder mounted on the International module.

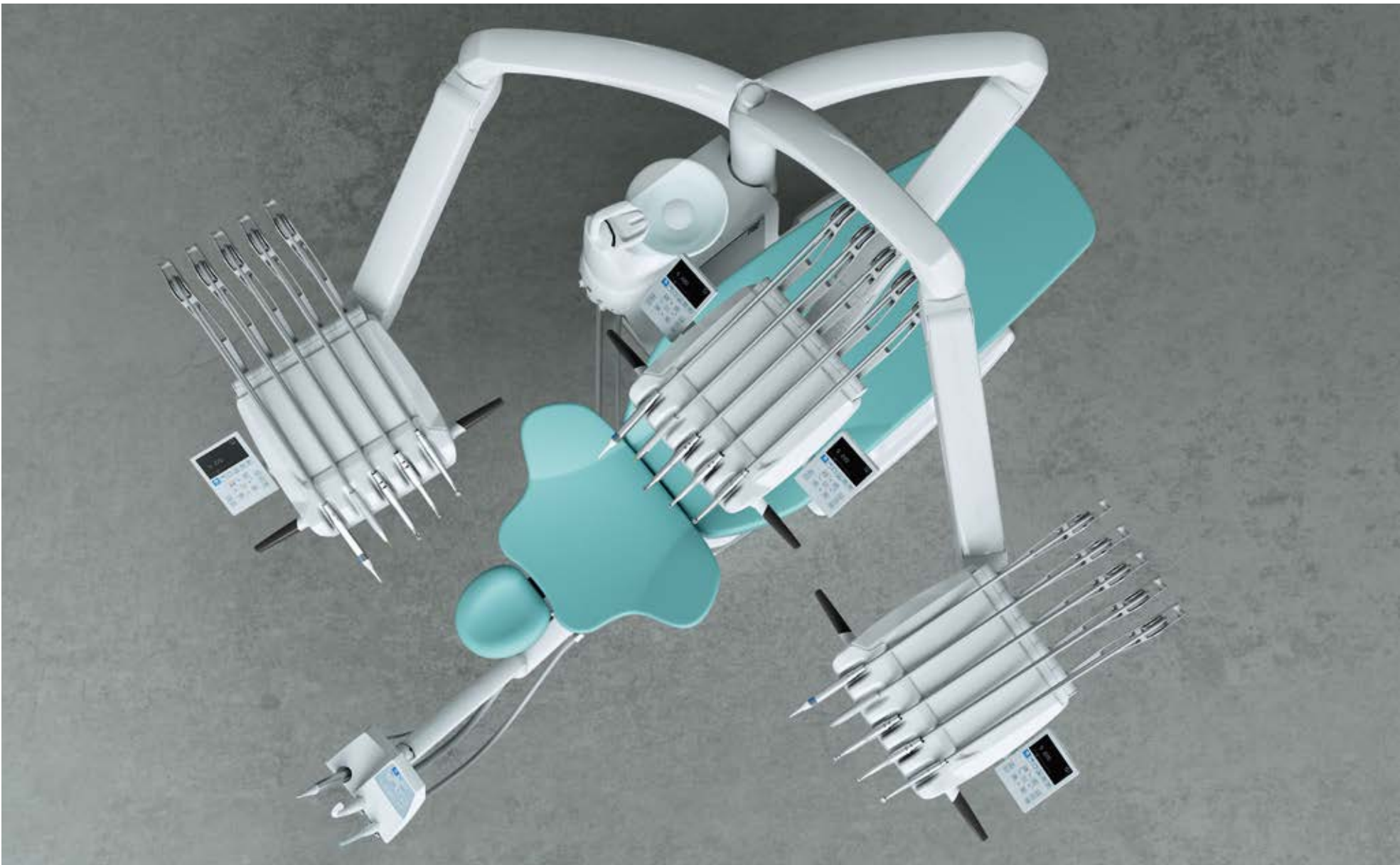


**Sixth instrument**  
The international dentist's module can be completed with an optional sixth instrument: camera or T-LED light.



**Assistant's module**  
The module mounted on the double-articulated arm is height-adjustable and comes with three holders as standard. An optional 5-holder version is also available: this can be used to hold other instruments such as a video camera or T-LED light. The keypad incorporates controls that move the patient chair, switch on the operating light and operate the water-to-cup and cuspidor bowl rinse functions.





**Ergonomic solutions that  
make the most of versatility**

Equipped with a dentist's module that can be positioned anywhere around the treatment area, the Hybrid model features an assistant's module that can be shifted right or left, always remaining independent from dentist module rotation. Exceptional operating freedom whether working alone or with an assistant.

To complete module conversion where the unit is configured for left-handed dentists, the S220TR Hybrid has a repositionable instrument control panel: just detach it, rotate the quick coupling 180° and then reposition the panel on the opposite side of the module.

