

→ PIEZOSURGERY<sup>®</sup> MEDICAL  
SURGICAL INSERTS

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# SURGICAL INSERTS

## → EXCELLENCE IN QUALITY



Intraoperative advantages and postoperative benefits are dependant on the quality of the osteotomies performed. Passion, dedication, and expertise are at the forefront of our insert production process.

We use only medical grade stainless steel in the production of Mectron inserts. Every single ultrasonic insert has to pass 12 working steps before it is ready to bear our name.



watch the inserts  
development process!

### → HOW ARE THE INSERTS DEVELOPED AND PRODUCED?

Our inserts are made in Italy, in our  
production site based in the Liguria Region.

# SURGICAL INSERTS

## → EXCELLENCE IN VARIETY

Osteotomy, Osteoplasty, Drilling, Finishing – PIEZOSURGERY® medical inserts cover a vast variety of surgical needs. Whatever your choice is, there is one thing they all have in common: they offer the best performance you will find on the market.

Based on the specific surgical application, each insert is designed to work with a specific handpiece: standard or plus, that differ in terms of power and ergonomics.



Surgical inserts are SINGLE USE. This way each insert is always sharp and effective, ensuring each osteotomy is precise and accurate.

# SURGICAL INSERTS

## FOR STANDARD HANDPIECE

The standard handpiece has been designed to be used in osteotomies where precision and cutting control make the difference.

The “gray” handpiece features the widest range of inserts for all the four different bone cutting applications.



### → OSTEOTOMY

Surgical inserts of different shapes and dimensions, short and long, curved and angled, designed to perform osteotomies with the utmost safety even in difficult to reach surgical sites.

- Saw thickness from 0.35 to 0.6 mm
- Osteotomy depth up to 20 mm



### → OSTEOPLASTY

Surgical inserts curved and angled, with sharp edges, for bone modeling and bone chip harvesting.



### → DRILLING

Surgical inserts to drill holes with very tight tolerance, minimizing the risk of bone necrosis.

- Head diameters from 0.8 to 1.8 mm



### → FINISHING

Surgical inserts of different shapes and dimensions, curved and angled, with heads of different shapes and with different diamond coatings, to finish the osteotomies in very delicate anatomies.



# OSTEOTOMY SURGICAL INSERTS



## → MT1-10

**Osteotomy micro saw**  
Operative length: 10.7 mm  
Saw width: 3.8 mm  
Saw thickness: 0.55 mm

## → MT1S-10

**Osteotomy micro saw**  
Operative length: 10.7 mm  
Saw width: 3 mm  
Saw thickness: 0.35 mm

## → MT1-20

**Osteotomy micro saw**  
Operative length: 20 mm  
Saw width: 3.8 mm  
Saw thickness: 0.6 mm

## → MT9-13

**Osteotomy micro saw**  
Length insert: 42.5 mm  
Operative length: 12 mm  
Saw width: 3.3 - 4.4 mm  
Saw thickness: 0.35 mm

## → UNIVR

**Round shape  
osteotomy micro saw**  
Length insert: 41.9 mm  
Operative length: 5 mm  
Saw width: 4.5 mm  
Saw thickness: 0.5 mm

## → MT6S-10

**Osteotomy micro saw**  
Operative length: 10 mm  
Saw width: 3.6 mm  
Saw thickness: 0.35 mm

# → OSTEOTOMY SURGICAL INSERTS

STANDARD HANDPIECE



→ **MT2L-4**

**Left angled micro saw**  
Operative length: 4 mm  
Saw width: 3.8 mm  
Saw thickness: 0.6 mm

→ **MT2R-4**

**Right angled micro saw**  
Operative length: 4 mm  
Saw width: 3.8 mm  
Saw thickness: 0.6 mm

→ **MT1204**

**Angled micro saw**  
Operative length: 3.5 mm  
Saw width: 4.2 mm  
Saw thickness: 0.55 mm

→ **MT11L-10**

**Left angled micro saw**  
Operative length: 10 mm  
Saw width: 4 mm  
Saw thickness: 0.55 mm

→ **MT11R-10**

**Right angled micro saw**  
Operative length: 10 mm  
Saw width: 4 mm  
Saw thickness: 0.55 mm

→ **MT7-3**

**Osteotomy micro saw**  
Length insert: 44.6 mm  
Operative length: 3 mm  
Saw width: 3.6 mm  
Saw thickness: 0.8 mm

# → OSTEOPLASTY SURGICAL INSERTS



## → MP1

### Osteoplasty trapezoidal scalpel

Length insert: 27.6 mm  
Operative length: 2.4 mm  
Saw width: 2.8>3.7 mm  
Saw thickness: 0.8 mm



