



# True performance

Constant reliability, hygiene systems in compliance with European directives, great ergonomics and top performance. S250 is designed for the dentist who requires equipment that will last. A treatment hub which can incorporate brushless micromotors and hi–tech multimedia devices. Centred around digital electronics, S250 allows easy integration of advanced systems and components, offering dentists some of today's best technologies. In order to express yourself to the best of your potential and with an eye toward the future.

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STERN S250 CONTINENTAL

# Tranquillity starts here

If you're looking for a unit that meets the high standards you've set yourself, one that provides you with the assuredness of high performance, outstanding ergonomics, a hygiene system that complies with the strictest international standards and total reliability, then look no further. The S250 is the perfect response to dentists who demand the very best technology, utmost attention to detail, a concept that enhances teamwork, as well as clean-cut modern design.

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### PRACTICAL AND WELL-BUILT



The instrument tubing on the dentist's and assistant's modules can easily be replaced via rapid couplings.



The stainless steel tray-holder module is removable and can be sterilised in an autoclave.

On-support rotation and on-guide slide shift, located directly underneath the dentist's module, give exceptional versatility.



Aluminium alloys improve mechanical characteristics and give the structural parts of the unit and patient chair greater rigidity and strength.

Surfaces are coated with polyurethane paint or treated with technopolymers highly resistant to chemical disinfectants.





### **Choice materials**

In addition to functional design, all materials have been carefully selected according to their specific use, enhancing durability and ensuring constant reliability. Like every Stern Weber dental unit, the S250 is safe and practical. This model's success stems from a combination of outstanding design and solid constructive quality, which allows easy maintenance.

### COMFORTABLE AND RELAXED



#### Atlaxis headrest

The Atlaxis 3 headrest (optional) allows natural positioning of the patient's head.

A pneumatic device makes it possible to shift, adapt and fix the upholstery in the ideal position, effortlessly and without having to act on levers or brakes.

#### Universal headrest

Double-articulating headrest with mechanical lock device. Right-hand armrest can also be fitted.





Memory-Foam upholstery (\*) Anatomical Memory-Foam upholstery ensures proper patient support and greater comfort, especially during long procedures.

















Right-hand armrest can also be fitted.

## **Ergonomics and comfort**

A more comfortable, more relaxed patient makes treatment work easier. A combination of Trendelenburg movement and backrest tilt ensures that the patient is positioned comfortably and that both dentist and assistant can work efficiently.

A low-thickness, specially shaped backrest also allows the dentist to place his/her legs underneath the backrest with ease and so maintain an ergonomic posture.

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### POSTURAL ERGONOMICS





Lumbar support on the new stool can be adjusted both horizontally and vertically.

Adjustment of seat height (470 – 630 mm) ensures optimal posture for dentists 1.56 m – 1.96 m tall; an extension kit is also available to accommodate dentists as tall as 2.06 m (570 – 730 mm).





Seat tilt adjustment and front zone flexibility ensure there is no pressure on the thigh underside zone.





#### Simple, practical controls

The new stool is easy to adjust.

Correct positioning of the horizontal-slide adjustment levers can be done by wrist contact alone; since use of fingers is not required, both good hygiene and user-friendliness are assured.





The seat backrest supports the lumbar region, following the slight movements of the chest through a spring operated compensation system.

The sole function of the backrest is to provide proper lumbar support; its compact design prevents contact perspiration.



# The advantages of proper posture

Incorrect working postures can cause varying degrees of discomfort and muscoloskeletal problems. A correct sitting position should be relaxed and require minimal movement of arms and neck; together with efficient organisation of the work area and the availability of equipment suited to the user's build, a proper sitting position lays the basis for improved mental-physical wellbeing. The new ergonomic stool eliminates unnecessary pressure against the back and minimises the pressure exerted on the underside of the thighs, thus minimising fatigue throughout the working day. T9 belongs to a new generation of stools: the result of close attention to essential ergonomics, they provide the dentist with the reassurance of long-lasting comfort.