The S220TR Hybrid is suitable for all surgeries, even where spaces are narrow, and is available in the Continental version only.

**Unmatched flexibility and  
high-strength materials**

Compact and made of materials that make the dental unit structurally stable, the S220TR 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.



Instruments and software to  
perform canal treatment in  
complete safety

With the optional i-XS4 motor, used with the dedicated contra angle, the S220TR has everything needed for endodontic treatment thanks to fine adjustment of endocanular burr speed and torque. An integrated apex locator is also available. During treatment, essential data is displayed in a clear user-friendly manner.



**SC Scalars**  
Ultrasound scalars, compatible with the best commercially available tips, for supragingival prophylaxis and periodontal tasks. Also suitable for the preparation of small cavities and usable in endodontic root canal cleaning techniques. Available with or without LED lighting.



**Micromotor i-XS4**  
Supplied as an alternative to the i-XR3 LED micromotor, the i-XS4 is suitable for conservative, prosthetic and endodontic dentistry. Speed ranges from 100 to 40,000 rpm and torque is adjustable. Powerful, light and versatile, it features auto-forward and auto-reverse functions and is fully autoclavable.



**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 a warning buzzer; to enhance safety, micromotor rotation is automatically disabled when it is reached.



**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 where the integrated apex locator is used.





Designed for outstanding  
comfort

Alongside ergonomics, the comfort factor is of prime importance. Indeed, a patient at ease enhances the working effectiveness of the medical staff. Lined with hard-wearing upholstery in a wide choice of colours, the patient chair is deliberately shaped to ease the approach to the work area. Made of tough materials and featuring thoroughly tested mechanics, the patient chair offers excellent support and has a lift capacity of 190 kg. The optional Nordic backrest ensures

lasting comfort during protracted treatment sessions and is shaped to aid dentists who work in 'indirect vision' mode.



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



**Universal headrest**  
Supplied as standard, the headrest rotates on two axes and can be positioned for adults and children alike.



**Atlaxis headrest**  
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.



**Standard backrest**  
Shaped so that dental staff can move closer to the patient during treatment. Suitable for adults, children and any treatment type.



From lighting to foot  
controls, personal  
preferences matter

The optional Venus LED MCT is a major step forwards in the development of clinical lighting. The colour rendering index (CRI) exceeds 95, a factor that allows ultra-high colour fidelity. It's also possible to use 3 colour temperatures so users can select just the right lighting for their specific clinical disciplines. 4300K warm light for surgical treatment; 5000K neutral light for conservative work; 5500K cool light for realistic colour capture. Light intensity is adjustable up to 50,000 Lux. A broad spotlight and excellent depth of field (from 55 to 85 cm) limit the number of times the dentist has to reposition the lamp during treatment. What's more, "composite"

mode can be activated quickly to prevent premature composite polymerisation. Supplied as standard, the Venus Plus – L LED, with light intensity from 3,000 to 50,000 Lux and a colour temperature of 5000K, features three-axes rotation and incorporates the no-touch sensor for adjustment via potentiometer.



**Multifunction 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.



**Pressure-operated foot control**  
Offering the same performance as the multifunction foot control, this unit offers different ergonomics for those who prefer a pressure-operated approach. Wireless versions of both this unit and the multi-function foot control are available: both have long-life batteries.



**Power Pedal**  
This third foot control model offers different design and ergonomics. It provides the same functions as the more classic models. The wireless Power Pedal version is not available.





Sharing information  
reassures patients and aids  
cooperation

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 lead-connected to a PC. LED light sources ensure high levels of contrast and brightness while, thanks to the IPS panel which significantly broadens the screen viewing range, images can be viewed comfortably from any angle.



**22" LED Monitor**  
93/42/EEC certified, the monitor is also available in the multitouch version; the screen can be positioned as desired.



**C-U2 HD camera**  
The video camera aids dentist-patient communication and, thanks to slender handpiece design, can reach distal zones with ease. Excellent depth of field avoids any need for manual focusing. Speeds up diagnostics and generates material with which to document treatment and complete clinical reports.



**Macro Cap**  
An extremely useful accessory, 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.



Unified in a single area, the system features cutting-edge X-ray devices

Integrating a complete system boosts diagnostic potential while shortening treatment times. Featuring advanced technology, the system includes the X-ray unit with digital wireless handheld controller, a LED monitor with optional touch-screen function and a latest-generation digital sensor. X-ray images can be displayed in a matter of seconds on the 22" monitor, letting dentists share information with patients immediately before deciding on a treatment plan.



**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.







The instruments are inserted in the tray above the cuspidor bowl throughout the **BIOSTER** cycle.

