



↗ **MECTRON**
PIEZOSURGERY® INSERTS





→ THE ORIGINAL
PIEZOELECTRIC
BONE SURGERY –
EVIDENCE-BASED!





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PIEZOSURGERY® TECHNIQUE

PIEZOSURGERY®
HAS DEFINED A
NEW DIMENSION
IN BONE SURGERY



- It's simple, stress-free and selective
- It increases the quality and success for you and your patients



Thanks to the controlled sophisticated ultrasound vibrations, the original PIEZOSURGERY® technique opens up a new age for osteotomy, osteoplasty and extraction in Implantology, Periodontology, Endodontics and Surgical Orthodontics.

- MICROMETRIC CUTS: optimal surgical precision and intra-operative sensitivity
- SELECTIVE CUTS: minimal damage to soft tissue, offering safety for you and your patients
- CAVITATION EFFECT: optimal intra-operative visibility and a blood-free surgical site
- HISTOLOGICAL ADVANTAGE: more favorable bone healing in osseointegration process

↗ INSERT QUALITY



↗ PRECISION

A CNC controlled 5-dimensional sharpening machine cuts with an accuracy of up to 0.01 mm. The whole cutting process for a single insert last up to 12 min.



↗ MATERIAL

mectron ultrasound inserts are built with medical grade, high quality, stainless steel.

→ HIGH END INSERTS FOR PROFESSIONALS

Each mectron ultrasound insert will pass through 12 working steps.



→ DIAMOND COATING

Depending on the indication, the inserts are coated with specially selected diamonds. The granulometry of the diamond coating is adapted to the respective treatment.

→ TITANIUM NITRIDE COATING

A coating of titanium nitride, applied to inserts which treat bone, increases the hardness of the surface, avoids corrosion and therefore increases working life.

→ LABELING

Each insert is gently labeled by a laser.

→ QUALITY CHECK

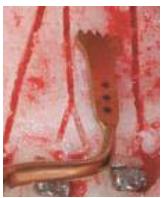
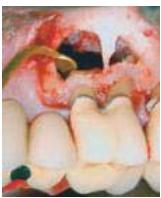
Each insert is checked in detail before getting an OK for the sales.

INDICATIONS

→ SINUS LIFT TECHNIQUE CRESTAL APPROACH	→ SINUS LIFT TECHNIQUE LATERAL APPROACH	→ IMPLANT SITE PREPARATION		→ RIDGE EXPANSION	→ PERIOSTEUM PREPARATION	→ EXTRactions	→ EXPLANTATION
→ PIEZO-LIFT	→ STANDARD	→ STANDARD	→ OPTIONAL	→ STANDARD	→ STANDARD	→ STANDARD	→ STANDARD
PL1	SLC	IM1S	IM1 AL	OT7	PR1	EX1	EXP3-R
PL2	SLO-H	IM2A	IM2A-15	OT4	PR2	EX2	EXP3-L
PL3	SLS	IM3A	IM2.8A	OP5	→ OPTIONAL	EX3	EXP4-R
	SLE1	IM4A	IM3A-15	OT2		PS2	EXP4-L
	SLE2	IM2P	IM3.4A	OT7A			
	OP3	IM3P	IM2P-15	OT7S-4			
	OT1	IM4P	IM2.8P	OT7S-3			
	EL1	OT4	IM3P-15	OT7-20			
	→ OPTIONAL	P2-3	IM3.4P	OT12			
	OT1A	P3-4	PIN IM1	OT12			
	OT5		PIN 2-2.4	OT12S			
	OT5A						
	OT5B						
	EL2						
	EL3						



→ BONE BLOCK GRAFTING	→ BONE CHIP GRAFTING/BONE MODELING	→ ENDODONTICS	→ OSTEOTOMY CLOSE TO NERVES	→ CORTICOTOMY TECHNIQUE	→ PERIODONTAL SURGERY	→ CROWN PREPARATION	
→ STANDARD	→ STANDARD	→ STANDARD	→ STANDARD	→ STANDARD	→ STANDARD	→ OPTIONAL	→ STANDARD
OT7	OP3	OP7	OT1	OT7S-4	OP5A	PS1	DB2
OP5	OP1	PS2	OT5	OT7S-3	OP8	PS6	CROWN PREP TIPS
OT8L	→ OPTIONAL	EN1		→ OPTIONAL	OP9	PP10	TA12D90* Ø 1.2 mm
OT8R	OP2	EN2		OT7	OT13	PP11	TA12D60*
→ OPTIONAL	OP3A	EN3		OT7A	OT14	PP12	TA14D120* Ø 1.4 mm
OT6		EN4			OP5	OP2	TA14D90*
OT7A		→ OPTIONAL			OP3	OP3A	TA14D60*
OT7S-4		EN5R			PS2	OP4	TA16D120* Ø 1.6 mm
OT7S-3		EN5L			PP1	OP6	TA16D90*
OT7-20		EN6R			ICP + IC1		TA16D60*
OT12		EN6L					TF12D90* Ø 1.2 mm
OT12S		OP3					TF12D60*
							TF16D90* Ø 1.6 mm
							TF16D60*





BASIC SET

→ EQUIPPED WITH:

- 1 insert OT7
- 1 insert OT2
- 1 insert EX1
- 1 insert OP1
- 1 insert OP3
- 1 insert tray





OSTEOTOMY SET



→ EQUIPPED WITH:

- 1 insert OT7
- 1 insert OT7S-4
- 1 insert OT7S-3
- 1 insert OT8R
- 1 insert OT8L
- 1 insert tray



↗ SINUS LIFT LATERAL SET*

→ EQUIPPED WITH:

- 1 insert SLC
- 1 insert SLO-H
- 1 insert SLS
- 1 insert SLE1
- 1 insert SLE2
- 1 insert tray



→ SLC → SLO-H → SLS → SLE1 → SLE2



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* developed in collaboration with Prof. Tomaso Vercellotti and Dr. Philippe Russe

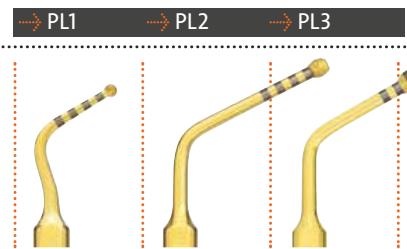
PIEZOSURGERY®

→ PIEZO LIFT SET



→ EQUIPPED WITH:

- 1 insert PL1
- 1 insert PL2
- 1 insert PL3
- 1 insert tray



→ SINUS LIFT SET

→ EQUIPPED WITH:

- 1 insert OT1
- 1 insert OT5
- 1 insert EL1
- 1 insert EL2
- 1 insert EL3
- 1 insert tray



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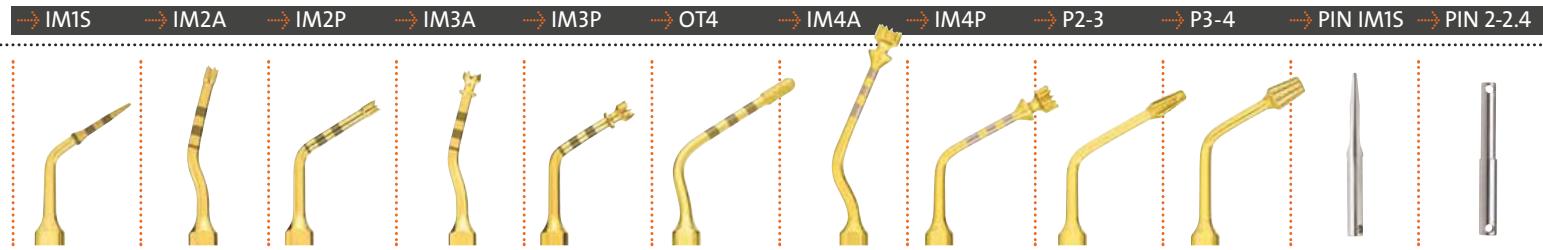


→ IMPLANT PREP SET PRO



→ EQUIPPED WITH:

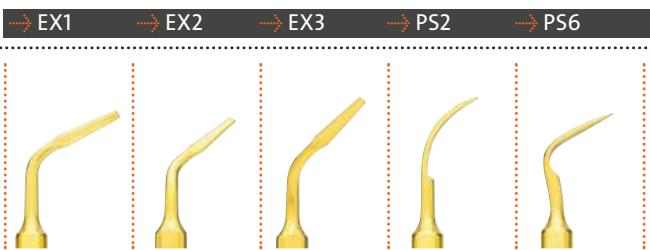
- 1 insert IM1S
- 1 insert IM2A
- 1 insert IM2P
- 1 insert IM3A
- 1 insert IM3P
- 1 insert OT4
- 1 insert IM4A
- 1 insert IM4P
- 1 insert P2-3
- 1 insert P3-4
- 3 pins IM1S
- 3 pins 2-2.4
- 1 implant insert tray



EXTRACTION SET

→ EQUIPPED WITH:

- 1 insert EX1
- 1 insert EX2
- 1 insert EX3
- 1 insert PS2
- 1 insert PS6
- 1 insert tray



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PIEZOSURGERY®



EXPLANTATION SET



→ EQUIPPED WITH:

- 1 insert EXP3-R
- 1 insert EXP3-L
- 1 insert EXP4-R
- 1 insert EXP4-L
- 1 insert tray

→ EXP3-R → EXP3-L → EXP4-R → EXP4-L



→ RESECTIVE PERIO SET*

→ EQUIPPED WITH:

- 1 insert OT13
- 1 insert OT14
- 1 insert OP5A
- 1 insert OP8
- 1 insert OP9
- 1 insert tray



→ OT13 → OT14 → OP5A → OP8 → OP9



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*developed in collaboration with Prof. Leonardo Trombelli and the University of Ferrara, Italy

