As I take the helm of Piezosurgery Incorporated, I am humbled by what has been accomplished in the 17 years since my father, Dr. Tomaso Vercellotti, and mectron’s engineers - Domenico Vercellotti and Fernando Bianchetti - invented Piezosurgery®.

Over the years, more than 2000 clinical and scientific papers have been published on Piezosurgery®, we have been awarded over 35 U.S. and international patents, and we have had the privilege of working with thousands of leading clinicians worldwide.

I am proud of having witnessed the development of Piezosurgery® from its first inception in my father’s practice to becoming a true paradigm shift in bone surgery and I look forward to building upon our history of success to further strengthen our position as a market leader.

My commitment as Piezosurgery Incorporated’s Chief Executive is to continue offering new and improved clinical solutions to dental professionals in the United States and Canada, and to forge strong long-term partnerships with both existing users and new adopters of our technology to ensure we maximize return on investment for each and every customer.

I am confident that, when you will take the time to learn more about Piezosurgery® and our company, you will realize how our technology and our service can benefit your daily practice. We are committed to assisting you in delivering consistently better patient outcomes for years to come.

Our Product Specialists, Customer Care professionals and I hope you will join the growing Piezosurgery® family and look forward to assisting you accomplish new and greater professional goals.

Giuseppe Vercellotti, PhD
President & CEO
THE NEW STANDARD OF CARE.

PIEZOSURGERY® - consistently improving surgical outcomes.

PIEZOSURGERY® has caused a paradigm shift in osseous surgery and is becoming the new standard of care in oral and periodontal surgery.

We invite you to learn about our technology, which gives you maximum intra-operative precision and control – and minimal stress for you and your patients. Once you learn more, we know PIEZOSURGERY® will become an intrinsic element in your daily practice, as it has for thousands of leading clinicians worldwide.

MAXIMIZE SURGICAL PRECISION

Maximum surgical precision and intra-operative tactile sensation for minimally invasive surgeries thanks to micrometric cuts.

CUT BONE, NOT SOFT TISSUES

Our patented ultrasonic modulated frequency is designed to cut bone and not soft tissues. This provides maximum safety for surgeons and patients.

MAXIMIZE INTRA-OPERATORY VISIBILITY

Maximum intra-operative visibility thanks to cavitation effect inducing temporary hemostasis.

WHY PIEZOSURGERY®?

Saws and burs limit your intra-operative control and may cause damage to bone and soft tissues. Additionally, the friction caused by their movement can lead to tissue overheating and necrosis.

PIEZOSURGERY® allows surgeons to have maximum control through its microvibrations, thus achieving extreme precision and safety.

Bone bur
Bone saw
PIEZOSURGERY®
PIEZOSURGERY® uniquely promotes tissue healing while cutting.

Several clinical and histological studies have shown that PIEZOSURGERY® is superior to saws and burs not only in terms of intra-operative precision and safety, but also in regard to tissue healing. When a surgeon uses PIEZOSURGERY® instead of conventional instruments, there is a significant acceleration in the healing response: inflammation is more controlled, there is a significant early increase in bone morphogenetic proteins (BMPs) levels, and faster new bone formation.\(^1\)

Additionally, PIEZOSURGERY®’s unique cutting action characteristics allow preserving the integrity of soft tissues such as membranes and the periosteum, for an enhanced healing response when compared to manual instruments.\(^2\)

Because PIEZOSURGERY® respects soft tissues and reduces intra-operative bleeding, the overall iatrogenic trauma is reduced, with immediate, tangible patient benefits. Patients don’t lose as much blood, don’t experience as much post-operative swelling, and overall report reduced discomfort associated with the surgical procedure.

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IT'S ALL ABOUT THE TECHNOLOGY.
PIEZOSURGERY® has been revolutionizing numerous surgical procedures.

Since we first developed PIEZOSURGERY®, our devices have been revolutionizing osseous surgery in a variety of clinical specialties. Our technology's many applications in dentistry, implantology, and oral surgery range from extractions to orthognathic procedures. In all clinical applications, PIEZOSURGERY® delivers great cutting efficiency, maximum intraoperative control and visibility, and utmost safety when working in proximity to delicate anatomical structures such as nerves, membranes, and blood vessels.
Perform surgeries you did not think possible.

PIEZOSURGERY® has caused a paradigm shift in dentistry and oral implantology. This technology, simplifies numerous surgical procedures and even allows clinicians to perform procedures that were simply not possible using conventional instruments.
PIEZOSURGERY® TOUCH.
The 4th generation of the original, unrivaled, evidence-based technology.

PIEZOSURGERY® touch responds to the need of simplicity and efficiency that the most demanding surgeons expect from the latest technology.