**Meticulous design and certified devices ensure protection you can count on, always**

Free to configure the dental unit with a broad selection of active devices as desired, dentists can also count on a design concept with an array of features that safeguard patient and surgery staff alike.



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

**BIOSTER**  
The S220TR can be equipped with the automatic BIOSTER system. This device performs fast, intensive disinfection cycles on spray water circuits. Each stage of the cycle is automatically controlled by the dental unit. Dentists can personalise settings as desired. The cycle stages are:

- Introduction of compressed air into water pipes to empty them
- Withdrawal of disinfectant from tank and introduction into spray water circuits
- Presence of liquid in ducts for the required time
- Liquid draining with compressed air
- Flushing with (mains or distilled) water

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.



**Cuspidor bowl with optical sensor**  
The glass cuspidor bowl rotates and can be removed for cleaning purposes. Incorporated in the cup and bowl fill unit, the optical sensor automates cup filling.



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



**W.H.E.**  
Continuous Peroxy Ag+ (H<sub>2</sub>O<sub>2</sub>) based disinfection system (compliant with EU standards and DVGW certified) 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.



**Removable International handle**  
The handle can be removed for in-depth sanitisation; removal also makes it easier to clean the dentist's module and instrument control panel.



**Removable Continental handle**  
New dentist's module handle can easily be removed for in-depth sanitisation.

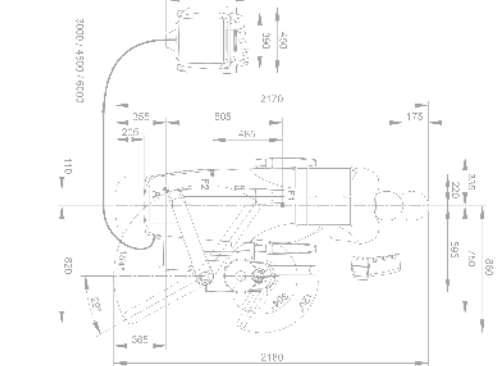
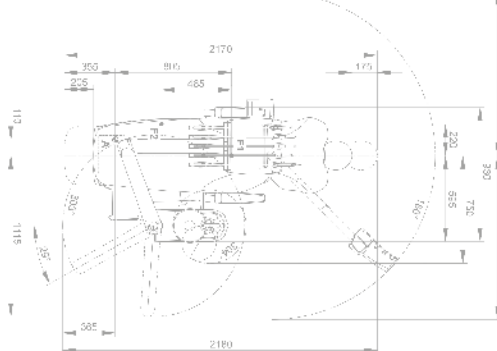
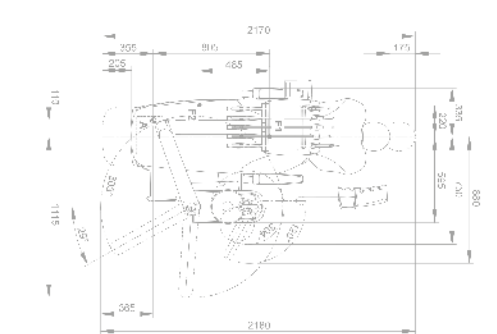
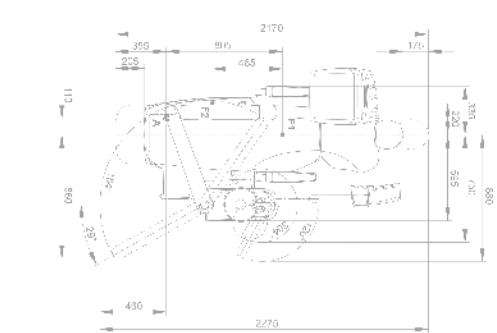
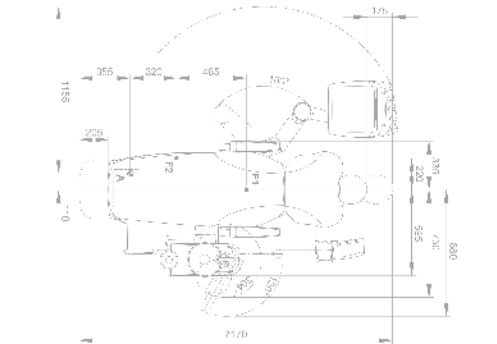
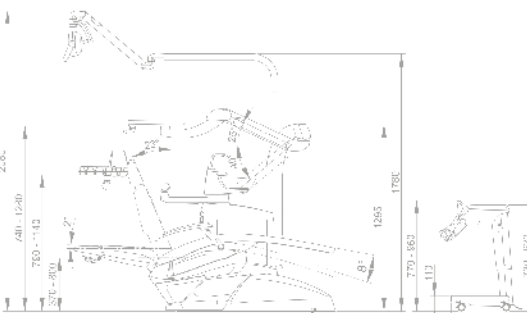
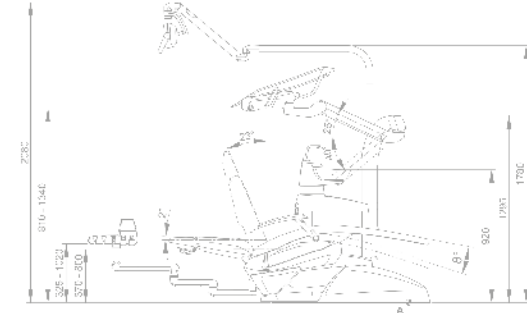
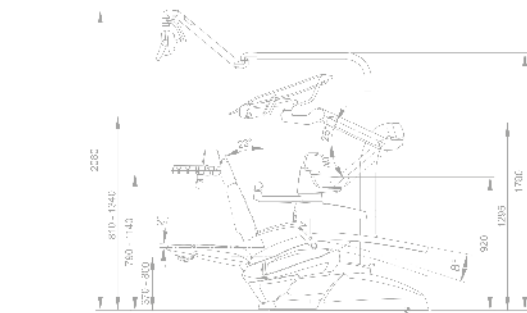
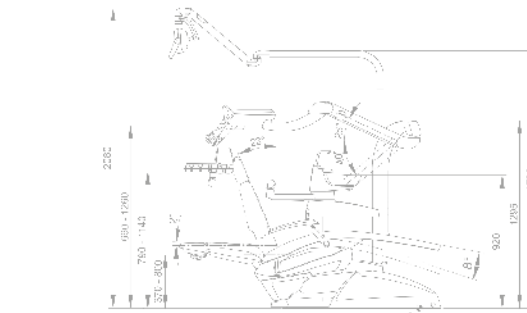
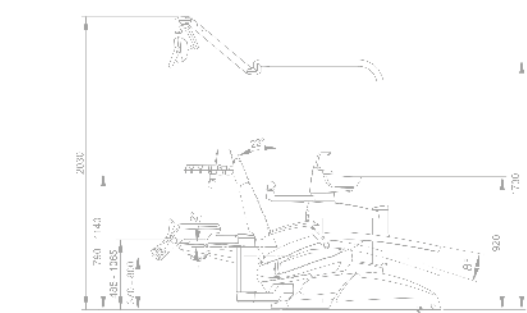
TECHNICAL CHARACTERISTICS