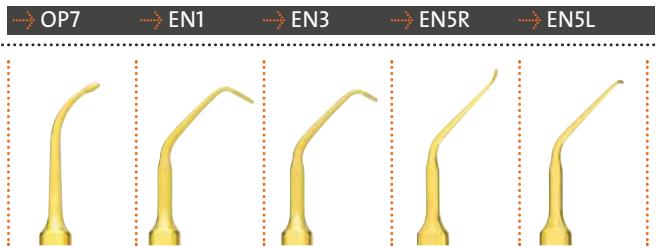
PIEZOSURGERY®

→ RETRO SURGICAL SET



→ EQUIPPED WITH:

- 1 insert OP7
- 1 insert EN1
- 1 insert EN3
- 1 insert EN5R
- 1 insert EN5L
- 1 insert tray



PIEZOSURGERY® INSERT BOX



- box fully autoclavable
- perfect storage of all PIEZOSURGERY® inserts
- light, easy to use, compact and roomy



INSERT TRAY



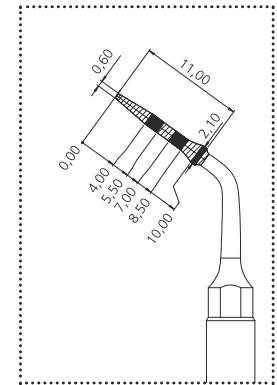
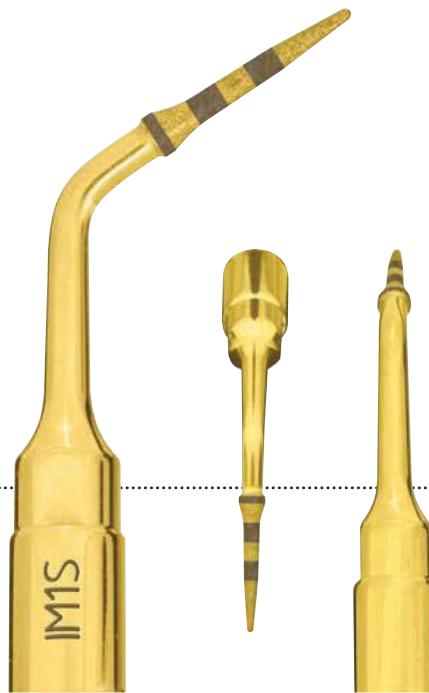
- stainless steel tray with depth markings
- ideal for storage
- tray fully autoclavable

→ CUTTING ACTION

bone perforation

→ CLINICAL APPLICATION

initial pilot osteotomy



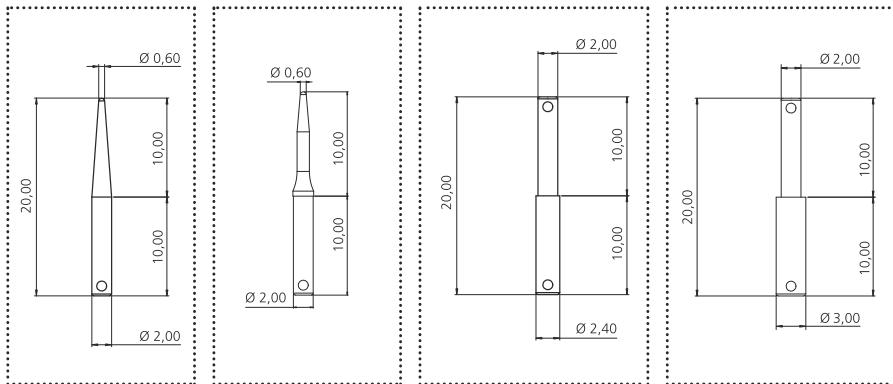
diamond grain size 30 µm



alignment pins



PINS IM1, IM1S, 2-2.4, 2-3

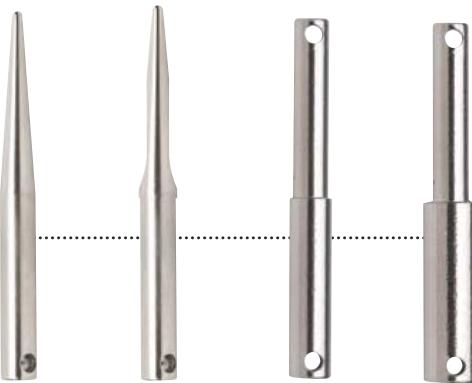


→ DESCRIPTION

alignment pins, dedicated to
IM1S, IM2 (\varnothing 2), IM3 (\varnothing 3), OT4 (\varnothing 2.4), IM1 SP

→ CLINICAL APPLICATION

to check preparation axis alignment



→ PIN IM1

→ PIN IM1S

→ PIN 2-2.4

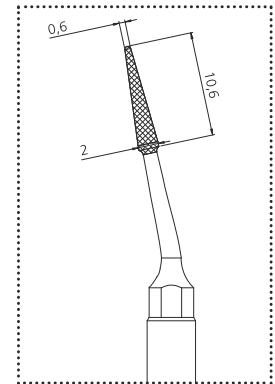
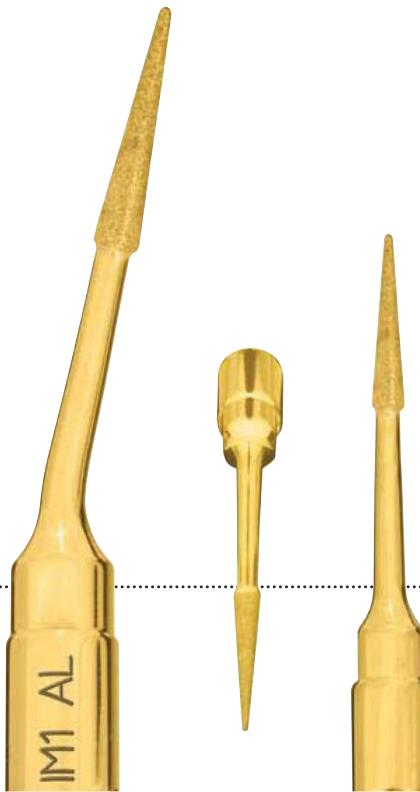
→ PIN 2-3

→ CUTTING ACTION

bone perforation

→ CLINICAL APPLICATION

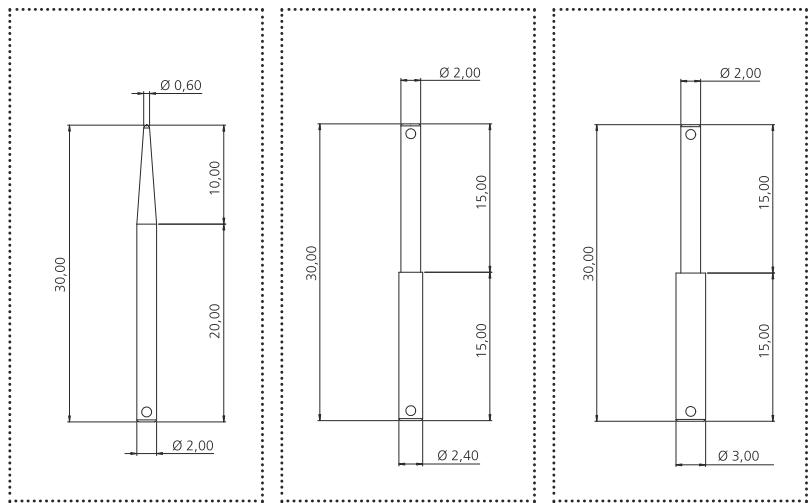
initial pilot osteotomy in extraction sites



diamond grain size 30 µm



ALVEOLAR PINS IM1 AL, 2-2.4 AL, 2-3 AL



→ DESCRIPTION

30 mm alignment pins, for extraction sites dedicated to IM1 AL, IM2A (\varnothing 2), OT4 (\varnothing 2.4), IM3A (\varnothing 3)

→ CLINICAL APPLICATION

to check preparation axis alignment



→ PIN IM1 AL

→ PIN 2-2.4 AL

→ PIN 2-3 AL

IM2A – IM2A-15

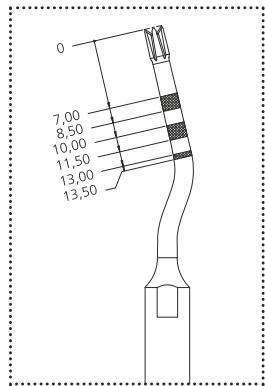
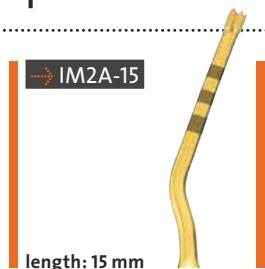
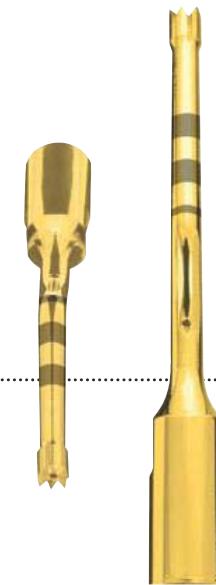
2 mm Ø implant site preparation insert

→ CUTTING ACTION

bone perforation

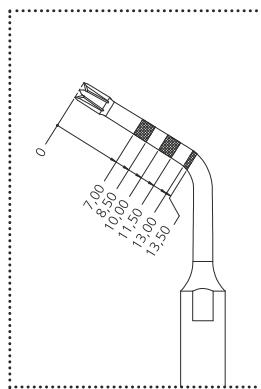
→ CLINICAL APPLICATION

pilot osteotomy in anterior region



2 mm Ø implant site preparation insert

IM2P – IM2P-15



→ CUTTING ACTION

bone perforation

→ CLINICAL APPLICATION

pilot osteotomy in posterior region



IM2.8A

2.8 mm Ø implant site preparation insert

→ CUTTING ACTION

bone perforation

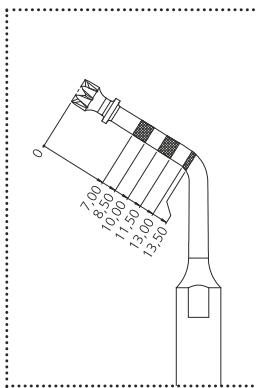
→ CLINICAL APPLICATION

to enlarge or to finalize the implant site preparation; insert with double irrigation to avoid overheating



