

S220TR HYBRID

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A new breed of ergonomics



STERN S220TR HYBRID

Unlimited flexibility

With the S220TR HYBRID, Stern Weber has launched a simple yet effective concept that raises flexibility to the point where everyone, left-handed dentists included, can enjoy an ergonomic configuration that best suits their needs, whether working alone or with the aid of an assistant at the patient chair.

Stern Weber has succeeded in creating an integrated treatment centre that is compact yet also, thanks to the ample space surrounding the operating zone, far-reaching. Wherever the dentist decides to work, the ingenious ergonomics of the S220TR HYBRID provides incomparable freedom, allowing him to operate to the very best of his ability.



STERN S220TR HYBRID

Team-oriented practicality

S220TR HYBRID implements design solutions that ensure optimal practicality for the entire dental team. Excellent manoeuvrability of the dentist's module arms, self-balancing with a system of joints for efficient articulation, ensures instruments are always at hand on both sides of the patient chair. Similarly, the assistant's module can be positioned all around the work area and features extensive horizontal and vertical adjustment.

OUTSTANDING FLEXIBILITY



340 degrees of comfort
S220TR HYBRID provides exceptional flexibility. The dentist's module arm can be rotated 340° to reach positions suitable for both right and left-handed dentists. Whatever the treatment being carried out, the dentist is always in a fully relaxed position, with instruments comfortably within reach. In short: optimal ergonomics at all times.



Space for the assistant
Positioned at the rear of the patient chair and mounted on the main pantograph arm and articulated support arms, the assistant's module rotates leftwards and rightwards. It moves independently of dentist's module rotation and allows, whatever the situation, whether the dentist is working alone or with an assistant, exceptional working freedom.



Assistant's module

Vertical movement of the assistant's module and the mobility of its articulated arm ensure perfect positioning of the assistant's instruments at all times.

This enables the assistant to operate freely and achieve the most convenient position within good reach of the patient.

A universal solution

Ambidextrous as and when required, yet always multi-functional. The ingenious design of the S220TR HYBRID is certainly not limited to dual left/right-handed use; the simplicity of the concept provides a wide variety of working configurations thanks to outstanding mobility of all parts, such as the dentist's and assistant's modules, and the re-positionable instrument control panel on the dentist's module.

RAPID TRANSFORMATION



Changing sides

To transform the module configuration from right-handed to left-handed and vice versa, the user simply detaches the control panel, rotates the connector 180° and repositions the panel on the opposite side of the module.

Just a few moves, a few seconds – and the dental unit is adapted to the needs of a new user.



New functions

The keypad has two new functions: activation of the I.W.F.C. hygiene system, which flushes the tubing with mains water, and a function to clear images from the screen where the multimedia system is used.



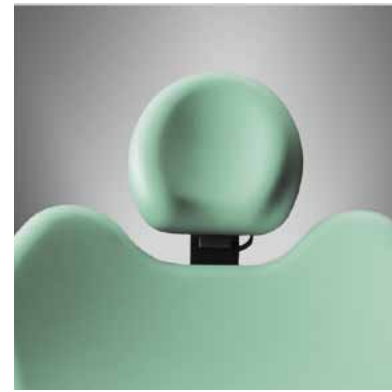
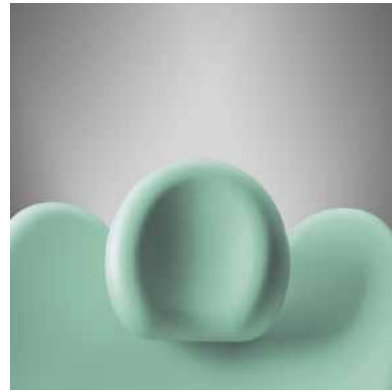
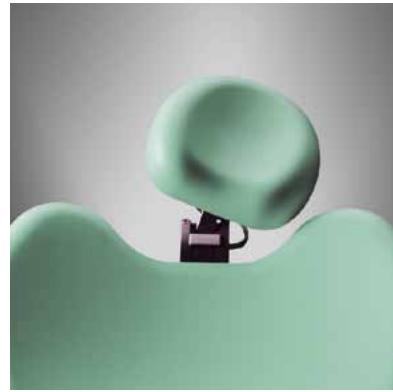
Practical set-up for left-handed dentists

