# NOWERFUL

# LESS TRAUMA LESS DRAMA

PIEZOTOME



PIEZOTOME

Dr. John Russo, DDS, MHS (Sarasota, FL) "PIEZOTOME" technology has revolutionized implantology in my practice."

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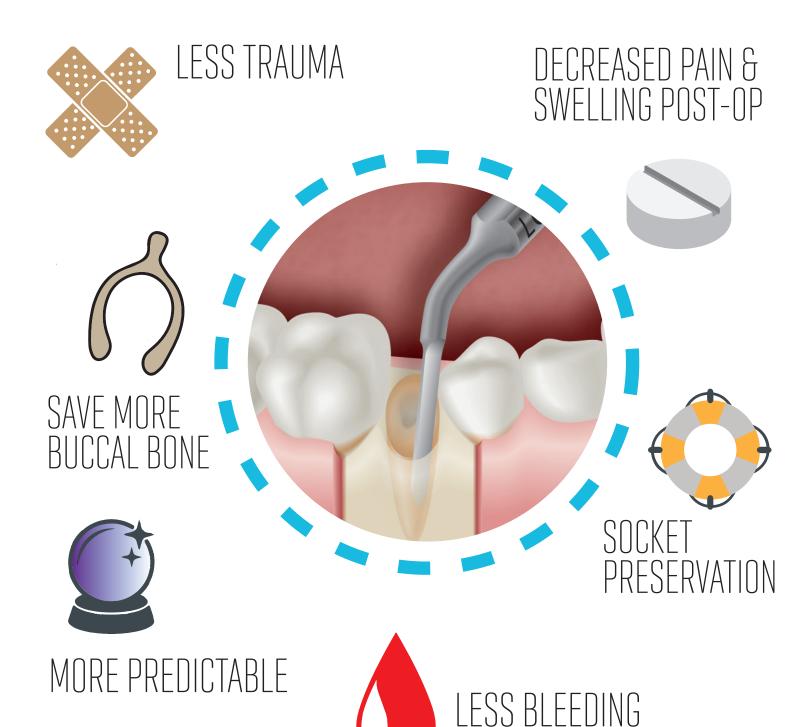
3

60

ml/min



# EXPAND YOUR EXPERTISE WITH ATRAUMATIC EXTRACTIONS



# CUBE PROCEDURES



#### BONE SURGERY

#### Osteotomy/Osteoplasty

Clean and thin cut for maximal bone volume grafts *Ref. F87509* 





#### **CREST SPI ITTING**

Rapid and minimally invasive technique for controlled ridge splitting *Ref. F87567* 



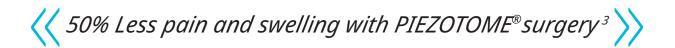


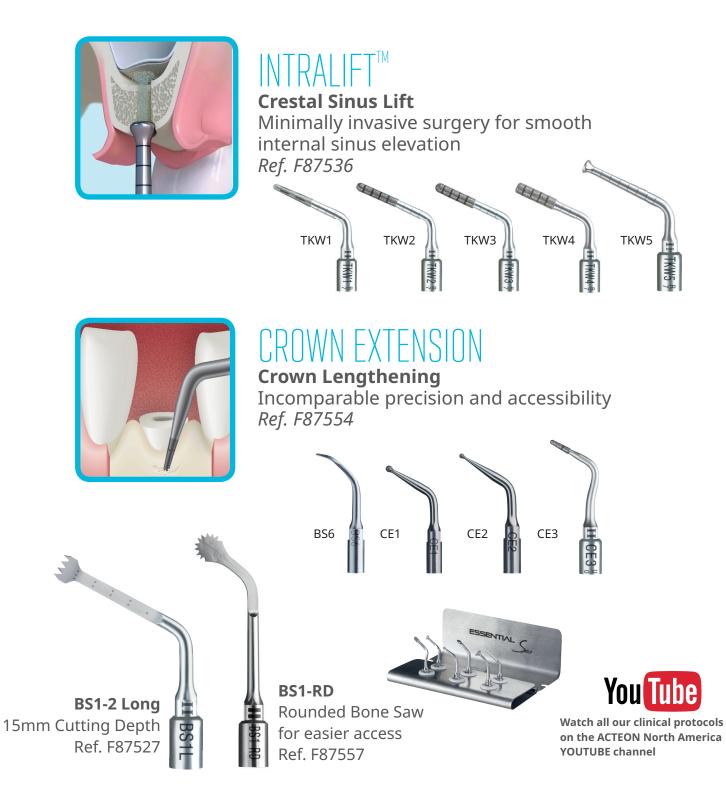
#### SINUS LIFT

**Lateral Sinus Lift** 

Unbeatable comfort: selective and hemostatic cut *Ref. F87519* 







# EXTRACTIONS: LESS TRAUMA, LESS

#### LC1 F87507 F87541 F87341 LC2 F87542 F87542 F87543 F87343 F87344 F87344 F87344 F87344

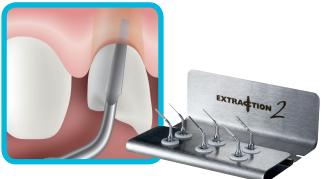
#### EXTRACTIONS WITH IMMEDIATE IMPLANT PLACEMENT

#### Extractions can sometimes be difficult. With **PIEZOTOME**<sup>®</sup> **Cube**, make them simple and less traumatic:

- Preserve more bone
- Faster healing
- Less post-operative swelling
- Like a "powered periotome"





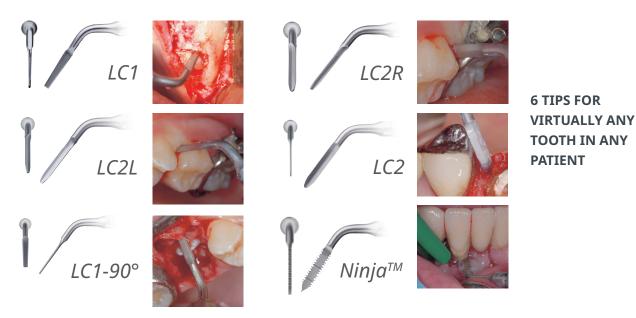


**EXTRACTION Syndesmotomy** For maximum bone preservation *Ref. F87546* 

- Reduce the risk of buccal plate fracture and other complications
- Increase bone preservation and extraction procedure predictability
- Tips follow the contour of teeth and bone



#### 1. Choose the appropriate tip according to the tooth location or root section

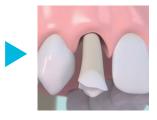


2. Activate the tip before its insertion. Use an up and down motion to help cool down the end of the tip<sup>\*</sup> \*Very important!



#### 3. Gently move around the tooth until complete avulsion and extract the root in one piece







Courtesy of Pr. F. Louise

# CLINICAL BENEFITS AT EACH STAGE

#### **INTRA-OPERATIVE**



### SAFETY

- Cutting selectivity: soft tissue is preserved (nerves, membranes and arteries)
- Intraosseous temperature is under control



#### PRECISION

- Fine and consistent cut on all types of bone
- Minimal bone loss for less invasive procedure



#### COMFORT

- New automatic power control for smooth and effortless cut
- Easy bone access with exclusive tip designs

**PIEZOTOME**<sup>®</sup> surgery is superior in atraumaticity and soft-tissue safety (...) No lesions of the mandible nerve were detected with **PIEZOTOME**<sup>®</sup> surgery.<sup>3</sup>

*THE PIEZOTOME<sup>®</sup> produced the smallest increase in intraosseous temperature.*<sup>4</sup>

**Prof. Dr. Marcel Wainwright (Sweden) -** "**PIEZOTOME**<sup>®</sup> has made my surgeries more predictable, easier, faster and significantly less traumatic which also helped increase the number of patients I have. Both surgeons and patients do benefit equally."

# OF YOUR SURGERY



## VISIBILITY

- Consistent irrigation flow
- Cavitation: microbubbles releasing oxygen has a hemostatic effect

#### **POST-OPERATIVE**



- SUPERIOR OUTCOMES
- Reduced pain
- Less analgesics
- Limited edema





- Predictable Fast recovery
- Fast recovery
  Bono donsificati
- Bone densification

86% of the patients were observed with no postsurgical swelling and 87% had no postsurgical pain.⁵

The healing at the clinical level is much more predictable and much less painful. The amount of demineralization created (...) minimizing trauma, discomfort, and enhancing patient's acceptance.<sup>6</sup>

# UNLEASH THE POWER OF PIEZOTOM

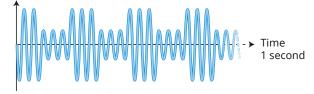
# NENTRON TECHNOLOGY

**PIEZOTOME**<sup>®</sup> ultrasonic surgery is guided by patented **NEWTRON**<sup>®</sup> technology. The handpiece and tips are perfectly tuned to ensure the best performance with unique clinical benefits, to tackle each surgery with confidence.

## MODULATION

- Alternation between high and low intensity
- Soft tissue preservation with better tissue recovery and cell regeneration

Amplitude Piezotome modulation mode



36 kHz



PRESERVATION

## FREQUENCY

- Automatic adjustment 28-36kHz according to every tip's shape and weight
- Maximum performance for each procedure



## POWER

28 ĸHz

- Automatic power regulation based on the resistance encountered
- Continuous vibration even in dense bone
- Faster procedures





## CUBE LED HANDPIECE

• Upgraded design

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- The most power ever
- Lighter with perfectly balanced design for less fatigue
- 360° LED light ring for tissue distinction and posterior area visibility

## TIPS

BS1S

- Many exclusive designs
- Clinical versatility
- Strengthened by surface treatments
- Excellent durability