2.8 mm Ø implant site preparation insert

..... IM2.8P



→ CUTTING ACTION

bone perforation

→ CLINICAL APPLICATION

to enlarge or to finalize the implant site preparation; insert with double irrigation to avoid overheating



IM3A – IM3A-15

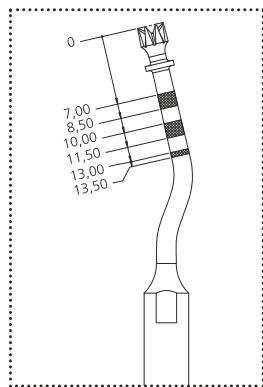
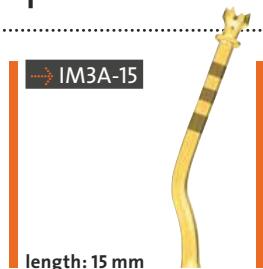
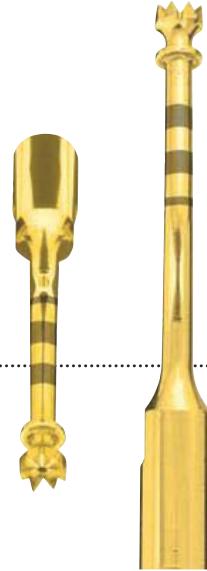
3 mm Ø implant site preparation insert

→ CUTTING ACTION

bone perforation

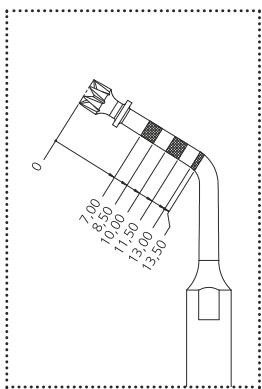
→ CLINICAL APPLICATION

to enlarge or to finalize the implant site preparation; insert with double irrigation to avoid overheating



3 mm Ø implant site preparation insert

IM3P – IM3P-15



→ CUTTING ACTION

bone perforation

→ CLINICAL APPLICATION

to enlarge or to finalize the implant site preparation; insert with double irrigation to avoid overheating

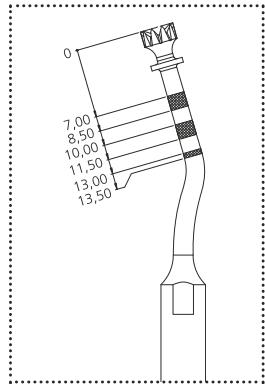


→ CUTTING ACTION

bone perforation

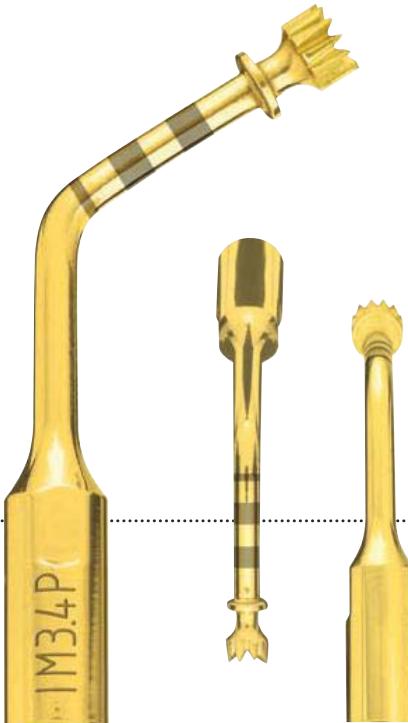
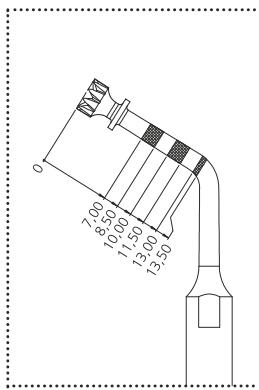
→ CLINICAL APPLICATION

to enlarge or to finalize the implant site preparation; insert with double irrigation to avoid overheating



3.4 mm Ø implant site preparation insert

..... IM3.4P



→ CUTTING ACTION

bone perforation

→ CLINICAL APPLICATION

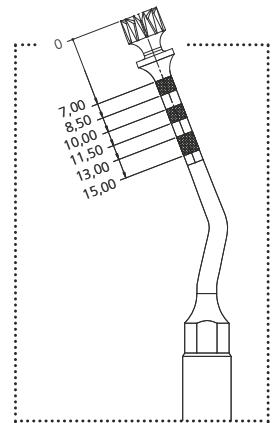
to enlarge or to finalize the implant site preparation; insert with double irrigation to avoid overheating

4 mm Ø implant site preparation insert

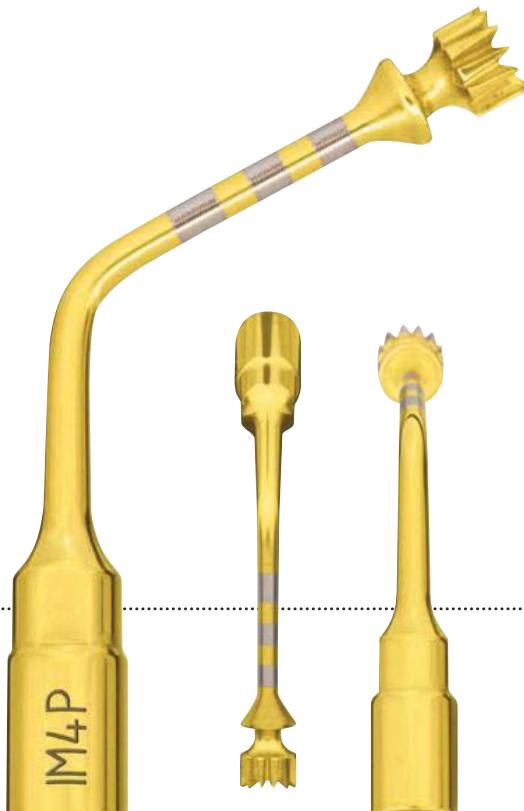
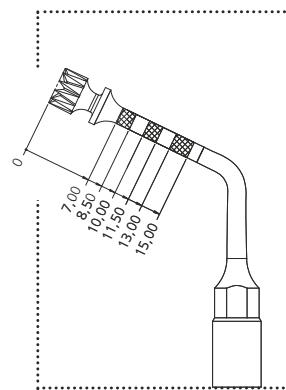
→ CUTTING ACTION

bone perforation

→ CLINICAL APPLICATION

to finalize the implant site
preparation; insert with double
irrigation to avoid overheating

4 mm Ø implant site preparation insert



→ CUTTING ACTION

bone perforation

→ CLINICAL APPLICATION

to finalize the implant site preparation; insert with double irrigation to avoid overheating

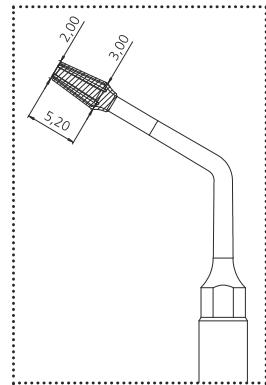
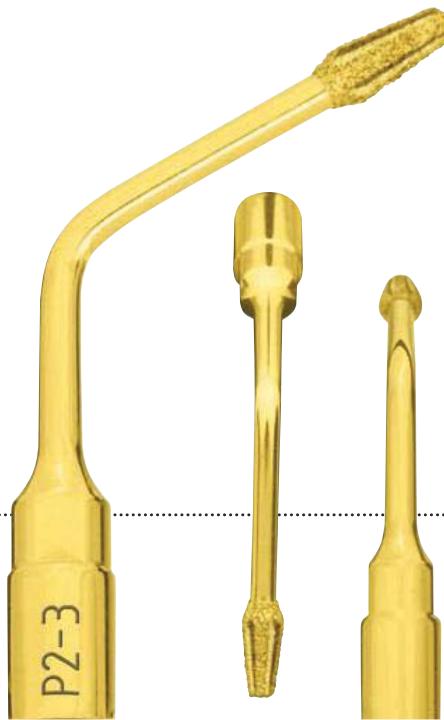


→ CUTTING ACTION

micrometric osteotomy

→ CLINICAL APPLICATION

to optimize concentricity of
implant site preparation
between Ø 2 and Ø 3 mm

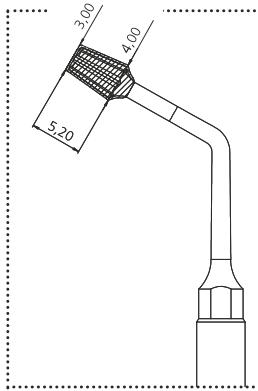


diamond grain size 150 µm



pilot implant site preparation insert

P3-4



diamond grain size 150 µm



→ CUTTING ACTION

micrometric osteotomy

→ CLINICAL APPLICATION

to optimize concentricity of
implant site preparation
between Ø 3 and Ø 4 mm



OT1–OT1A

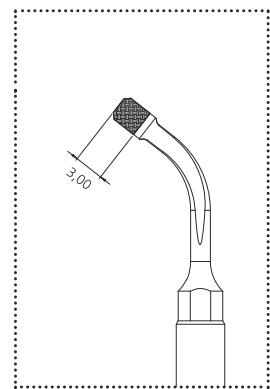
sinus bony window osteotomy insert

→ CUTTING ACTION

micrometric osteotomy (about 1 mm)

→ CLINICAL APPLICATION

to finalize the osteotomy in proximity of soft tissue (for example: sinus membrane, vessel, alveolar nerve)



diamond grain size 91 µm



→ CUTTING ACTION

osteotomy

→ CLINICAL APPLICATION

osteotome of great precision
in anatomically thin structures
(for example, ridge expansion,
interdental corticotomies)

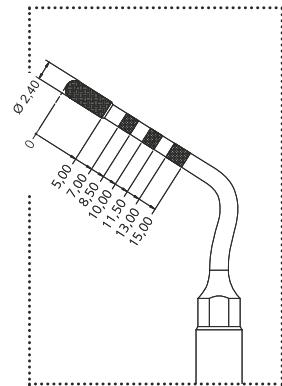


→ CUTTING ACTION

micrometric osteotomy (about 1 mm)