With simple, intuitive settings at the touch of your fingers, PIEZOSURGERY® touch is an extension of your body and maximizes your surgical skills to help ensure precise, safe, flawless surgical outcomes.

The PIEZOSURGERY® touch device has several innovative features including a black glass touch surface, handpieces with swivel LED lights for optimum visibility, a more compact and versatile console, and a new and improved computerized feedback system. For ease of use, this device also features intuitive setting controls as well as four handpiece holder configurations.

• sterilizable, all-in-one LED-handpiece and cord system
• sterilizable, internal irrigation line, with no disposable components
• innovative handpiece cord connector ensuring easy plug-in
A touch of your finger is all you need to select cutting and irrigation settings. No further insert specific adjustments are required – the fine tuning for each insert and indication is performed automatically by PIEZOSURGERY® touch's electronic feedback-system.

The exclusive feedback system automatically adjusts optimal insert movement and power levels to consistently provide the best cutting efficiency in every situation – allowing the clinician to focus on surgery and deliver the best possible surgical outcomes.

Thanks to its intelligent electronic feedback system, the original PIEZOSURGERY® technology provides maximum power and perfect cutting efficacy in every situation without ever compromising soft tissue safety – for surgeries which are time-efficient, safe, and successful.
The perfect device to enter the world of PIEZOSURGERY®.

As an entry-level product you couldn't ask for a more versatile, yet effective, ultrasonic device to provide your patients with state-of-the-art treatment.

PIEZOSURGERY® GP was developed for the general practitioner who performs a limited number of surgical procedures, yet wants to incorporate the benefits of PIEZOSURGERY® in their practice.

PIEZOSURGERY® GP is an excellent option for the young specialist who has just opened a practice and wants to enter the world of PIEZOSURGERY®.

PIEZOSURGERY® GP is also ideal for the budget-conscious specialist practice looking to incorporate a device in each operatory.
PIEZOSURGERY® GP.
The real PIEZOSURGERY® in a new, cost-effective console.

The new PIEZOSURGERY® GP has a compact and versatile console, a standard (non-LED) handpiece, and a new and improved computerized feedback system. This device also features intuitive setting controls, as well as four handpiece holder configurations.

PIEZOSURGERY® GP combines the same cutting efficiency and all of the clinical benefits of our patented dual wave technology with standard manual functions.

Constructed with cost-effective materials selected for easy cleaning, disinfection and sterilization, PIEZOSURGERY® GP offers the clinician a budget-friendly instrument to be incorporated in the daily clinical practice.

AUTOMATIC PROTECTION CONTROL
- recognizes deviations from standard functioning automatically
- stops power and irrigation in less than 0.1 seconds
- displays a diagnostic icon on the keyboard.
ONGOING CUTTING EDGE INNOVATION.

With new, clinician-designed inserts released every year, PIEZOSURGERY®'s vast array of insert options will never hold you back.

Our commitment to maximizing your return on investment drives us to expand the range of clinical applications for PIEZOSURGERY® devices through the ongoing development of innovative insert designs.

All PIEZOSURGERY® inserts are developed in response to specific clinical needs and result from collaborations with universities and clinical practitioners. Our rigorous insert development process includes finite elements analyses, computer simulations, serial prototyping, and extensive laboratory and clinical research.

Thanks to clinical experience and our cutting-edge technological know-how, over 90 PIEZOSURGERY® insert designs are now available to surgeons worldwide – and new inserts are released every year.

**CUT EFFICIENTLY**
- effective and safe SHARP inserts
- fine and uniform cutting
- used for osteotomy, osteoplasty and implant site preparation

**CUT SAFELY CLOSE TO NERVES**
- diamond-coated SMOOTHING inserts for precise and controlled operation on bone structures
- safe osteotomy close to delicate anatomical structures such as Schneiderian membrane and nerves

**CLINICAL VERSATILITY**
- BLUNT inserts for soft tissue preparation
- root planing in periodontology

**EASY ORGANIZATION**
- set of inserts for specific clinical applications
- stainless steel tray with depth markings
- ideal for sterilization and storage
PRECISION
PIEZOSURGERY® inserts are individually crafted using a CNC controlled 5-dimensional sharpening machine, which cuts with an accuracy of up to 0.1 μm.

The whole cutting process for a single insert lasts up to 12 min.

SURGICAL OPTIONS
Depending on their clinical application, inserts are coated with specially selected diamonds.

Different diamond sizes ensure optimal surgical performance in each clinical application.

LONG-LASTING
A coating of titanium nitride, applied to all cutting inserts, increases their surface hardness, thus reducing friction and corrosion, thus increasing the insert’s working life.