## → MP2

### Osteoplasty circular scalpel

Length insert: 27.3 mm  
Operative length: 4 mm  
Saw width: 3.9 mm  
Saw thickness: 0.8 mm



## → MP3-a30

### Osteoplasty circular scalpel

Length insert: 35.6 mm  
Operative length: 3 mm  
Saw width: 2.4 mm  
Saw thickness: 0.8 mm  
Operative angle: 29°



## → MP0745

### Sharped semi sphere

Operative length: 1.1 mm  
Saw width: Ø 4.5 mm

# → DRILLING SURGICAL INSERTS

STANDARD HANDPIECE



→ MD2-08

**Micro-perforation  
sharp cylinder insert**  
Operative length: 12 mm  
Ø 0.8 mm



→ MD2-10

**Micro-perforation  
sharp cylinder insert**  
Operative length: 12 mm  
Ø 1.0 mm



→ MD3-14

**Micro-perforation  
sharp cylinder insert**  
Operative length: 12 mm  
Ø 1.4 mm



→ MD3-18

**Micro-perforation  
sharp cylinder insert**  
Operative length: 12 mm  
Ø 1.8 mm



# FINISHING SURGICAL INSERTS



→ MF1

**Diamond coated flap scalpel**  
Operative length: 3 mm  
Operative width: 3.7 mm  
Operative thickness: 0.85 mm  
Diamond grit size (µm): D91

→ MF2

**Diamond cylinder insert**  
Operative length: 5.3 mm  
Operative width: Ø 2.4 mm  
Diamond grit size (µm): D151

→ MF3

**Diamond ball insert**  
Operative length: 1.7 mm  
Operative width: Ø 1.7 mm  
Diamond grit size (µm): D91

→ MF4

**Diamond conic insert**  
Operative length: 10 mm  
Operative width: Ø 0.6>1.5 mm  
Diamond grit size (µm): D30

→ MF5

**Diamond truncated cone insert**  
Operative length: 13 mm  
Operative width: 2.1>2.7 mm  
Operative thickness: 1.1>1.9 mm  
Diamond grit size (µm): D126

→ MF6

**Blunt cone compressor**  
Operative length: 0.5 mm  
Operative width: 4.2 mm

# SURGICAL INSERTS

## FOR PLUS HANDPIECE

The plus handpiece has been designed to be used in osteotomies of highly mineralized bone, where more power and precision are required. The “black” handpiece features different type of inserts for all the four different bone cutting applications. Long inserts with an extension and a cover to preserve delicate structures and soft tissues are available.

### → OSTEOTOMY

Surgical inserts of different shapes and dimensions, short and long, curved and angled, designed to perform osteotomies with the utmost safety even in difficult to reach surgical sites.

- Saw thickness from 0.35 to 0.6 mm
- Osteotomy depth up to 20 mm
- Shank length up to 10 cm



### → OSTEOPLASTY

Surgical inserts short and long, curved and angled, with sharp edges, for bone modeling and bone chip harvesting.

- Shank length up to 10 cm



### → FINISHING

Surgical inserts with diamond coating, to finish the osteotomies in very delicate anatomies.



# OSTEOTOMY SURGICAL INSERTS



→ MT4-10 +

**Osteotomy micro saw**  
Operative length: 12 mm  
Saw width: 4.1 mm  
Saw thickness: 0.55 mm

→ MT4-20 +

**Osteotomy micro saw**  
Operative length: 19.3 mm  
Saw width: 4.2 mm  
Saw thickness: 0.55 mm

→ MT10-20 +

**Osteotomy micro saw**  
Operative length: 19.8 mm  
Saw width: 4.2 mm  
Saw thickness: 0.55 mm

→ MT1412 +

**Osteotomy micro saw**  
Operative length: 12 mm  
Saw width: 3.3>4.4 mm  
Saw thickness: 0.35 mm

# → OSTEOTOMY SURGICAL INSERTS



## → MT8-20 L

**Long osteotomy micro saw**  
 Operative length: 19.1 mm  
 Saw width: 2.95×4.26 mm  
 Saw thickness: 0.45 mm  
 Total length insert + extension:  
 117 mm