### EASY, INTUITIVE, EVOLVED



If necessary the foot control can be powered from the dental unit via a lead, which also recharges the batteries. In any event lithium ion batteries ensure long-lasting unit autonomy.

Foot control

The multi-function foot control is

available in three versions. All basic

via the foot control, thus improving

focus back to the patient.

services and controls can be activated

hygiene, saving time and bringing the



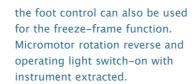
Foot controls can be used to operate patient chair movement, activate Chip Air and Chip Water on the instrument in use and also activate the extracted instrument (with and without spray). When the video camera is extracted



# Wireless foot control Supplied as an optional, the new wireless foot control gives the dentist full freedom of movement.

Being able to operate the patient chair and other functions directly via the wireless unit provides control wherever it is most convenient.



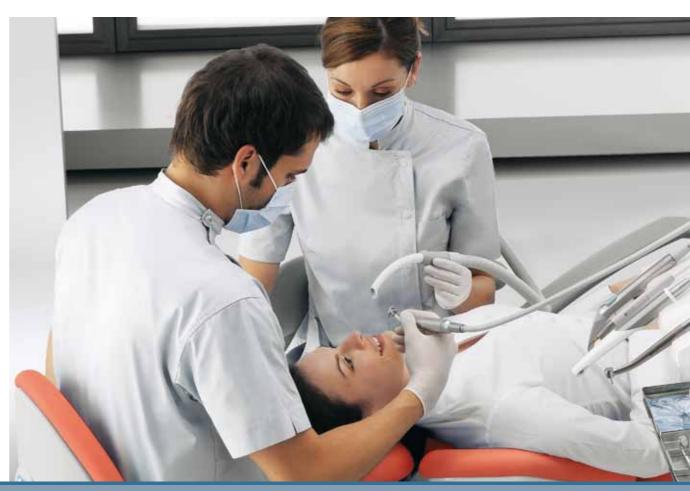




#### New colour display

The instrument control panel with colour display incorporates advanced software that enhances precision and control of parameters.

Thanks to the on-display colour graphics and the easy-to-read symbols on the control panel, managing dental unit functions and establishing settings couldn't be easier.



# Simplified management, precision control

More immediate, intuitive data reading means greater working safety. With the new display the dentist can comfortably monitor connected system status. In addition to information on hygiene system operation, the display shows all dynamic instrument parameters and the remaining charge on the wireless foot control.

The optional wireless foot control provides a practical solution for those who want the underchair area unimpeded by leads.

### LIGHTING: THE FUTURE LOOKS BRIGHT

















#### Perfect positioning

The new VENUS PLUS – L LED operating light is easy to position. The reflector dish features 3-axis adjustment to ensure the lighting axis is always parallel to the dentist's line of sight.

#### Enhanced, effective lighting

- Minimisation of the shadow effect, thanks to dual reflected-light LEDs mounted inside a large dish
- Low consumption and high lighting efficiency
- Silent running because there is no forced ventilation
- Reliable, because the LEDs are guaranteed to work for 50,000 hours



#### Unparalleled performance

- Light intensity from 6,000 to 50,000 Lux
- Colour temperature 5,000 K
- Hermetically sealed front screen
- Handles can be removed and sterilised in autoclave







#### Infrared sensor

The infrared sensor (optional) gives the user remote control of on/off and brightness adjustment functions, thus ensuring maximum hygiene.

# LED technology and visual comfort

Dentists focus their gaze on a very small – and often poorly lit – work area all day long. Moreover, they're often forced to strain their eyes to distinguish fine details in low-contrast lighting conditions.

To ensure high quality treatment is provided without any risk of damaging eye fatigue, a good organisational layout of the operating zone is indispensable.

The large, regular spot-lit area, homogeneous light distribution and reassuring operating efficiency provided by the dual-reflector dish make the VENUS PLUS - L LED the new standard in oral cavity lighting.