QUALITY YOU CAN COUNT ON
Lot numbers are laser etched on each insert, ensuring traceability pursuant to the highest quality control standards.

INDIVIDUAL QUALITY INSPECTION
Each insert is visually inspected by a Quality Control representative to guarantee that surgeons worldwide will receive only the best performing instruments.

PIEZOSURGERY® unique cutting action results from the application of ultrasonic modulated vibrations to a surgical insert. To deliver the best surgical performance, the insert and handpiece must vibrate in unison up to 36,000 times per second. To withstand such an enormous strain, all PIEZOSURGERY® inserts are individually crafted from forged stainless steel and designed to couple with the handpiece perfectly for optimal tuning.

PIEZOSURGERY®’s proprietary, 12-step insert manufacturing process lasts several months and employs the finest materials and most advanced technological processes to guarantee that all inserts meet the highest quality and cutting efficiency standards.
SURGICAL CHOICES.

PIEZOSURGERY® has dedicated inserts for a wide variety of clinical applications.

Our technology is designed to empower surgeons to perform more and better surgeries. PIEZOSURGERY® has over 90 inserts specifically designed for use in many applications in oral surgery and implantology, from sinus lift to ridge splitting, extractions and even orthognathic procedures.

**OPTIMAL VISIBILITY**
- swivel LED-light can be directed to the insert tip
- choice between automatic, and permanent light or switched off
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**DENTAL IMPLANT REMOVAL (EXPLANTATION):**

- EXP3-R
- EXP3-L
- EXP4-R
- EXP4-L

**ACCESS OSTEOPLASTY:**

- OP1
- OP2
- OP3

**OSTEOTOMY CLOSE TO NERVES AND VESSELS:**

- OT1
- OT2
- OT3

**OSTOTOMY:**

- PS1
- PS2
- PS3

**PERIOSTEAL ELEVATION:**

- PR1
- PR2

**OSTEOMY CLOSE TO NERVES AND VESSELS:**

- OT1
- OT2

**SCALING:**

- PP1
- PP2
- PP3

**RESECTIVE SURGERY:**

- OP2
- OP3
- OP4

**CROWN PREPARATION:**

- DR2
- TA12D60
- TA14D60
- TA16D60
- TA12D90
- TA14D90
- TA16D90
- TA14D120
- TA16D120

**SUBGINGIVAL MARGIN PREP:**

- OT13
- OT14
ULTRA-OSSEointegration.

PIEZOSURGERY® induces new bone formation, leading to faster osseointegration of dental implants.

Implant site preparation with PIEZOSURGERY®, the revolutionary technique – safe and precise.

• faster osseointegration due to the reduction of inflammatory cells and increased neo-osteogenesis compared to sites prepared with conventional drills.
• high intraoperative control: our patented implantology inserts with double irrigation allow a perfect control of the site preparation.
• implant site preparation with PIEZOSURGERY® allows placement of all dental implants requiring osteotomies of 2, 3 and 4mm.

1 initial pilot osteotomy
OPTIONAL: verify the pilot osteotomy axis with alignment PIN IM1S
2 pilot osteotomy in anterior or posterior region
OPTIONAL: verify the pilot osteotomy axis with alignment PIN 2-2.4
3 preparation of the cortical basal bone from 2 to 3 mm to ease progressive implant site enlargement
4 enlargement or finalization of the implant site using a 3mm insert with double irrigation for optimum cooling

STEP-BY-STEP IMPLANT SITE PREPARATION TECHNIQUE

1 US PATENTS 8,109,931, 808,295, DS39,909, DS39,908, DS09,588.
The inserts for the implant site preparation are designed to provide best results in maxillary bone.
EVIDENCE-BASED.

The original, patented PIEZOSURGERY® technology is supported by thousands of peer-reviewed publications.

For over 18 years we have had ongoing collaborations with clinical practitioners and research institutions worldwide. As you get ready to incorporate PIEZOSURGERY® into your practice, we invite you to educate yourself on the benefit of our technology by reviewing the extensive peer-reviewed literature. Selected examples of the breadth of benefits associated with PIEZOSURGERY® are collected in our "Abstract Volumes", available for download at www.piezosurgery.us.

"ESSENTIALS IN PIEZOSURGERY"

The monography by Tomaso Vercellotti - published by Quintessence Publishing - clearly outlines the clinical advantages of our technology over conventional instruments. Additionally, the book illustrates the proper surgical technique for many applications through easy to read step-by-step diagrams, which help users at different stages of their career achieve a fast learning curve and benefit from PIEZOSURGERY®’s unique advantages right away.

BONE HEALING

"As bone healing is not disturbed by the PIEZOSURGERY®, but even seems to be improved, this method will have a major influence on new minimally invasive bone surgery techniques".