In addition to outstanding manoeuvrability of parts and its intrinsic, far-reaching ergonomic flexibility, S220TR HYBRID can easily be adapted for use by left-handed dentists thanks to the quickly re-positionable instrument control panel.

A versatile control panel

Key instrument parameters and dental unit status can be monitored at all times on the large LCD display. For example, the software will tell the dentist when the H₂O₂ tank needs filling. With turbines and scalers the control panel also allows the user to display and adjust micromotor rpm and power (expressed as a percentage). It is also possible to re-position the panel on either side of the dentist's module, transforming the dental unit from right-handed to left-handed, and vice versa, in seconds.

ERGONOMICS AND COMFORT



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 headrest in the ideal position, effortlessly and without having to act on levers or brakes.



Carefully selected materials

Upholstery is made of tough yet flexible co-moulded polyurethane lined with seamless SKAI stretch fabric that is heat-welded to the padding.

Those parts of the patient chair most subject to wear are made of solid shock-absorbent, scratchproof polyurethane.



Anatomic chair design

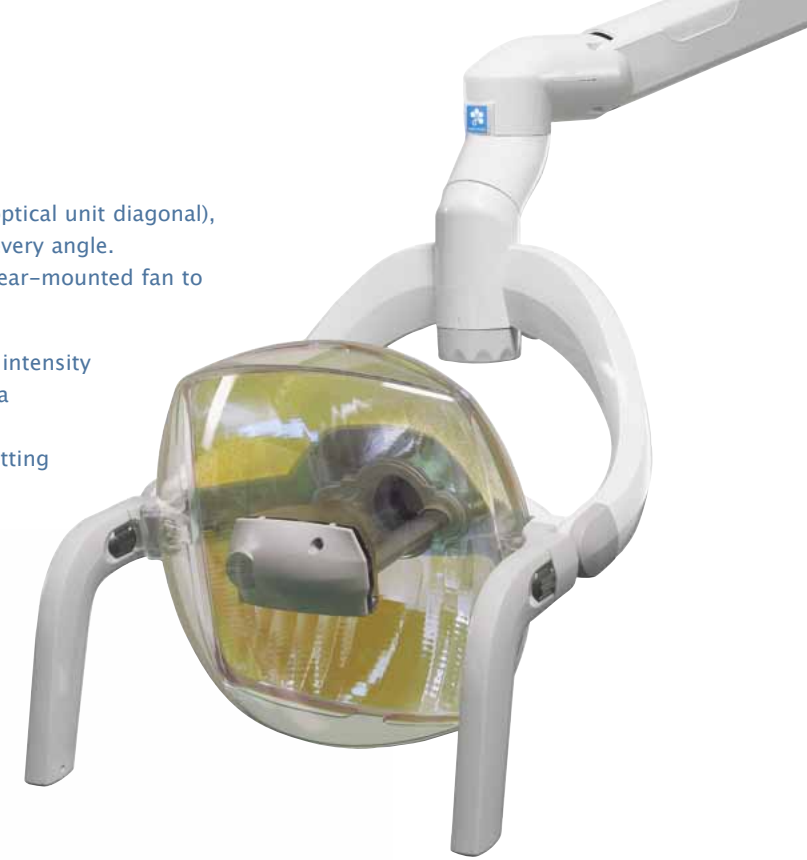
Combined patient chair movements ensure correct alignment of the lower limbs and constant, proper support of the patient's shoulders, thus preventing undesirable tension in the neck and shoulders themselves.

Recall to the Trendelenburg position is automated.