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#### PERFORMANCE AND VERSATILITY

#### **Stern Weber brushless micromotors**

Exceedingly lightweight and compact, the 3 brushless models of the Stern Weber micromotor range are exceptionally quiet, vibration-free and ensure top class performance.

Thanks to brushless technology, they require very little maintenance and are highly reliable. Each one is ISO 3964-compliant.

#### i-XS4 brushless micromotor

Available as an option on the \$250, the i-XS4 provides outstanding performance in conservative dentistry, prosthetic and endodontic applications. The micromotor is fully autoclavable.

Electronic adjustment of torque up to 4.5 Ncm and speeds from 100 to 40,000 rpm, plus the availability of auto-forward and auto-reverse functions, provide outstanding versatility. Dimensions: Ø22 x 47.5 mm

Weight: 82 g

#### i-XR3 brushless micromotor

The i-XR3 brushless micromotor is available with or without LED lighting (i-XR3L). Suitable for conservative and prosthetic dentistry, both of which can be cold-disinfected, provide a maximum torque of 3 Ncm and a speed range from 1,000 to 40,000 rpm. Dimensions: Ø22 x 35.1 mm Weight: 82 g

#### **Silent Power Turbines**

Lower hearing stress and less discomfort, in an environment that thus becomes more comfortable for everyone. Thanks to cutting-edge ball bearing technology, high precision rotation and fluid dynamic analysis of air flows, the noise emissions of the turbine have been cut by more than one half, to a medium level of 57 dB(A).

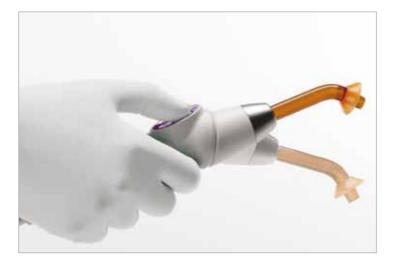
#### LED lighting technology for the surgical field

A miniaturised circuit with a light-emitting diode replaces traditional halogen bulbs. The emitted white light does not alter the colour of teeth or tissues.



#### **Multiple irrigation**

From two to four spray outlets in the various Silent Power models constantly assure optimal cooling and maximum visibility of the operating field in all working conditions. Two separate nozzles, one for water and one for air at each point of delivery, prevent the mixture of fluids inside the turbine and reciprocal air and water line contamination. The flow of coolant is regulated by means of an adjustment ring in the hose connector or quick coupling.



#### **Curing Light**

An exclusive, patented instrument with programmes and accessories to meet every possible need. Light and articulated, it can be swivelled up to 180° for use in pen and gun-type mode.

Very high efficiency LEDs, 6 time/power programs, energy delivered (max. 36,000 mJ) and compact design make the T-LED an ideal compound curing tool.

#### Efficient, safe ultrasound

The excellent size of the instrument with a weight of less than 55 grams, make the SC scalers very comfortable instruments to use even during the longest lasting procedures.

The grip is always easy and balanced.