→ CLINICAL APPLICATION

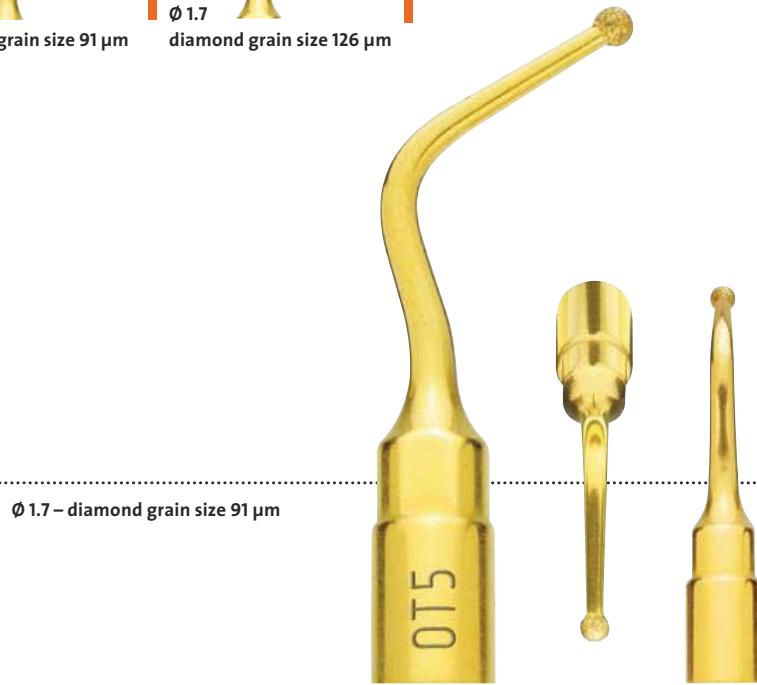
to correct pilot osteotomy axis, to finalize the implant site preparation close to the alveolar nerve; sinus crestal approach technique



diamond grain size 151 µm

osteoplasty and osteotomy insert

OT5 – OT5A – OT5B



→ CUTTING ACTION

micrometric osteotomy or osteoplasty

→ CLINICAL APPLICATION

non-traumatic, to finalize the osteotomy or osteoplasty on thin bone and/or near delicate anatomic structures

→ CUTTING ACTION

high effectiveness osteotomy

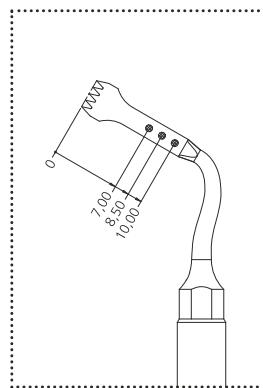
→ CLINICAL APPLICATION

osteotomy of large bone sections
during maxillofacial surgery



principal micro-saw 0.55 mm

↗ OT7 – OT7A



→ CUTTING ACTION

high effectiveness osteotomy

→ CLINICAL APPLICATION

all the osteotomy technique
in maxilla and mandible

- ridge expansion
- corticotomy technique
- bone block grafting



OT7S-4

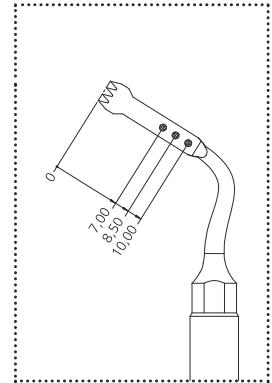
special micro-saw 0.35 mm (4 teeth)

→ CUTTING ACTION

high effectiveness and precision
osteotomy

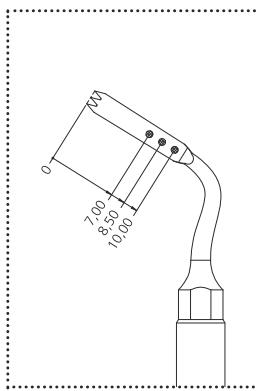
→ CLINICAL APPLICATION

very thin osteotomy, corticotomy for
orthodontic microsurgery technique,
root separation in dental extraction
technique and periodontal surgery



special micro-saw 0.35 mm (3 teeth)

OT7S-3



→ CUTTING ACTION

high precision osteotomy

→ CLINICAL APPLICATION

very thin and small osteotomy
and corticotomy technique for
orthodontic microsurgery, root
fraction technique for dental
extraction maneuver



→ CUTTING ACTION

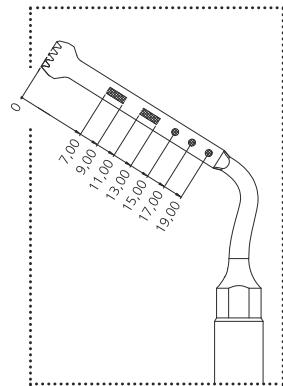
high effectiveness osteotomy

→ CLINICAL APPLICATION

ridge expansion technique, bone block grafting (from chin/mandible ramus), Le Fort I osteotomy, bilateral sagittal split osteotomy



tight up this insert only
with torque wrench K8



angled micro-saw 0.6 mm

→ OT8R – OT8L



→ CUTTING ACTION

horizontal osteotomy

→ CLINICAL APPLICATION

all the osteotomy technique
in maxilla and mandible

- bone block grafting

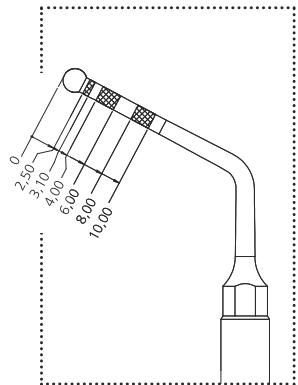


→ CUTTING ACTION

micrometric osteotomy or osteoplasty

→ CLINICAL APPLICATION

to finalize the osteotomy or osteoplasty
near delicate anatomic structures;
insert with double irrigation to avoid
overheating

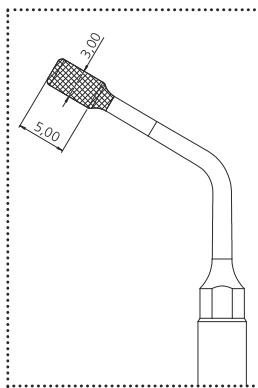


Ø 2.4 – diamond grain size 151 µm



osteoplasty and osteotomy insert

OT11



Ø 3.0 – diamond grain size 151 µm

→ CUTTING ACTION

micrometric osteotomy or osteoplasty

→ CLINICAL APPLICATION

removal of the sinus basal cortex and elevation of the sinus membrane

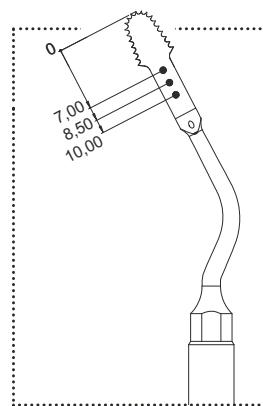


→ CUTTING ACTION

high effectiveness and precision
osteotomy

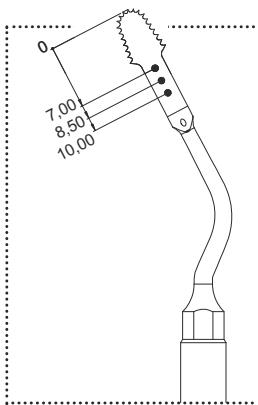
→ CLINICAL APPLICATION

dedicated to the osteotomy
techniques where the standard
piezoelectric bone saws may have
a difficult surgical approach



circular micro-saw 0.25 mm

OT12S



→ CUTTING ACTION

high effectiveness and precision
osteotomy

→ CLINICAL APPLICATION

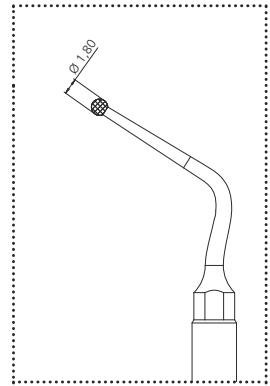
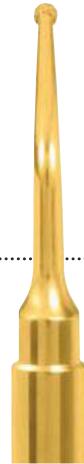
dedicated to the osteotomy
techniques where the standard
piezoelectric bone saws may have
a difficult surgical approach

→ CUTTING ACTION

micrometric osteotomy or osteoplasty

→ CLINICAL APPLICATION

non-traumatic bone defect preparation
in resective periodontal surgery

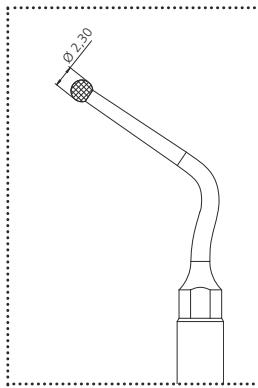


Ø 1.8 – diamond grain size 150 µm



osteoplasty and osteotomy insert

↗ OT14



Ø 2.3 – diamond grain size 150 µm



→ CUTTING ACTION

micrometric osteotomy or osteoplasty

→ CLINICAL APPLICATION

non-traumatic bone defect preparation
in resective periodontal surgery

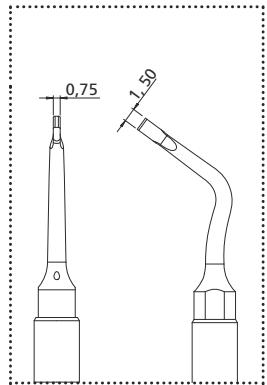


→ CUTTING ACTION

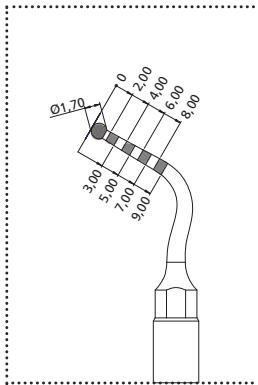
high precision osteotomy

→ CLINICAL APPLICATION

to finalize the bone window osteotomy
to gain access to the sinus membrane



osteoplasty and osteotomy insert

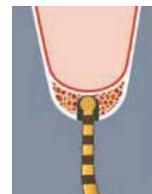


→ CUTTING ACTION

micrometric osteotomy or osteoplasty

→ CLINICAL APPLICATION

sinus floor reaching and safe
bony ring removal during crestal
sinus lift procedure (PIEZO-LIFT)