Stern Weber VENUS PLUS operating light

The VENUS PLUS light moves around 3 axes (including the optical unit diagonal), allowing the user to adapt the light to the oral cavity from every angle. Also features a protective screen for easier cleaning and a rear-mounted fan to reduce noise.

- Soft-start device with automatic progression of luminous intensity
- Potentiometer for adjustment of luminous intensity from a min. 8,000 to max. 35,000 Lux
- Colour temperature 4,900 K independently of intensity setting
- Chromatic yield: 97%



Memory-Foam Upholstery

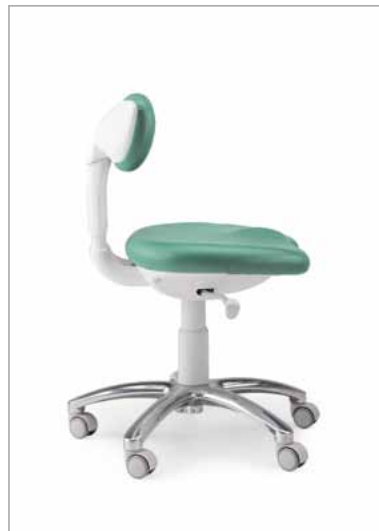
Anatomical Memory-Foam upholstery (optional) ensures proper patient support and greater comfort, especially during long procedures.

Optimal distribution of the surface area in contact with the patient's body and uniform exertion of pressure make the patient more comfortable and relaxed.

An operating area comfortable for everyone

Efficiency also depends on the degree of comfort in the work area and good patient relaxation. Thanks to excellent design and synchronised movement, the patient chair provides proper support for patients of all builds. Comfort is enhanced further by the anatomical padding and orbital headrest options. Equally important for the dentist is proper lighting of the operating zone.

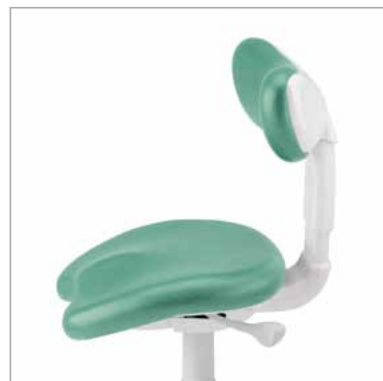
POSTURAL ERGONOMICS



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.



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 that there is no pressure on the thigh underside zone.



Simple, practical controls

The new stool is easy to adjust. Horizontal-slide control levers allow adjustments to be made via contact with the wrists, not the fingers, ensuring hygiene standards and ease of use.

The advantages of proper posture

Incorrect working postures can cause varying degrees of discomfort and musculoskeletal 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, lessening fatigue over 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.

LIGHTING: THE FUTURE LOOKS BRIGHT



Perfect positioning

The new VENUS PLUS - L LED operating light is easy to position. The light housing features 3-axis adjustment to ensure the lighting axis is always parallel to the dentist's view.



Enhanced, effective lighting

- Dual reflected-light LEDs mounted inside a large dish ensure minimisation of the 'shadow effect'
- Low power consumption, outstanding lighting performance
- 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



Infrared sensor

The infrared sensor (optional) can be used for remote operating light on/off and brightness control, thus ensuring maximum hygiene.



- Hermetically sealed front screen
- Handles can be removed for sterilisation



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.

PERFORMANCE AND FLEXIBILITY



Efficient, safe ultrasound
 Designed to safeguard soft tissues, the new SC scalers are ideal for supra-gingival prophylaxis and more invasive periodontic tasks. They enable excellent operational features even for preparatory procedures of small caries besides in endodontic root canal cleaning procedures. Power, precision and flexibility of application are the qualities that set the SC ultrasonic scalers apart.

Cleaning and Hygiene
 SC scalers enable perfect hygiene. They may be disassembled for cleaning and basic maintenance procedures. They may also be sterilised in an autoclave.

