

YOUR RELIABLE SUPPORT IN ORAL SURGERY: PIEZOSURGERY® TOUCH BY MECTRON

The experience gained in using a piezosurgery device for several interventions on rabbits in a research study for the University of Hadassah in Jerusalem, Israel, makes me come back to you on piezosurgery.

I have decided to present to you a new piezosurgery device, produced by the well-known company Mectron S.P.A. (via Loreto 15 / A, 16042 Carasco (Ge), Italy), which in 2001 introduced a revolutionary technology for bone surgery, namely piezosurgery.

Piezosurgery provides a number of clinical benefits:

- provides micrometric cuts for minimally invasive surgery, with maximum surgical accuracy and intraoperative tactile sensation
- ensures selective cuts with protection of soft tissues (nerves, vessels and membranes)
- creates a bloodless surgical site with maximum intraoperative visibility through the cavitation effect
- provides maximum safety during bone cutting for both surgeons and patients.

The new device, PIEZOSURGERY touch, has a number of benefits for the patient, due to the technical advantages it furnishes, its precision, safety, ergonomics as well as quality for surgeon.

PIEZOSURGERY® touch has a number of benefits for the patient:

- soft tissue protection
- the risk of perforation is reduced by over 80% in lateral sinus lift surgery
- reduced post-surgical edema
- faster bone integration after preparation of the implant site
- faster and less traumatic post-operative recovery.

Here are the technical advantages of PIEZOSURGERY® touch:

Digital screen:

- all-glass touch screen
- easy to clean
- irrigation and power rate chosen by digital control
- protection of the screen from dirt, scratches or fingerprints by sterile protection foils.

Automatic protection control (APC):

- recognizes deviations from standard operation automatically
- stops power and fluid in less than 0.1 seconds
- shows the cause of the interruption on the touch screen.

Feedback system:

- constant and optimal adjustment of the insert movement
- automatic power detection and consecutive adjustment
- simplified user intervention by depressing the foot pedal.

Working efficiency:

- provides optimal power-to-safety ratio



The PIEZOSURGERY® touch device (Mectron s.p.a. (via Loreto 15 / A, 16042 Carasco (Ge), Italy)
<https://dental.mectron.com/products/piezosurgeryr/units/piezosurgeryr-touch/>

- the intelligent electronic feedback system ensures maximum power and cutting efficiency
- ensures the efficiency, safety and success of each surgery.

Unique handpiece system:

- fully sterilizable handpiece cord system and LED-handpiece
- sterilizable internal irrigation line
- handpiece cord coupling protected against mishandling.

LED-handpiece:

- swivel LED light directed to the insert tip
- choice between automatic, and permanent light or off
- flexible position adaptable to the sterilizable handpiece holder (4 positions).

Flexible irrigation system:

- the irrigation system works with standard parts
- the peristaltic pump tube is reusable
- standard connections for piping
- liquid line integrated in the handpiece cord.

Automatic cleaning function:

- cleaning cycle for the main irrigation tubes of the device
- control provided by the foot pedal.

Foot pedal

- 360° foot pedal control function
- high weight for fix positioning
- easy movement with the U-bolt.

Due to the technical advantages presented above, the PIEZOSURGERY touch device ensures precision, safety, ergonomics and quality for the following categories of surgery: sinus lift technique - crestal and lateral approach, implant and mini dental implant site preparation, extractions / explantation, ridge expansion, corticotomy techniques, bone block grafting, bone chip grafting, bone modeling, endodontics, osteotomy close to nerves, periodontal surgery, and implant cleaning. Due to its main technical specifications and its very clear qualities, the PIEZOSURGERY® touch device is positioned as a reliable support in oral surgery.

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