S220TR	CONTINENTAL	INTERNATIONAL	SIDE DELIVERY	CART	HYBRID
HYGIENE SYSTEMS					
BIOSTER	*	*	*	*	*
A.C.V.S.	*	*	*	*	*
SANASPRAY	*	*	*	*	*
W.H.E.	*	*	*	*	*
I.W.F.C.	*	*	*	*	*
DENTIST'S MODULE					
LCD touch screen	●	●	●	●	●
i-XR3 micromotor with fibre optics (100 – 40,000 rpm, 3.3 Ncm)	●	●	●	●	●
i-XS4 micromotor with f.o. (100 – 40,000 rpm, 5.3 Ncm)	*	*	*	*	*
Scaler (with and without f.o.)	*	*	*	*	*
6-way syringe	●	●	●	●	●
Sixth instrument	*	*	*	-	*
Integrated X-ray sensor	*	*	*	*	*
Integrated Apex Locator	*	*	*	*	*
UNIT BODY					
Glass cuspidor bowl	●	●	●	●	●
Ceramic cuspidor bowl	*	*	*	*	*
Cuspidor bowl drive system	*	*	*	*	*
Cup fill sensor	*	*	*	*	*
Cup filler water heater	*	*	*	*	*
Spray heating	*	*	*	*	*
Independent cannulae selection	*	*	*	*	*
Suction stop device on chair base	●	●	●	●	●
Multimedia applications wiring	*	*	*	*	*
Assistant's tray holder	*	*	*	*	*
Assistant's module with 3 holders	●	●	●	●	●
Assistant's module with 5 holders	*	*	*	*	*
Venus Plus LED lamp	●	●	●	●	●
Venus LED MCT lamp	*	*	*	*	*
PATIENT CHAIR					
Atlaxis headrest	*	*	*	*	*
Adjustable right armrest	*	*	*	*	*
Left armrest	●	●	●	●	●
Child's cushion	*	*	*	*	*
Multi-function foot-control	●	●	●	●	●
Pressure-operated foot control	*	*	*	*	*
Power Pedal foot control	*	*	*	*	*
Wireless multi-function foot-control	*	*	*	*	*
Wireless pressure-operated foot control	*	*	*	*	*

● as standard  
\* optional  
- not available



The measurements shown in the drawings are in mm.



SIDE DELIVERY

INTERNATIONAL

CONTINENTAL

HYBRID

CART