Ergonomics and comfort

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.



Technology and Control

SC-A2 and SC-A3 are controlled by highly advanced electronics, able to regulate the vibration amplitude by way of a retroactive power signal adjustment.

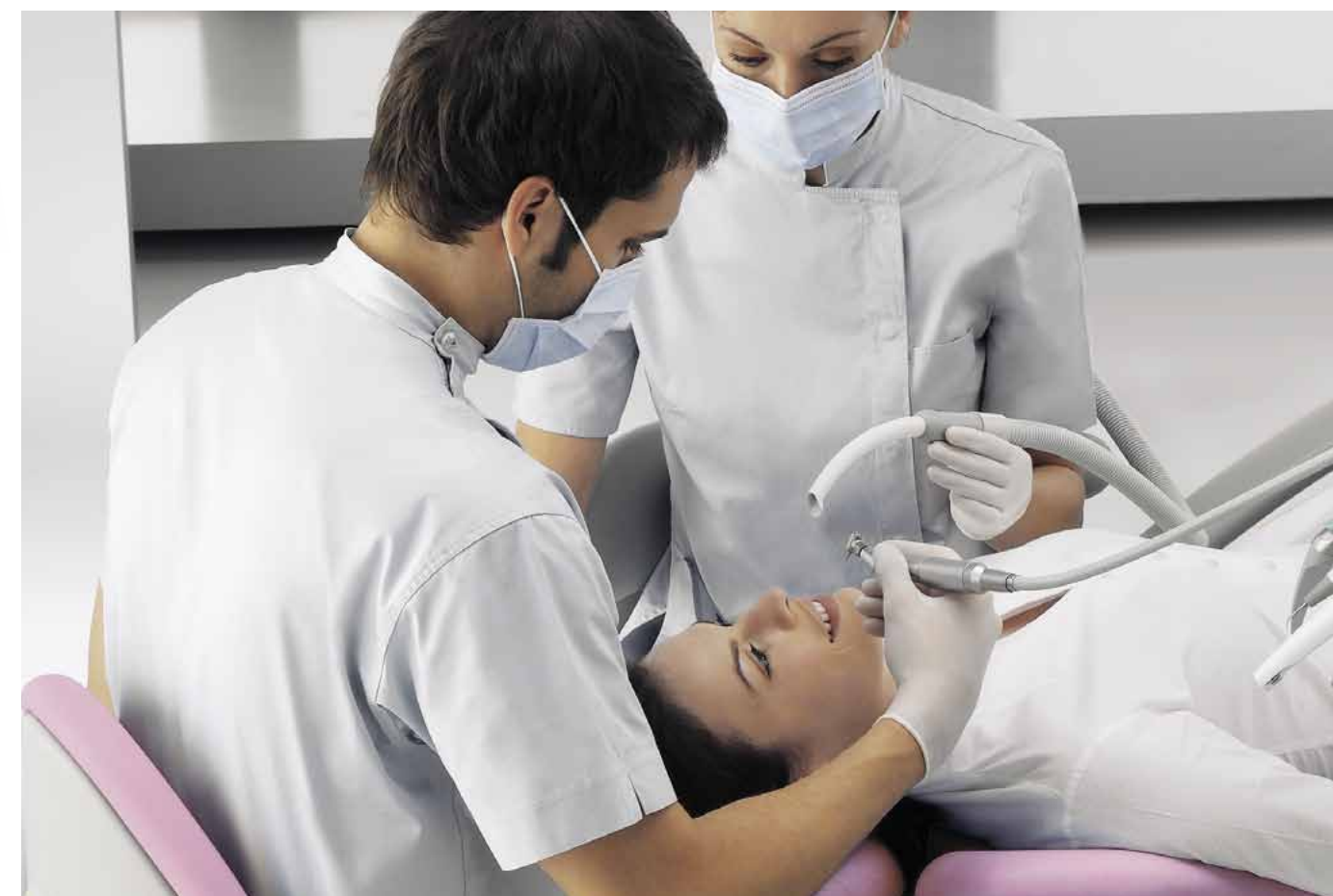
Depending on the resistance met by the tip on the surface undergoing treatment, the power delivered is self-adjusted avoiding the overheating of the handpiece and irrigation fluids. The sine wave form assures low heat dissipation and heightened operational efficiency in the handpiece.