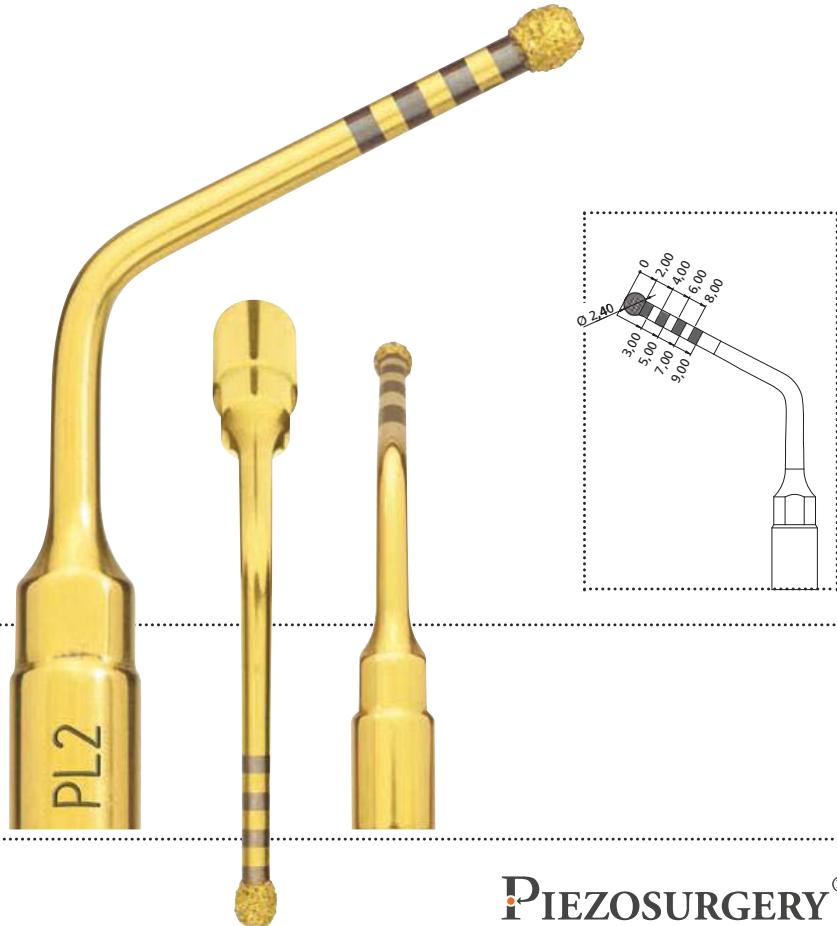


→ CUTTING ACTION

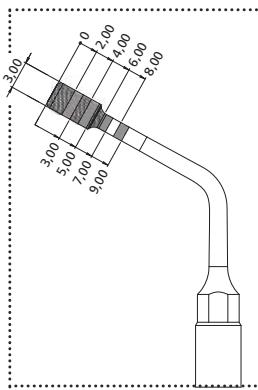
micrometric osteotomy or osteoplasty

→ CLINICAL APPLICATION

sinus floor consumption and initial membrane elevation during crestal sinus lift procedure (PIEZOLIFT)



osteoplasty and osteotomy insert



→ CUTTING ACTION

micrometric osteotomy or osteoplasty

→ CLINICAL APPLICATION

removal of the sinus basal cortex and elevation of the sinus membrane during crestal sinus lift procedure (PIEZO-LIFT)



→ CUTTING ACTION

high efficiency bone osteoplasty

→ CLINICAL APPLICATION

bone remodelling and harvesting
of bone chips



back action scalpel

..... OP2



→ CUTTING ACTION

osteoplasty

→ CLINICAL APPLICATION

bone osteotomy, remodelling and
removal of inflammatory tissue

↗ OP3 – OP3A

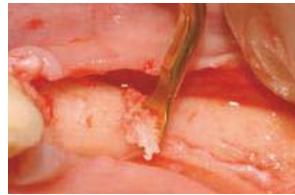
principal osteoplasty insert

→ CUTTING ACTION

universal osteoplasty

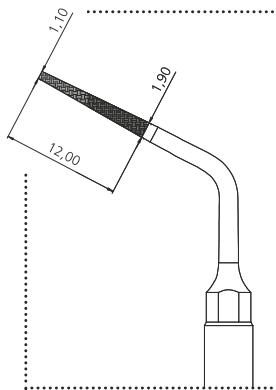
→ CLINICAL APPLICATION

periodontal osteotomy, crown lengthening, bone chips harvesting, inflammatory tissue removal (cyst, etc.)



crown lengthening file

OP4



diamond grain size 126 µm



→ CUTTING ACTION

micro-osteoplasty

→ CLINICAL APPLICATION

interproximal osteoplasty
and root planing



OP5 – OP5A

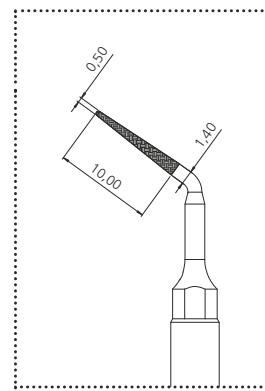
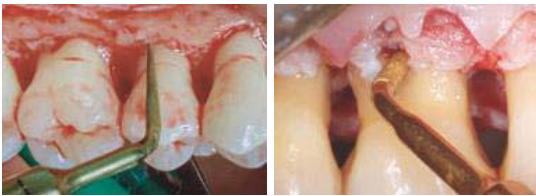
root debridement insert

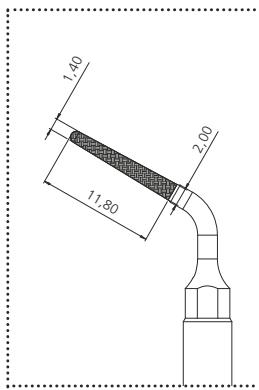
→ CUTTING ACTION

micro-osteoplasty

→ CLINICAL APPLICATION

root debridement and root planing
during resective and regenerative
periodontal surgery





diamond grain size 126 µm

→ CUTTING ACTION

micro-root preparation

→ CLINICAL APPLICATION

root preparation in periodontal surgery



→ CUTTING ACTION

micro-osteoplasty

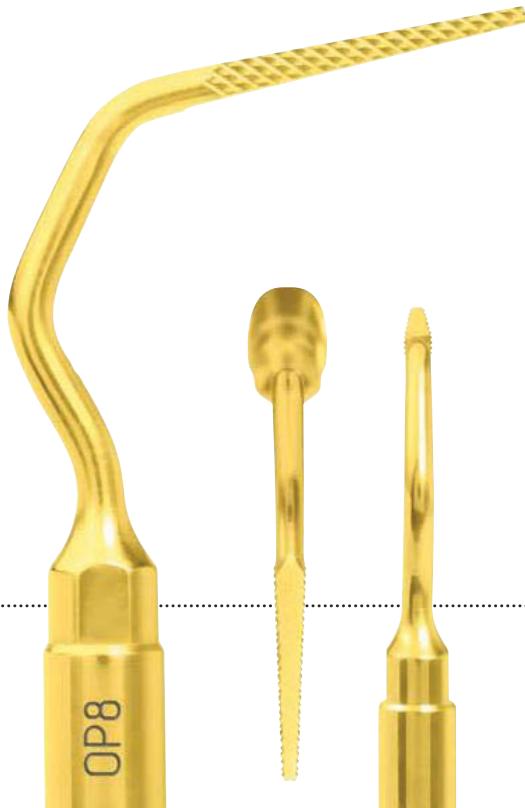
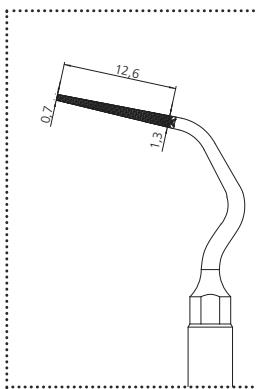
→ CLINICAL APPLICATION

peri-apical maxillary bone
osteotomy access, inflammatory
tissue removal



crown lengthening file / perio file

OP8*



→ CUTTING ACTION

micro-osteoplasty

→ CLINICAL APPLICATION

Interproximal osteoplasty without
damaging adjacent root surfaces

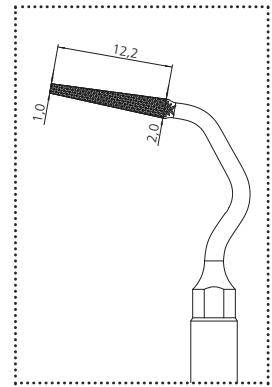
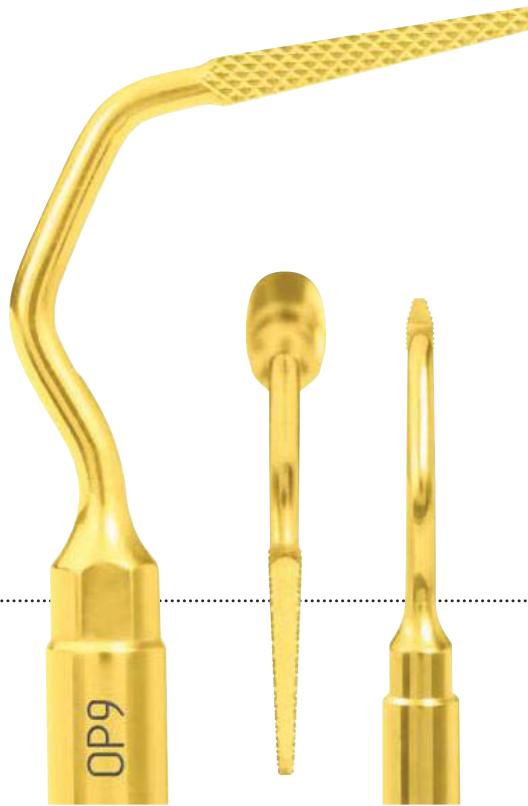


