

User Report

Dental practice

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KaVo EXPERTsurg LUX / MASTERSurg LUX



When we established a new building for our practice early in 2014, we re-evaluated the entire area of surgery. The requirements of the RKI guidelines and our aim to improve our quality management were the main reasons for us to consider purchasing a new surgical unit.

Before actually realizing this investment, we were given an opportunity to test the new surgical units made by KaVo in our practice routine for several months.

Since we run a general dentistry practice without specializing on surgery, we decided in favor of a surgery cart to make the surgical unit easily available in the different treatment rooms. The cart is stored in a central location in a kind of „garage“ and transports the surgical unit including straight and contra-angle hand-pieces and accessories to where it is needed.

This allows us to equip the treatment rooms adequately on short notice even if the surgical intervention was not scheduled beforehand.

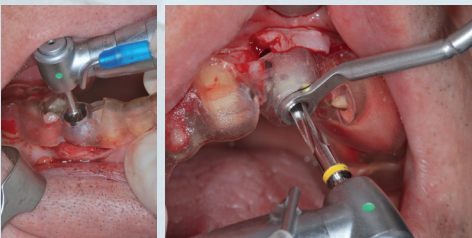


Basically, it is possible to select from two KaVo models.

The KaVo EXPERTsurg surgical unit as the standard model (shown on the right) and the MASTERSurg affording the following additional equipment features:

- Touch-screen replacing the membrane keyboard
- Wireless foot control
- Documentation of torques during the treatment on SD card
- Display of the torque graph
- Additional opportunity to freely program treatment steps

We have used both devices for osteotomies and implantations.



The external coolant solution is pumped by an irrigation pump via an external tube (disposable product) to the rinsing spray channel. The pump flow rate can be set to one of 4 levels.



Both versions use the powerful S 600 LED as their motor that features a lightweight design and matches well with the KaVo surgical handpieces.

First we defined several steps of an implantation on both of the devices. This process was very easy due to the intuitive programming.

In operation, both devices were very convincing. All surgical interventions were carried out without any errors or breakdown of the equipment. Our dental assistants experienced no problems when they connected the NaCl solution and the coolant hose to the unit and the pump.

The motor showed good start-up behavior and a strong motor power without heating up. The LED light ensured good illumination of the entire surgical field without glare.

Thanks to the well-balanced motor and contra-angle, I could work safely and fatigue-free.

The different pre-programmed treatment steps used in implantology can be called up easily step-by-step by means of the foot control. In addition, the foot control can be used to switch to reverse rotation - indicated by a warning sound - and to set the rinsing fluid rate. The behavior of the foot control can be defined appropriately such as to match the preference of the user. Either fixed speed upon actuation or increasing speed according to increasing pressure on the button.

The membrane keyboard and the touch display are easy to use. We liked the color display very much as it offers optimal sight from all angles due to a nonreflecting display.

Who has never wanted to briefly rinse the bone cavity during a surgery? However, due to the rotating handpiece, actuating the motor usually results in a spray mist rather than cleaning of the surgical field. The special rinsing function of the surgical units - actuated by the foot control - allows this to be done easily now without a rotating handpiece.

Initially, we were surprised that the foot control can be taken apart completely for cleaning purposes and thought this would not be necessary. But when we looked more closely at the foot controls of the surgical units and noticed the soiling, we became excited about this opportunity to clean the parts individually.

The most convincing feature of both units, EXPERTSurg and MASTERSurg alike, was how they meet the requirements of RKI. Looking at the components that make up a surgical unit, it is indisputable that straight and contra-angle surgical handpieces are hollow bodies and need to be classified as level „B“ critical.



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Classifying the motor and motor tube may give rise to a heated debate. Obviously, neither of these is associated with „penetration of skin/mucous membrane“ meaning that both must be considered to be semi-critical products.

However, some colleagues and site inspectors classify even products exposed to blood as critical. Now, if one also considers the possibility of treating difficult patients, we can agree that even motor and motor tube need to be classified as being critical as a prophylactic measure. This means that the components of the unit, starting with the housing connection, must be well-suited for reprocessing like appropriately critical surgical products.



In terms of the practical application, this means:

1. Reprocessing in the thermo disinfectant including drying
2. Sterilization in an autoclave class B



This is easy to do with the KaVo EXPERTurg or MASTERSurg. The reprocessing can be conducted without additional actions on motor and hose.

To summarize our practice test, the test was consistently positive. Both the MASTERSurg and the EXPERTurg are well-suited for a dental practice and very convinced based on these features:

- High quality components
- Straight and contra-angle hand pieces feature LED light
- Smooth surface, easy to clean
- RKI-conform reprocessing of all critical components
- Reliable powerful micro motor
- Large clearly-structured display
- High retention of value as is common for KaVo products
- Good price/performance ratio

I personally prefer the MASTERSurg unit. I liked very much the additional programming possibilities and the easy-to-clean glass touch panel. Thanks to the wireless foot control, I could carry out the surgery without being disturbed by any cable.

It is mainly the safeguarding for the future, which is provided by the MASTERSurg unit in terms of RKI-conform reprocessing. Finally, considering an eventual need to document surgical treatments, I decided to purchase the MASTERSurg. I consider the extra cost compared to the EXPERTurg as justified.