Standard tips: Tartar Scaler



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 versions are cold-disinfectable, maximum torque is 3 Ncm and speeds range from 1,000 to 40,000 rpm. Dimensions: Ø22 x 35.1 mm Weight: 82 g



TECHNICAL SPECIFICATIONS	SC-A3	SC-A2
Operational frequency	25-32 kHz	25-32 kHz
Self-tuning	Yes	Yes
Power may be set from 1 to 100%	Yes	Yes
Maximum output	12W	12W
Maximum output in ENDO Mode	3W	3W
Handpiece may be autoclaved	Yes	Yes
LED illumination	Yes	No
Dimensions of handpiece in mm	ø 19 x 102	ø 19 x 102

Multi-role instruments

Assured performance from the Stern Weber instrument range, which includes the latest generation of brushless micromotors and ultrasound scalers: compact, lightweight and extremely user-friendly.

All instruments are perfectly integrated with dental unit electronics and the dentist enjoys complete control of parameters, all of which can be managed with immediacy and simplicity.

WORKING COMFORT



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). The Silver 4LK turbine is preset for the MULTiflex® quick coupling.

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.



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.



Push-button bur change

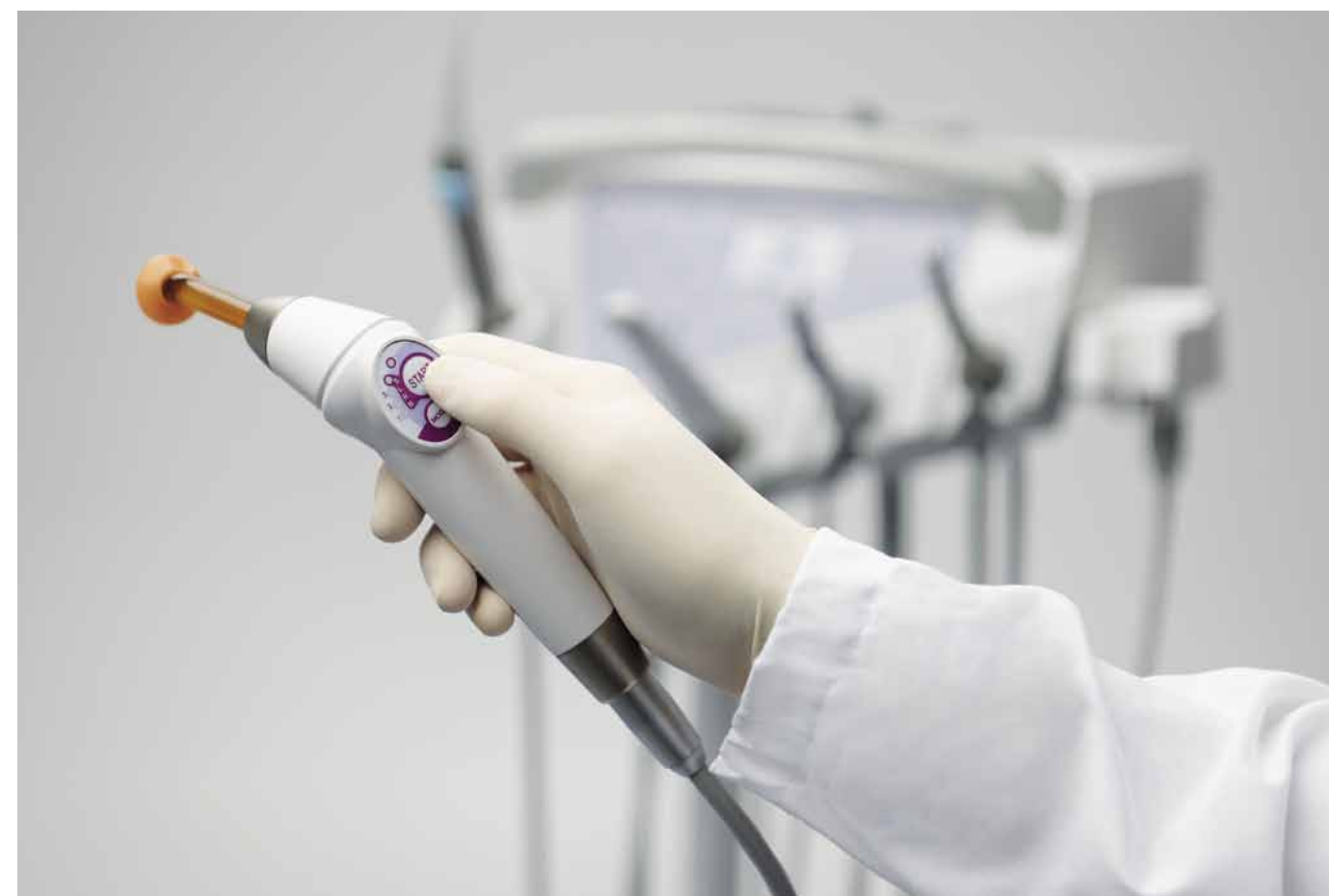
Bur changes are made fast and easy thanks to the push-button release present on the head of all Stern Weber Silent Power models.