*only available for PIEZOSURGERY® 3, PIEZOSURGERY® touch and PIEZOSURGERY® white

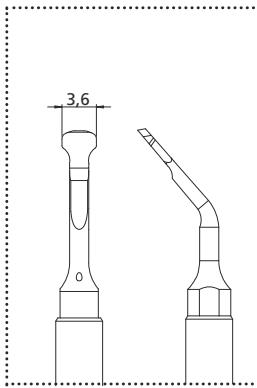
→ CUTTING ACTION

micro-osteoplasty

→ CLINICAL APPLICATION

Interproximal osteoplasty without
damaging adjacent root surfaces

osteoplasty insert

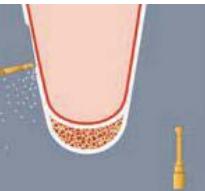


→ CUTTING ACTION

universal osteoplasty

→ CLINICAL APPLICATION

sinus vestibular wall consumption to
gain the membrane access; bone chips
harvesting, inflammatory tissue removal

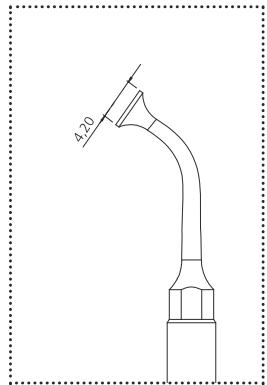


→ CUTTING ACTION

schneiderian membrane
separation from bony walls

→ CLINICAL APPLICATION

separation of the sinus membrane,
2 mm around the frame of bony window



sinus membrane separator angled at 100°

...↗ EL2



→ CUTTING ACTION

non-cutting elevator of the sinus membrane

→ CLINICAL APPLICATION

separation of the sinus membrane
in internal zones



→ CUTTING ACTION

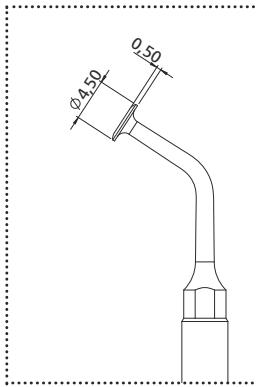
non-cutting elevator of the sinus membrane

→ CLINICAL APPLICATION

separation of the sinus membrane in internal zones



sinus membrane separator



→ CUTTING ACTION

sinus membrane separator

→ CLINICAL APPLICATION

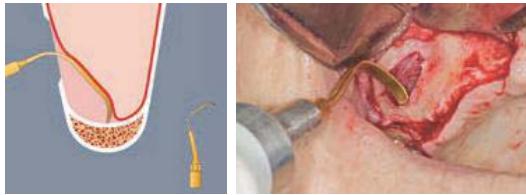
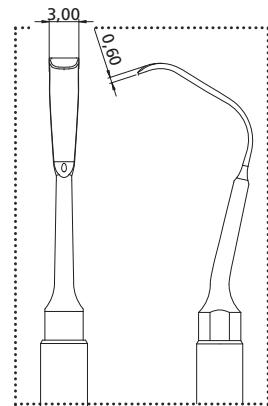
sinus membrane separation from
the bony window margins