## → MT5-10 L

**Long osteotomy micro saw**  
 Operative length: 11 mm  
 Saw width: 3 mm  
 Saw thickness: 0.55 mm  
 Total length insert + extension:  
 106 mm

# OSTEOPLASTY SURGICAL INSERTS



## → MP4 +

**Osteoplasty circular scalpel**  
Operative length: 4 mm  
Saw width: 3.9 mm  
Saw thickness: 0.8 mm



## → MP5 L

**Long osteoplasty scalpel**  
Operative length: 4 mm  
Saw width: 3.9 mm  
Saw thickness: 0.8 mm  
Total length insert + extension:  
98 mm



## → MP6 L

**Long and straight osteoplasty scalpel**  
Operative length: 6.4 mm  
Saw width: 3 mm  
Saw thickness: 0.9 mm  
Total length insert + extension:  
112 mm



# → FINISHING SURGICAL INSERTS



## → MF0702 +

**Diamond coated ball insert**  
Operative length: 10.2 mm  
Ø 1.7 mm  
Diamond grit size (µm): D90



**ARE YOU INTERESTED IN LEARNING  
MORE ABOUT HOW EACH INSERT IS  
USED IN SURGICAL APPLICATIONS?**

Scan or click the QR code

# PIEZOSURGERY® IN PRACTICE

mectron

medical technology



YOUTUBE



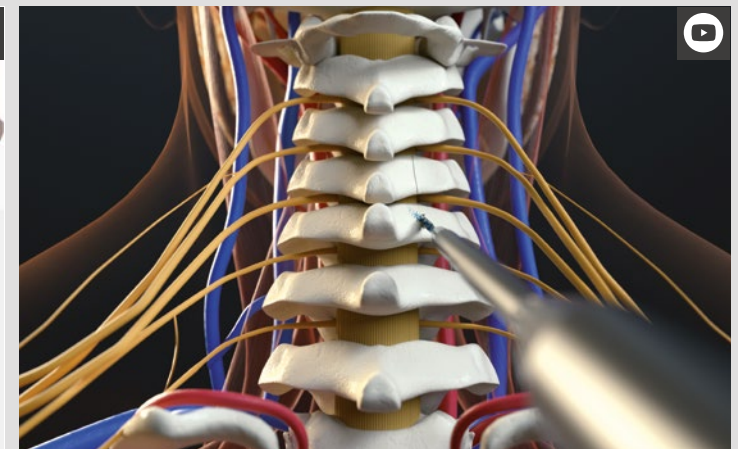
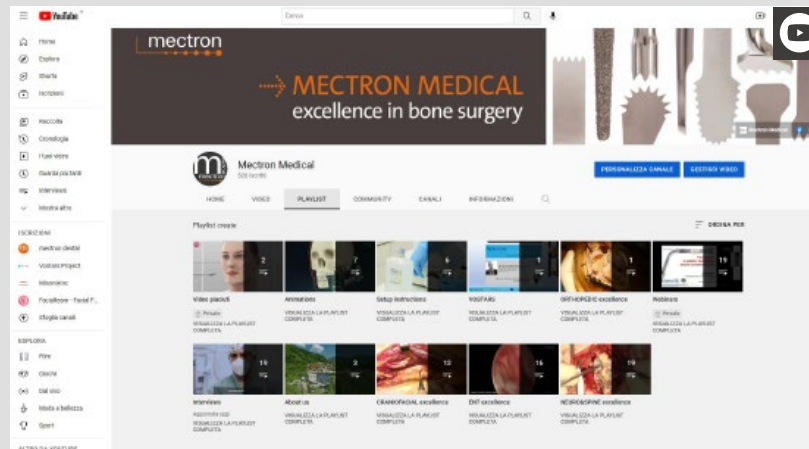
FACEBOOK