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.

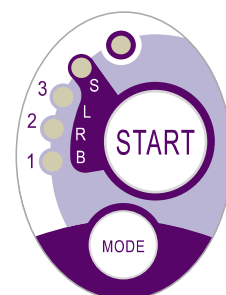
Very high efficiency LEDs, 6 time/power programs, energy delivered (max. 36,000 mJ) and compact design make the T-LED an ideal compound curing tool.



6 programmes to meet every possible need

The new light emission cycles have, following in-depth analysis and clinical recommendations, been optimised to deliver the right amount of energy in relation to minimum light exposure times. This prevents compound shrinkage.

Program	Total time	Light guide Ø8 mm	Total energy
Program 1 - Standard	20 s.	1,000 mW/cm ²	20,000 mJ
Program 2 - Rapid	15 s.	1,600 mW/cm ²	24,000 mJ
Program 3 - Cement and inlay	20 s.	1,800 mW/cm ²	36,000 mJ
Program 4 - Bonding	15 s.	Ramp	11,250 mJ
Program 5 - Rapid Restoration	15 s.	Ramp	20,250 mJ
Program 6 - Long Restoration	20 s.	Ramp	26,250 mJ



In the dentist's hands

A key aspect of the Stern Weber range is the outstanding ergonomics, meticulously designed to improve working comfort. Handpiece lightness, size and shape, low noise and vibration levels on dynamic instruments: every single detail enhances the concept of working ergonomics.

The purpose of painstaking instrument development is also to provide excellent, long-lasting performance and reliability, thus ensuring that dentists get the very most from advanced Stern Weber engineering.

SIMPLE TECHNOLOGY



Foot controls

The multi-function foot control is available in three versions: horizontal-slide lever control, conventional pressure-operated foot control and the all-new Power Pedal. All the main functions and controls can be activated via the foot control:

this enhances hygiene, saves time and focuses the dentist's attention on the patient.

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 selected the foot control can also be used for the freeze-frame function.

Wireless foot control

The optional wireless foot control is particularly suited to the S220TR HYBRID, as it allows the dentist to move around the patient chair without the hindrance of connection leads to the dental unit.

The patient chair and other functions are controlled just as they would be with the lead-connected foot control. The wireless unit is available in lever-operated and more conventional pressure-operated versions.