→ CUTTING ACTION

elevator to cut Sharpey's fibers
from the endosteum

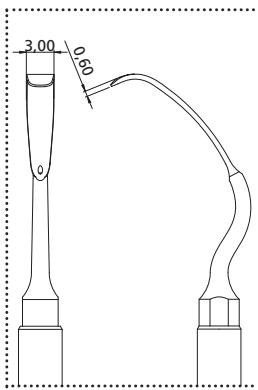
→ CLINICAL APPLICATION

sinus membrane elevation
from the sinus floor



sinus membrane elevator

..... SLE2

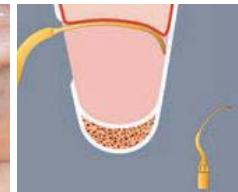


→ CUTTING ACTION

elevator to cut Sharpey's fibers
from the endosteum

→ CLINICAL APPLICATION

sinus membrane elevation
from the palatal wall

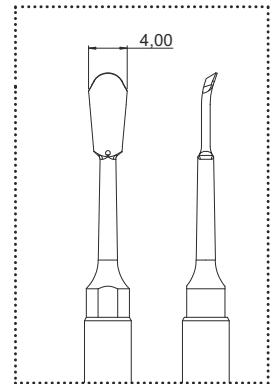


→ CUTTING ACTION

periosteum elevator

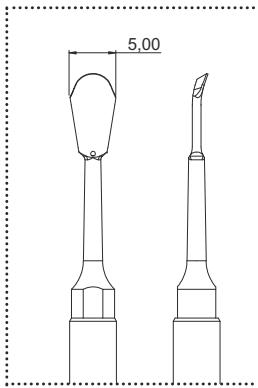
→ CLINICAL APPLICATION

subperiostal preparation



piezoelectric raspatory, 5 mm width

PR2



→ CUTTING ACTION

periosteum elevator

→ CLINICAL APPLICATION

subperiostal preparation

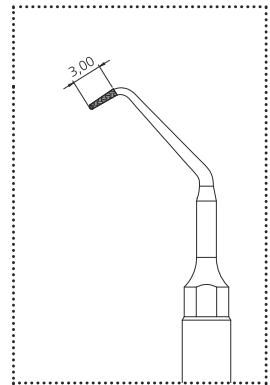


→ CUTTING ACTION

efficient canal cleaning

→ CLINICAL APPLICATION

apical root debridement



diamond grain size 30 µm

smooth endo apical debrider 3 mm

EN2



→ CUTTING ACTION

gentle canal cleaning

→ CLINICAL APPLICATION

gentle apical root debridement

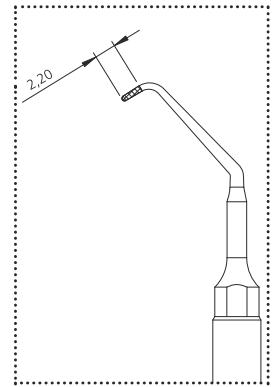


→ CUTTING ACTION

efficient canal cleaning

→ CLINICAL APPLICATION

apical root debridement



diamond grain size 30 µm

smooth endo apical debrider 2.2 mm

EN4



→ CUTTING ACTION

gentle canal cleaning

→ CLINICAL APPLICATION

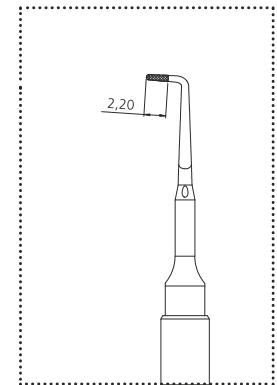
gentle apical root debridement

→ CUTTING ACTION

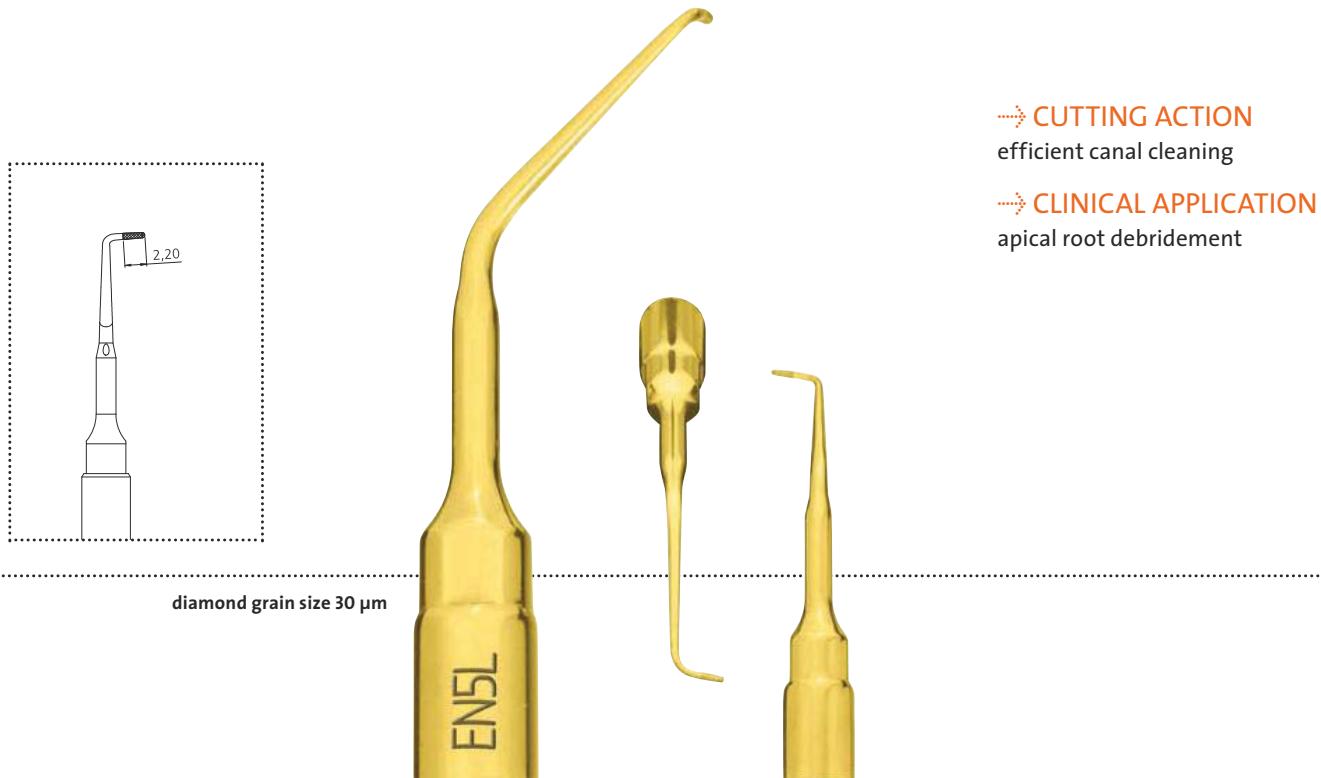
efficient canal cleaning

→ CLINICAL APPLICATION

apical root debridement



diamond grain size 30 µm

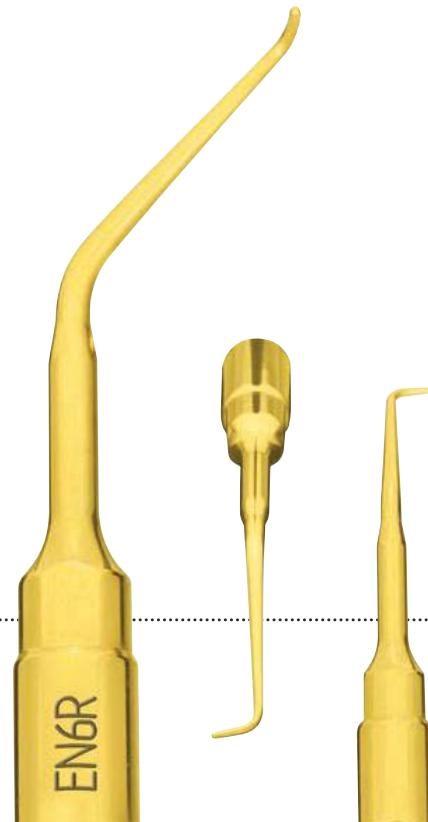


→ CUTTING ACTION

efficient canal cleaning

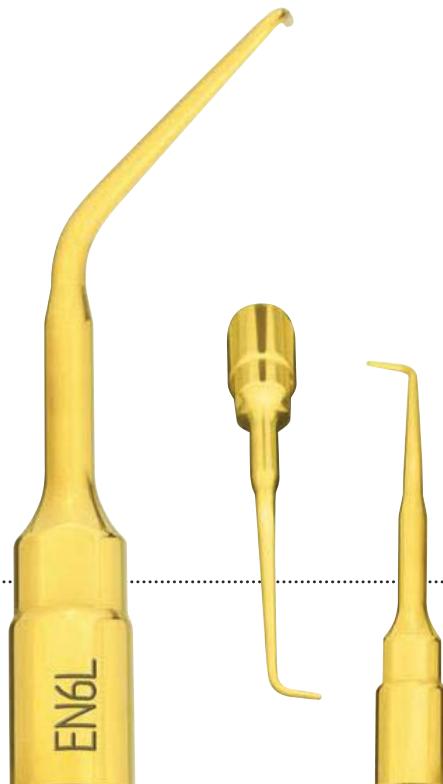
→ CLINICAL APPLICATION

apical root debridement



left angled, smooth endo apical debrider 2.2 mm

EN6L



→ CUTTING ACTION

efficient canal cleaning

→ CLINICAL APPLICATION

apical root debridement

→ CUTTING ACTION

delicate osteotomy

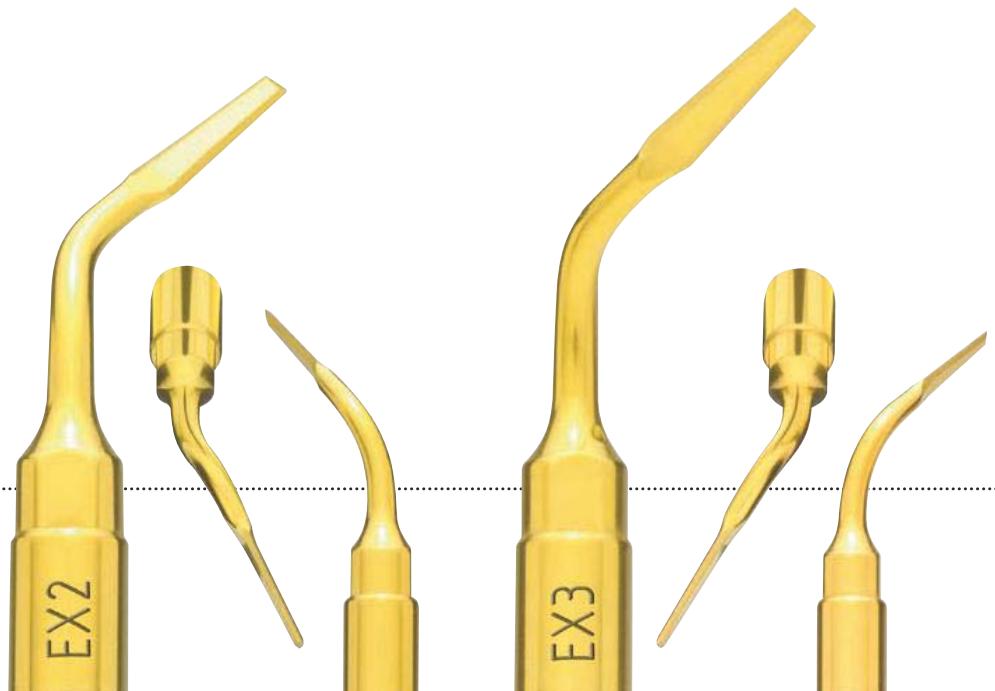
→ CLINICAL APPLICATION

to cut off the ankylosis, root fraction techniques



angled extraction scalpel

EX2 – EX3



→ CUTTING ACTION

micrometric osteotomy

→ CLINICAL APPLICATION

analogue to EX1 in the posterior regions



↗ EXP3-R – EXP3-L

explantations

→ CUTTING ACTION

peri-implant osteotomy

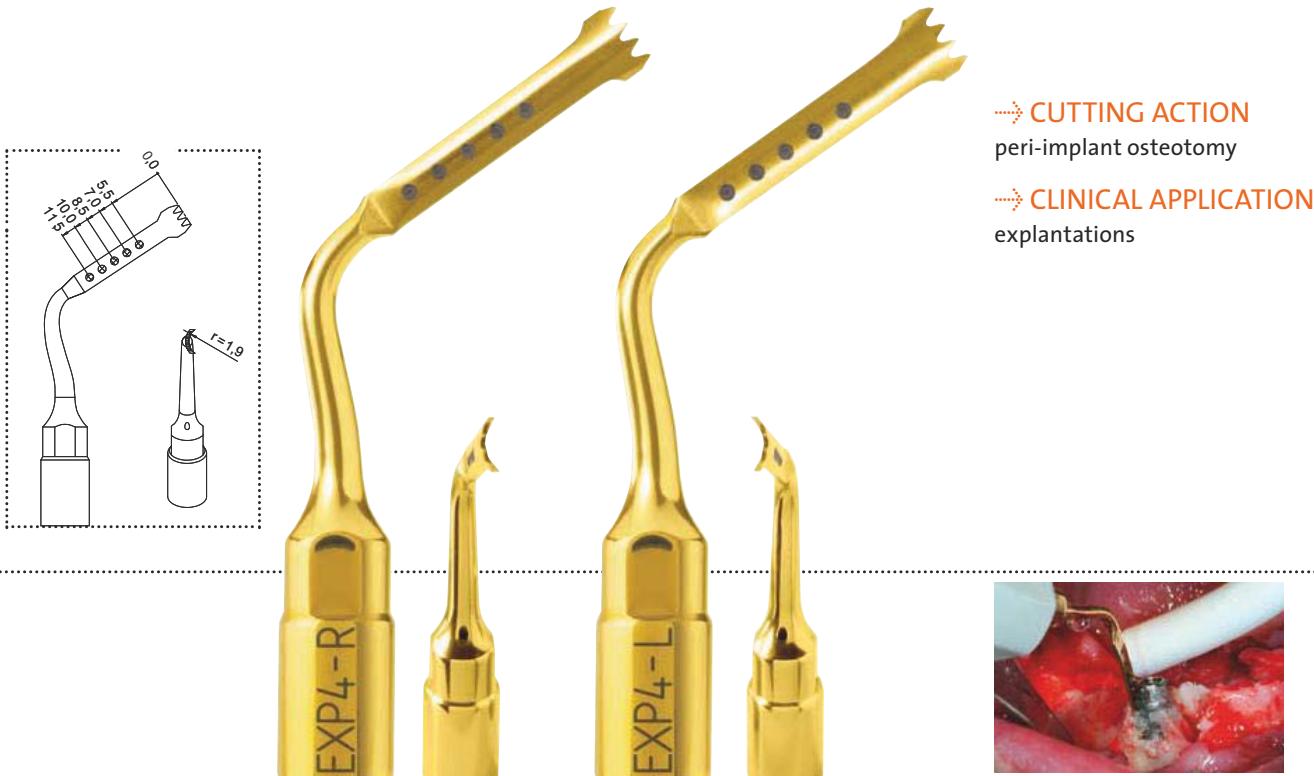
→ CLINICAL APPLICATION

explantations



explantations

..... EXP4-R – EXP4-L

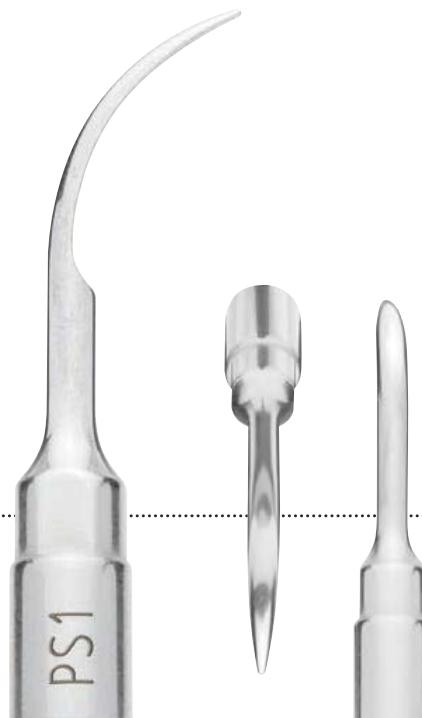


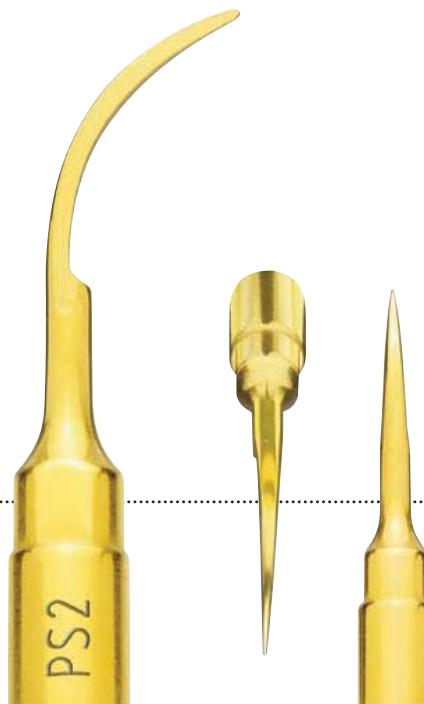
→ CUTTING ACTION

gentle scaling

→ CLINICAL APPLICATION

root scaling





→ CUTTING ACTION

powerful scaling

→ CLINICAL APPLICATION

scaling and inflammatory tissue removal
fractured root apex extraction



→ CUTTING ACTION

gentle scaling

→ CLINICAL APPLICATION

root scaling



principal root planing insert



→ CUTTING ACTION

root surface micro-smoothening

→ CLINICAL APPLICATION

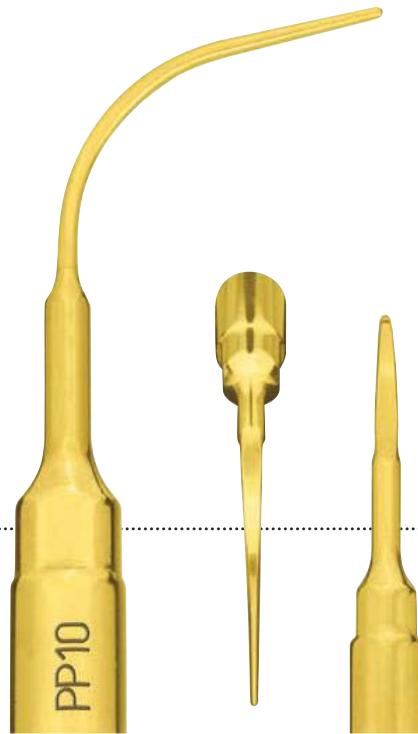
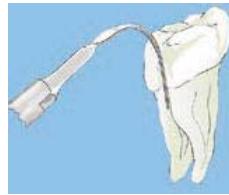
root planing

→ CUTTING ACTION

root surface micro-smoothening

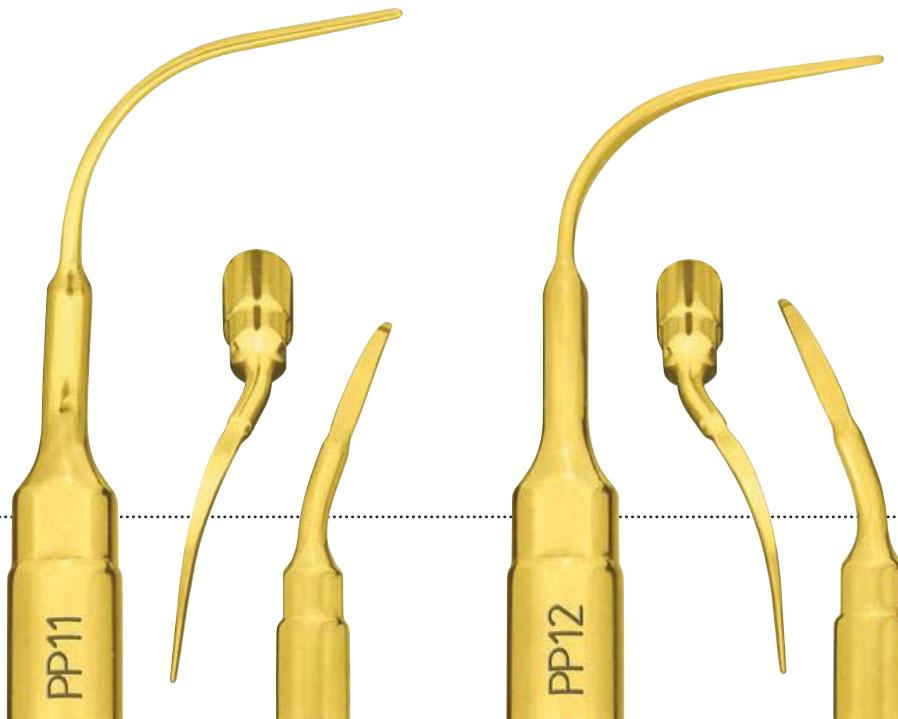
→ CLINICAL APPLICATION