# POWER WHEN YOU NEED IT MOST

# POWERFUL AND SMART



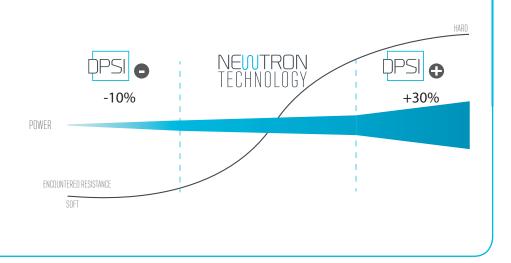
Dynamic Power System Inside POWER INTUITIVELY ADAPTED FOR MAXIMUM EFFICIENCY & SAFETY

According to the resistance encountered, the **D.P.S.I.** smart assistance will:

Increase the power +30% improving cutting performance Decrease the power -10% to be even safer on soft tissues

#### WITH THE D.P.S.I., GET

- The most power for the fastest cutting on the market
- Tip will not get "bogged" down or stop in deep cuts or dense bone
- Immediate power responsiveness
- Special starting boost for a smooth and effortless cut



## STYLISH

 Touch screen for easy control of major settings

PIEZOLOW

- Compact unit
- Perfect asepsis





## TOTAL ADAPTABILITY

Autoclavable handpiece holder with 2 positions protecting from accidental fall:

- Clip to the table
  or
- Rest on the table top



*Dr. Jay B. Reznick, DMD, MD* "*The dynamic power of PIEZOTOME*® *Cube cuts easier and with less pressure than other ultrasonic devices.*"

# CUBE MAKES THE DIFFERENCE

DETOTOME

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60

mlmi

x

\* HON

Imin

# MAKE IT EASY

- Consistent irrigation flow reaches the tip's end with decreased heating and a reduced risk of bone necrosis
- Sterile, single-use irrigation lines delivered with device (sterilizable lines available upon request)



# DURABILITY

**PIEZOTOME®** Cube accessories are designed with strong materials like stainless steel

#### PERFECT ASEPSIS

TORQUE WRENCH PREVENTS STRIPPING

> **THE HANDPIECE** - Saves precious time

- All tips, accessories and the handpiece are autoclavable



XMIND



#### **EXTRACTION KIT**

6 tips for maximum bone preservation LC1, LC1-90°, LC2, LC2L, LC2R, Ninja<sup>®</sup> tips Ref. F87546

## GLOBAL SOLUTION FOR IMPLANTOLOGY



## implantProtect

Specially designed tips for implant care and maintenance



3D technology to measure volume and assess bone density



#### NENTRON

For use with ImplantProtect Tips

#### EQUIPMENT DELIVRED WITH

- 1 CUBE LED handpiece
- 1 torque wrench
- 1 multifunction foot pedal
- 1 irrigation bracket
- 1 handpiece holder
- 5 sterile, disposable irrigation lines
- 5 autoclavable irrigation clips

#### UNIT DIMENSIONS

- Length 9.8 in x Height 6.3 in x Depth 10.7 in - Weight: 7.7 lbs

#### FOOT PEDAL DIMENSIONS

- Length 6.8 in x Height 5.5 in x Depth 6.9 in

- Weight: 2.2 lbs

#### www.acteongroup.com

1. The most sold device according to "Global and Chinese Dental Surgical Ultrasonic Generator Industry", 2010-2020 Market Research Report" published by Prof Research, 2015

2. In vivo assessment of bone healing following PIEZOTOME ultrasonic instrumentation. J. Reside, E. Everett, R. Padilla, R. Arce, P. Miguez, N. Brodala, I. De Kok, S. Nares. Clinical Implant Dentistry and Related Research, June 2013

3. Ultrasonic PIEZOTOME<sup>®</sup> surgery: is it a benefit for our patients and does it extend surgery time? A retrospective comparative study on the removal of 100 impacted mandibular 3rd molar. A. Troedhan, A. Kurrek, M. Wainwright. Open Journal of Stomatology, 2011

4. Performance of ultrasonic devices for bone surgery and associated intraosseous temperature development. S. Harder, S. Wolfart, C. Mehl, M. Kern. The International Journal of Oral & Maxillofacial Implants, volume 24, number 3, 2009

5. The transcrestal hydrodynamic ultrasonic cavitational sinuslift: results of a 2-year prospective multicentre study on 404 patients, 446 sinuslift sites and 637 inserted implants. A. Troedhan, A. Kurrek, M. Wainwright, I. Schlichting, B. Fischak-Treitl, M. Ladentrog. Open Journal of Stomatology, 3, 2013

6. Tissue response during piezocision-assisted tooth movement: a histological study in rats. S. Dibart, C. Yee, J. Surmenian, J-D. Sebaoun, S. Baloul, E. Goguet-Surmenian, A. Kantarci. European Journal of Orthodontics, 36(4):457-64, 2014

MORE INVENTIVE LESS INVASIVE