RESPECT OF SOFT TISSUES

"Membrane perforation rate in this series of 100 consecutive cases using the piezoelectric technique has been reduced from the average of 30% with rotary instrumentation to 7%.*


PATIENT COMFORT

"Microvibration and reduced noise minimize a patient’s psychologic stress and fear during osteotomy under local anesthesia."

ENDORSED BY CLINICAL EXPERTS

PIEZOSURGERY®'s clinical superiority is recognized and endorsed by leading clinicians worldwide.

"Mectron’s Piezosurgery® machine is very efficient and they have been at the forefront of innovation for this technology. Mectron has the most complete repertoire of innovative tips for a wide array of surgical procedures. The staff and support team are very professional and helpful."

Dr. Homa Zadeh
Woodland Hills, California

"The incorporation of Piezosurgery® into both my private practice and Institute over the past 8 years has indeed resulted in a distinct paradigm shift with all of my bone grafting protocols. This exciting technology has afforded me the ability to fine tune and finesse all bone related surgery including donor and recipient site preparation for bone grafting and implant placement, as well as extraction site management and implant removal."

Dr. Michael A. Pikos
Trinity, Florida

"The Piezosurgery® unit has allowed me to perform very precise and minimally invasive procedures for my patients and it out-performs any of the other "piezo" units. This is the standard and original with substantial documentation and research behind it."

Dr. Sascha A. Jovanovic
Los Angeles, California

"What would you use in your mouth? The gold standard, impeccably manufactured, grounded in science, and well-documented in the literature; or something else that is "just as good"? The answer is clear. You would utilize Piezosurgery®. Don't our patients, who place their trust in us, deserve the same? There is no other alternative."

Dr. Paul Fugazzotto
Milton, Massachusetts

"I would not be able to achieve the same results with the same precision and lack of complications and morbidity as I am able to with this unit. THIS is the return on investment. I like the power and tactile feedback I get with the Mectron Piezosurgery® unit and knowing that the tip designs are validated by research has made this the preferred machine for me."

Dr. Giles Horrocks
Boulder, Colorado

I have been using Piezosurgery® in my OMS practice for 5 years. Piezosurgery® provides a new level of precision, efficiency and safety in surgical treatment. Complicated procedures including Sinus Grafting, Ridge Expansion and Nerve Repositioning can be performed with less stress and have an expanded role in my practice. The speed of the unit is impressive, reducing operative time and patient discomfort.

Dr. Daniel R. Cullum
Coeur d'Alene, Idaho

"I use Piezosurgery® for almost all surgical procedures; it reduces my surgical stress while improving patient outcomes. This equals fun for me and it is evidence-based."

Dr. Robert Levine
Philadelphia, Pennsylvania

New technology should allow a clinician to do something better, quicker or allow something that could not be done before. The Piezosurgery® unit fits those criteria for myself and the other three doctors in the practice.

Dr. Ralph Wilson
Paradise Valley, Arizona
GET MORE PATIENTS.

More patients than ever are now seeking providers using PIEZOSURGERY®. Let us connect them with you.

Increased exposure in the media, has made the real PIEZOSURGERY® popular among patients seeking the best care. As a service to these patients and an added benefit to our customers, we have introduced a patient portal on our website, which allows patients to learn more about specific advantages of our technology in various procedures and to connect with practices that use PIEZOSURGERY® in their area.

When you join the elite community of clinicians using PIEZOSURGERY®, your practice is eligible to be featured on our patient portal and each clinician may become a "PIEZOSURGERY® Certified Provider". To recognize your participation in this initiative, you will be provided with an authenticated certificate displaying the "CERTIFIED BY PIEZOSURGERY®" logo and a unique provider number assigned to your practice.

CONNECT WITH PATIENTS
Display your practice on our easy to use Practice Locator, allowing patients to find Certified Providers in their area.

PATIENT EDUCATION
Educate your patients on the numerous clinical advantages of utilizing PIEZOSURGERY® and its post-operative benefits.

SHOWCASE YOUR PRACTICE
Our Patient Testimonials Page spotlights your practice and the positive experience your patients had with you and PIEZOSURGERY®.
EDUCATION FOR SUCCESS.

Maximize your surgical success with PIEZOSURGERY® with unlimited complimentary hands-on training courses.

Piezosurgery Incorporated offers its customers unlimited, complimentary access to "Essential in PIEZOSURGERY®" training courses. Combining case presentations, lecture, and hands-on opportunities throughout the day, attendees have the opportunity to discover the many surgical applications that are enhanced and perfected in utilizing this advanced technology.

Additionally, clinical videos and other resources on the proper use, set-up, and maintenance of our devices are available online. Learn more at www.piezosurgery.us.