LINKEDIN

Do you want to find out more about clinical protocols and experiences of surgeons who already collaborate with us? Discover the world of PIEZOSURGERY® and join the community on our social channels and website. You will have at your disposal:

- CLINICAL ANIMATIONS
- SURGICAL PROTOCOLS
- WEBINARS
- USERS TESTIMONIAL



Mectron Medical  
581 followers  
4m ·

An outstanding surgery have been carried out at Spedali Civili in Brescia by Stefano Negrini MD. A severe case of TMJ bilateral Psoriatic Arthritis was treated, implanting a bilateral total temporomandibular joint prosthesis...vedi altro

Vedi traduzione

PIEZOSURGERY®

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medical technology

NEURO-SP  
EXCELLEN

27th ESPN - MECTRON'S SATELLITE SYMPOSIUM  
April 26th 2021 | 12.45 - 13.45 (EEST)

Pediatric neurosurgery approaches | Experience PIEZOSURGERY

Topic: endoscopic approaches    Topic: orbital approaches    Topic: Laminotomies for neoplasms and malformations



DISCOVER MORE!



# PIEZOSURGERY® DEVICES

## → EXCELLENCE IN BONE SURGERY

PIEZOSURGERY® *plus* is the complete device: it is engineered to support an expansive range of surgical applications.

### → COMPLETE

- Power joins precision in two handpieces
- High efficiency
- Cutting-edge technology



### → SURGICAL APPLICATIONS

- ORAL/MAXILLOFACIAL SURGERY
- OTOLARYNGOLOGY
- PLASTIC/RECONSTRUCTIVE
- HAND SURGERY
- FOOT SURGERY
- NEUROSURGERY
- SPINE SURGERY
- ORTHOPEDICS
- THORACIC SURGERY

→ PIEZOSURGERY® *plus* 05170003



→ PIEZOSURGERY® plus

→ PIEZOSURGERY® flex

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PIEZOSURGERY® *flex* is the essential device: with its perfect control, precision and ease of use it is your perfect start into an new era of bone surgery

→ ESSENTIAL

- Control joins precision in one handpiece
- Compact and portable
- Easy to use



→ PIEZOSURGERY® flex 05170002



## → PRODUCTS

### → ACCESSORIES

Handpiece for plus channel	03120243
Torque wrench for plus channel	02900116
Torque wrench for extension of long inserts	02900115
Handpiece for standard channel	03120127
Torque wrench for standard channel	02900080
Irrigation kit single use (box of 10 units)	03230008
Trolley-case	04440018
Cart	03540009

### → CONTAINERS FOR STERILIZATION OF HANDPIECE AND TORQUE WRENCH

Container for sterilization completed with cover with valve	02900173
Tray for sterilization completed with cover	02900172
Thermodisinfection adaptor for handpiece	04610008
Filter for thermodisinfection adaptor	04590006

### → SPARE PARTS

Power-supply cable	00050020
Footswitch for PS <i>plus</i>	04620004
Peristaltic pump	03210006
Drip stands for saline bag	01380002
Metal cone for standard handpiece	00710034
Metal cone for plus handpiece	00710090
Protection for standard handpiece's connector	03150086
Protection for plus handpiece's connector	00690022

→ SURGICAL INSERTS

→ STANDARD HANDPIECE  
 03120127

→ PLUS HANDPIECE  
 03120243

OSTEOTOMY

MT1-10	03600001
MT1S-10	03600007
MT1-20	03600002
MT1204	03600019
MT2R-4	03600003
MT2L-4	03600004
UNIVR	03600008
MT6S-10	03600011
MT7-3	03600012
MT9-13	03600016

MT4-10 +	03600010
MT5-10 L	03600009
MT8-20 L	03600013
MT4-20 +	03600014
MT10-20 +	03600015
MT1412 +	03600020

OSTEOPLASTY

MP1	03610001
MP2	03610002
MP3-a30	03610003
MP0745	03610010

MP4 +	03610007
MP5 L	03610008
MP6 L	03610009

DRILLING

MD2-08	03620010
MD2-10	03620004
MD3-14	03620006
MD3-18	03620008

FINISHING

MF1	03630001
MF2	03630002
MF3	03630003
MF4	03630004
MF5	03630005
MF6	03630006

MF0702 +	03630007
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