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







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.



#### 

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

watch the inserts development process!

### **PIEZOSURGERY**<sup>®</sup>

Osteotomy, Osteoplasty, Drilling, Finishing – PIEZOSURGERY<sup>®</sup> 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.



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.





PIEZOSURGERY

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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 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.  $\rightarrow$  Head diameters from 0.8 to 1.8 mm

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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.



### **PIEZOSURGERY**<sup>®</sup>





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

Operative length: 10.7 mm Saw width: 3 mm Saw thickness: 0.35 mm **Osteotomy micro saw** Operative length: 20 mm Saw width: 3.8 mm Saw thickness: 0.6 mm Osteotomy micro saw Length insert: 42.5 mm Operative length: 12 mm Saw width: 3.3 - 4.4 mm Saw thickness: 0.35 mm Round shape osteotomy micro saw Length insert: 41.9 mm Operative length: 5 mm Saw width: 4.5 mm Saw thickness: 0.5 mm

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

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All dimensions have been rounded to the first decimal place. For further details, please refer to Mectron's technical data sheets.



All dimensions have been rounded to the first decimal place. For further details, please refer to Mectron's technical data sheets.

**PIEZOSURGERY**<sup>®</sup>



# OSTEOPLASTY SURGICAL INSERTS



#### 

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



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



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**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°

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**Sharped semi sphere** Operative length: 1.1 mm Saw width: Ø 4.5 mm

## DRILLING SURGICAL INSERTS

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



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



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



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



All dimensions have been rounded to the first decimal place. For further details, please refer to Mectron's technical data sheets.



# FINISHING SURGICAL INSERTS



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

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

#### 

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

#### 

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

#### 

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

#### 

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

All dimensions have been rounded to the first decimal place. For further details, please refer to Mectron's technical data sheets.

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.

### 

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 20 mm
 → Shank length up to 10 cm

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Surgical inserts short and long, curved and angled, with sharp edges, for bone modeling and bone chip harvesting. → Shank length up to 10 cm

### 

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





**PIEZOSURGERY**<sup>®</sup>





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

#### 

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

#### 

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

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



Osteotomy micro saw Operative length: 20 mm Operative width: 2.95>4.8 mm Operative thickness: 0.45 mm



All dimensions have been rounded to the first decimal place. For further details, please refer to Mectron's technical data sheets.

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**PIEZOSURGERY**<sup>®</sup>



# OSTEOPLASTY SURGICAL INSERTS

#### 

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



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

#### 

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

All dimensions have been rounded to the first decimal place. For further details, please refer to Mectron's technical data sheets.

## FINISHING SURGICAL INSERTS

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**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

All dimensions have been rounded to the first decimal place. For further details, please refer to Mectron's technical data sheets.

# PIEZOSURGERY<sup>®</sup> IN PRACTICE



YOUTUBE f) FACEBOOK in) LINKEDIN C Ve Lake D mectron (2) Esslers S man -> MECTRON MEDICA (T) licitaire excellence in bone surgery (F) sacob (i) crossical Mectron Medica Mectron Medica (in) mectron f - 581 folio: 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 reated, implanting a bilateral total t il 26th 2021 | 12.45 - 13.45 (EEST) urgery approaches | Experience PIEZOSURGERY PIEZOSURGERY<sup>®</sup> **DISCOVER MORE!** 

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

# PIEZOSURGERY® DEVICES

mectron

MD ME

PIEZOSURGERY

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

- -----> Power joins precision in two handpieces
- ------> High efficiency

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ightarrow Cutting-edge technology

### 

→ PIEZOSURGERY<sup>®</sup> plus 05170003







PIEZOSURGERY<sup>®</sup> *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

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- -----> Control joins precision in one handpiece



→ PIEZOSURGERY<sup>®</sup> *flex* 05170002



**PIEZOSURGERY**<sup>®</sup>

# ···· PRODUCTS

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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

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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

00050020
04620004
03210006
01380002
00710034
00710090
03150086
00690022



OSTEOTOMY	MT1-10	03600001	MT4-10 +	03600010	
	MT1S-10	03600007	MT5-10 L	03600009	
	MT1-20	03600002	MT8-20 L	03600013	
	MT1204	03600019	MT4-20 +	03600014	
	MT2R-4	03600003	MT10-20 +	03600015	
	MT2L-4	03600004	MT1412 +	03600020	
	UNIVR	03600008	MT1520 +	03600021	
	MT6S-10	03600011			
	MT7-3	03600012			
	MT9-13	03600016	•••••		
OSTEOPLASTY	MP1	03610001	MP4 +	03610007	
	MP2	03610002	MP5 L	03610008	
	MP3-a30	03610003	MP6 L	03610009	
	MP0745	03610010	·····		
DRILLING	MD2-08	03620010	<b>.</b>		
	MD2-00 MD2-10	03620004	••••••		
	MD3-14	03620006	•••••		
	MD3-18	03620008			
FINISHING	MF1	03630001	 MF0702 +	03630007	
	MF1 MF2	03630001			
	MF2 MF3	03630002	••••••		
	MF5 MF4	03630003	••••••		
		03630004	••••••		
	MF5 MF6	03630005	••••••		
	ΙΝΓΟ	00006000	••••••		

> PLUS HANDPIECE 03120243		
ЛТ4-10 +	03600010	
AT5-10 I	03600009	
ЛТ8-20 L	03600013	
AT4-20 +	03600014	
AT10-20 +	03600015	
AT1412 +	03600020	
AT1520 +	03600021	
	•••••••	
ΛP4 +	03610007	
ለP5 L	03610008	
ЛР6 L	03610009	
ΛF0702 +	03630007	



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