#### **Ergonomics and comfort**

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#### Technology and control

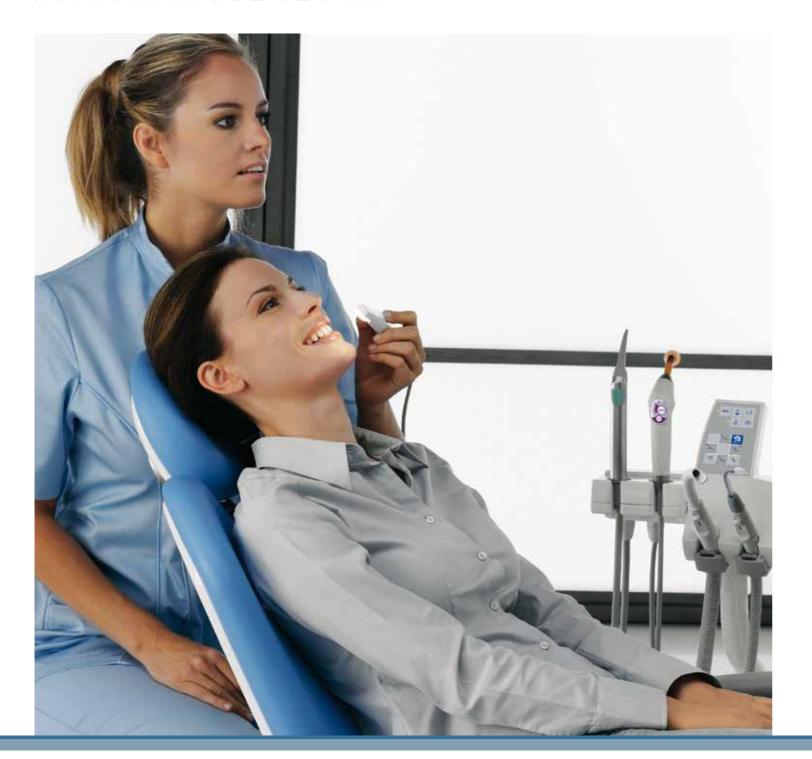
SC-A2 (without lighting) and SC-A3 (with LED lighting) are controlled by highly advanced electronics, able to regulate the vibration amplitude by way of a retroactive power signal adjustment.



### Advanced instrumentation

Brushless micromotors, powerful yet silent turbines, the latest generation of ultrasound instruments and a patented curing light. Stern Weber provides a comprehensive instrument range, the performance of which is accurately controlled by the dental unit electronics. Developed to give dentists every possible opportunity to make the most of their skills, flexibility is a key feature right across the range.

### MULTIMEDIA SYSTEM





#### C-U2

Straightforward and simple to use, totally automatic without the need for any manual adjustments, the C-U2 camera generates clear and explicit images and features the highest degree of illumination in its category.

The control electronics integrated in the dental unit ensures real-time adjustment of all the parameters required for ideal image acquisition: lighted areas and shaded zones, colour brightness, reflection. C-U2 has a touch-sensitive area through which the freeze-frame function is activated and images are obtained without any vibration-induced blur. The freeze-frame function can also be used via the foot control.

#### C-U2 PRO

The highly sophisticated PRO optics provide uncompromised image quality in three different focal adjustments.

- Macro Close-Up: enhances the perception of the tiniest details.
- Intra-oral Depth of Focus: inspect the entire oral cavity easily thanks to the thin distal end of the camera.
- Extra-oral Vision: grabs a smile to add to patient records.

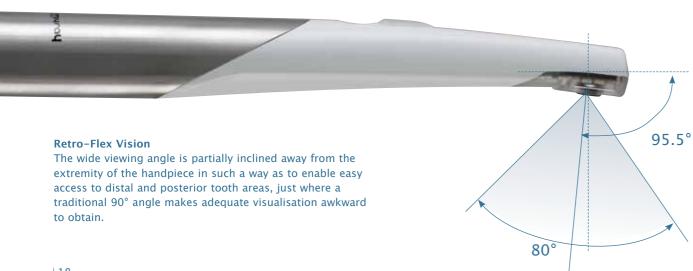


LCD flat-screen 15" monitor that complies with EC Medical Device directive 93/42. The anti-glare 3.3 mm thick optical glass screen features sealed edges to prevent liquid penetration and make cleaning easier. Two connections are possible: a standard PAL/NTSC link for the video camera and one for a PC (with VGA signal).

With the image management software it is possible to display and manage all digital images, whatever their acquisition source.

# **Communication made simple**

Communication through images is both simple and immediate. Incorporating an imaging system involves the patient in every stage of the treatment process, providing him/her with the necessary motivation to embark on the program of therapy. The simplicity of the devices and the sheer immediacy of communication makes for greater patient awareness.