Lead connection

Where required the wireless foot control can be connected to the dental unit via a lead. While it is connected the functions remain the same and the battery is recharged. In any event lithium ion batteries ensure long-lasting unit autonomy.



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.



High definition images

Images make communication simple and immediate. The availability of an integrated system allows patients to be involved in every stage of their treatment, providing added motivation to proceed with the therapeutic programme. The simplicity of the devices and the immediacy of image-based communication opens the way to informed consensus, promoting a professionalism in which dialogue and continuous attention to the patient play a pivotal role.

ACTIVE HYGIENE



I.W.F.C. (Integrated Water Flushing Cycle)

The I.W.F.C. device (optional) 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.



SANASPRAY

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

The tank is placed outside the unit body, making it easily accessible to the assistant.



System compliant with EN 1717 (DVGW)

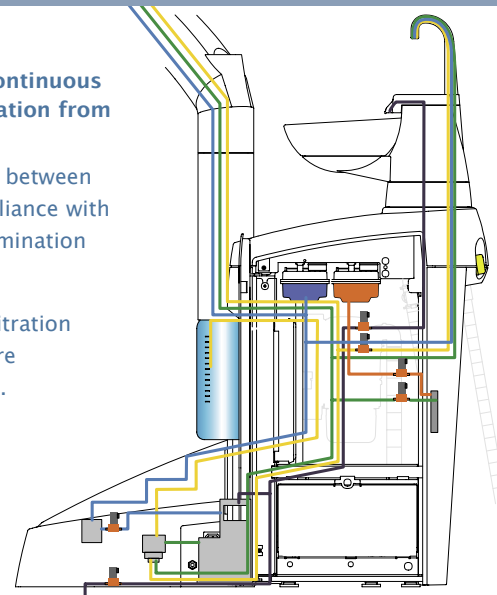


W.H.E. Water Hygienisation Equipment – Continuous hygiene system with Type A air gap separation from mains water as per EN 1717 standards.

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 H₂O₂ to provide a secure bacteriostatic effect in the unit water circuits.

- W.H.E. water with 0.06% hydrogen peroxide
- SANASPRAY distilled water
- Cannulae wash disinfectant
- Mains water



Safety you can count on

To ease those daily tasks that are essential to maintaining rigorous levels of hygiene Stern Weber has perfected automatic systems that allow medical personnel to guarantee exacting hygiene standards while cutting manual jobs to a minimum. Some systems are only available on digital models, others across the entire range. Each system provides total security and maximum peace of mind.

PASSIVE HYGIENE



Easy access

The hatch shielding the internal parts of the unit body covers the entire side of the unit, allowing easier and faster completion of assistant's tasks and scheduled maintenance.



Double filters

The double suction filters fit flush with the unit body. Extensive filtration surface area ensures maximum efficiency and reduces emptying frequency. Automatic, independent selection of cannulae is available as an optional function.



Cannula roller guides

The roller housing smoothes removal and placement of the suction cannulae; it can easily be removed for disinfection and cleaning purposes.



Suction tube duct

The suction tube duct is provided with an easily accessible filter.

The large surface area of the filter reduces the need for frequent drainage.



Disposable covers

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



Specially treated surfaces

Because exposed surfaces have no gaps and upholstery is seamless cleaning is easier and the possibility of contamination is limited. Easily removable upholstery ensures easy, effective sanitising. Surfaces are coated with polyurethane paint or made with techno-polymers highly resistant to chemical aggression.

A design concept

For Stern Weber hygiene is neither casual nor limited to certain aspects: it is both comprehensive and constantly borne in mind because it stems from the goal of guaranteeing dentist, assistant and patient complete safety. Right down to the finest detail, dentists will discover that Stern Weber units are designed and built with the utmost care and attention to minimise the risk of contamination and make cleaning tasks easier. Both the design and the specific devices of the unit provide a hygiene system that is both far-reaching and cutting-edge.