### INTEGRATED X-RAY SYSTEM



#### RXDC with HyperSphere technology

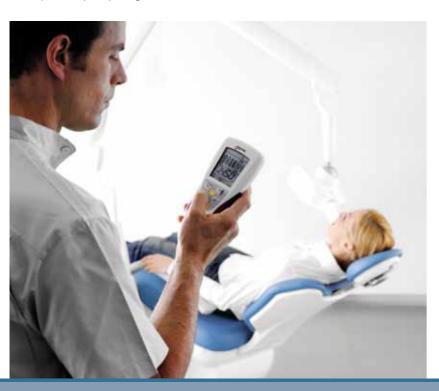
The RXDC X-ray unit is equipped with HyperSphere technology. Rotating freely around the revolutionary spherical coupling, the tube can reach any position, including the vertical.

An automatic touch–sensitive lock/ release device allows fast repositioning of the tube between exposures.

#### Precision and safety

Designed with outstanding digital X-ray imaging and the patient's health in mind, the constant-potential tube, together with one of the smallest available focal spots (0.4 mm), ensures sharp images every time.

The 12" (30 cm) collimator also enhances X-ray beam parallelism to provide sharper, more precise quality images.



#### Wireless control

The RXDC is supplied with a portable wireless digital control device. Extremely user-friendly, the control device provides a comprehensive range of exposure programmes, specially designed to make proper X-ray acquisition a direct process.

The RXDC automatically calculates the correct exposure on the basis of the selected anatomic area.



#### ZEN-X X-ray sensor

To complete integration of the digital X-ray system the new removable sensor is conveniently located on the dentist's module.

The lead mounted at the rear of the sensor reduces its overall size. Smoothed, rounded design makes correct positioning inside the oral cavity easier.

Moreover, thanks to the absence of protruding upper edges, it is also more comfortable in the mouth.

A reinforced lead connector and lining seal protect the sensor perfectly and improve device solidity. Easily sanitised and removed, the sensor and its lead can also be transferred and installed on other machines with compatible connections.





## **Enhanced diagnostic capacity**

Fitted directly on the dental unit, without any of the inconveniences associated with a separate installation yet with all the advantages of having an advanced X-ray system within a compact area, the RXDC with HyperSphere technology, together with the ZEN-X sensor and LCD monitor, represent an outstanding direct-diagnosis solution. Shorter times, immediate results, instant effectiveness.

### HYGIENE FIRST AND FOREMOST



Holder guides provide support during removal and replacement of the suction tubing. The guide can be removed for easier disinfection and cleaning.



S250 features fully removable suction manifold to allow perfect clearing and sterilisation.



To allow sterilisation in an autoclave, the tray-holder module is made of stainless steel.



The cuspidor bowl and cup holder are made of ceramic.

The cup and bowl fill unit can be removed and disinfected.





Controls on both dentist's and assistant's module are easily wiped clean and feature disposable covers.

The soft silicone instrument support mat can also be removed and autoclaved.





Tanks, internal filters and amalgam separator are easily accessible to make maintenance and cleaning





Simply by releasing the handpiece holder support the instrument tubing can be detached and reconnected in just a few seconds thanks to the rapid tubing couplings.

# The total hygiene concept

The S250 offers outstanding hygiene control at every possible level. Conscientious contamination control ensures complete safety. A comprehensive set of devices, developed at the design stage, maximises safety for dentist, assistant and patient alike. Because exposed surfaces have no fissures and/or gaps and upholstery is seamless cleaning is easier and the possibility of contamination is limited.

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### ACTIVE SAFETY



#### **BIOSTER system**

The BIOSTER system carries out fast, automatic spray water circuit disinfection cycles.

The automatic control system manages the following cycle phases:

- 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 required time
- Liquid expelled with compressed air
- Flushing with (mains or distilled) water.

BIOSTER can systematically be run between patients by drawing the selected disinfectant from a dedicated tank.

#### I.W.F.C.

#### (Integrated Water Flushing Cycle)

The I.W.F.C. device included in the BIOSTER system – yet also available separately – allows for complete flushing of tubing with water. Thanks to very short cycles lasting from just 1 to 5 minutes, dental unit tubing can be efficiently washed at any time; this function is extremely useful following periods of machine idleness, at the weekend or at night.



#### A.C.V.S. (Automatic Cleaning Vacuum System)

The automatic A.C.V.S. system flushes the cannulae with water and then sanitises them with a liquid drawn from a dedicated tank.

Because the cycle is completed quickly (in about 1 minute) the system can be used between patient treatment sessions.



#### **Automatic Chip Air**

The system automatically emits an air jet when you stop using dynamic instruments so as to clean any residual liquids or solids from the handpiece and so prevent any risk of backflow or patient—to—patient cross—contamination.



#### **SANASPRAY**

SANASPRAY consists of a pressurised 2-litre container that allows distilled water (with added sanitising fluids if required) to be used for all the dentist's module instrument sprays and the assistant's syringe.



# System compliant with EN 1717 (DVGW)

W.H.E. Water Hygienisation Equipment - Continuous hygiene system with Type A air gap separation from mains water as per EN 1717 standards.



Type A devices ensure there is a 20 mm gap between the mains water and the unit piping in compliance with the most recent mains water backflow contamination prevention standards.

The system also features a mixing tank for titration (0.06%) of water with  $H_2O_2$  to provide a secure bacteriostatic effect in the unit water circuits.

HYGIENE SYSTEMS	S250 Continental
BIOSTER	*
A.C.V.S.	*
SANASPRAY	*
WHE	<b>↓</b>

#### **DENTIST'S MODULE**

I.W.F.C.

DENTIST 3 MODULE	
Micromotor i–XR3 (1,000 – 40,000 rpm)	*
Micromotor i–XR3L with f.o. (1,000 - 40,000 rpm)	•
Micromotor i–XS4 with f.o. (100 – 40,000 rpm)	*
6-way syringe	•
6-way syringe f.o.	*
6th instrument	-
Module with T-LED curing light	*
Module with scaler	*
Integrated X-ray sensor module	*
X-ray viewer for intraoral films (30x40)	-
Panoramic X-ray viewer	-

#### **UNIT BODY**

UNIT BODY	
Motor-driven cuspidor bowl	-
Ceramic cuspidor bowl body	•
Water to cup heater	•
Spray heating	*
Independent cannulae selection	-
3rd cannula application	*
Air/water connections	*
Suction stop switch on foot control	•
Wired for multimedia applications	•
Dentist's side tray holder	•
Assistant's tray holder	*
VENUS PLUS operating light	•
VENUS PLUS – L LED operating light	<b>+</b>

#### PATIENT CHAIR

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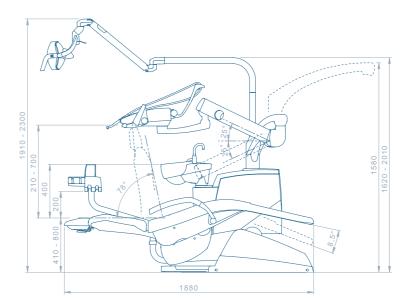
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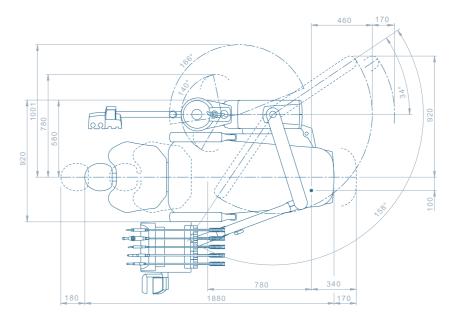
★ optional

- not available



#### S250 CONTINENTAL





Dimensions are quoted in millimetres.