gentle subgingival concrements removal



left and right angled, gentle perio anatomic insert

PP11 – PP12



→ CUTTING ACTION

root surface micro-smoothening

→ CLINICAL APPLICATION

gentle subgingival concrements removal



→ CUTTING ACTION

gentle and safe cleaning action
of the implant surface

→ CLINICAL APPLICATION

efficient and soft cleaning of
implants and restorations



→ IMPLANT
CLEANING SET P
The set consists
of a tip holder ICP
and 5 tips IC1

→ ICP

tip holder
ICP

→ IC1

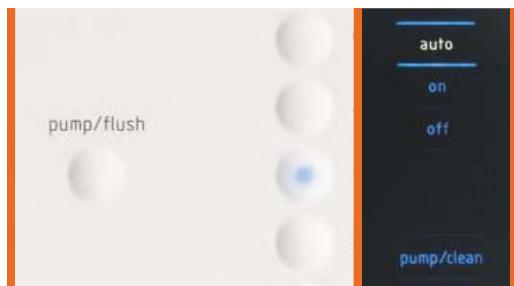
implant cleaning tip IC1 is
made of PEEK, can be easily
tightened without special
tools and is fully autoclavable

preparation and finishing of subgingival margins

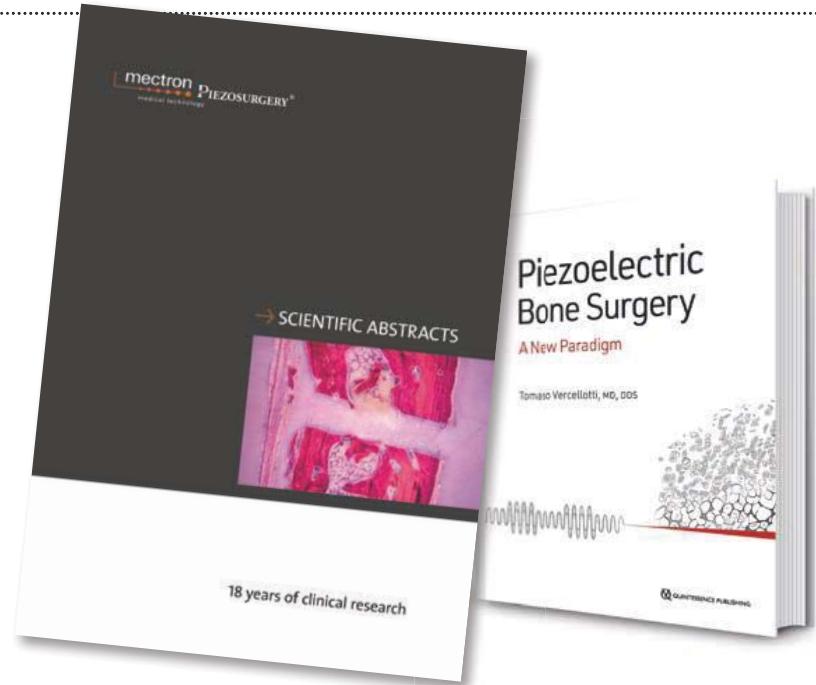
CROWN PREP TIPS



- enzymatic solution for efficient removal of organic residue
- specifically dedicated to the “clean” function of all PIEZOSURGERY® devices
- works perfectly in ultrasonic cleaning tanks
- easy handling thanks to the dosage measuring cap



↗ PIEZOSURGERY® –
MORE THAN 20 YEARS
OF SUCCESSFUL
SCIENTIFIC RESEARCH



↗ METHOD PIEZOSURGERY®: EVIDENCE-BASED

With over 20 years of successful clinical research, the original PIEZOSURGERY® method is the only one supported by more than 250 clinical and scientific studies. An updated list of publications can be found at www.mectron.com. Scientific Abstracts are also available for download.

→ EXPERIENCE EDUCATION – MECTRON IS COMMITTED TO ENSURING YOU GET THE BEST KNOWLEDGE OF PIEZOSURGERY® METHOD.

PIEZOSURGERY® has caused a paradigm shift in osseous surgery and has become the new standard of care in oral and periodontal surgery. In addition to its revolutionary technology, its unique level of quality and its optimal ergonomic features, there is yet one more important factor to success with PIEZOSURGERY® technology: you.



Free of charge registration
education.mectron.com



→ [WW.MECTRON.COM/EDUCATION](http://www.mectron.com/education)

We are happy to share with you our online education platform. It will allow you to attend free of charge our live and on-demand educational webinars and view our clinical video library. A fantastic possibility to take a deeper view on clinical opportunities helpful for your daily practice. Visit our mectron education platform and register to receive notifications about upcoming webinars.

On www.mectron.com we offer you even more seminars: In the section courses and workshops you will find different seminars on PIEZOSURGERY® in English. Please contact your mectron partner for the courses in your local language – you will find the contact address in the dealer list on our website.

↗ SPARE PARTS



handpiece holder with LED-handpiece



protection foils



PIEZOSURGERY® insert box



torque wrench K8

→ COMMON SPARE PARTS

→ ITEM/REFERENCE NUMBER
surgical tray 04610004
torque wrench K8 02900109
irrigation set 03230006
PIEZOSURGERY® insert box with a tray holding 15 inserts 02900111
insert tray 02900037
PIEZOSURGERY® insert box with bone expander tray 02900107
PIEZOSURGERY® insert box with implant insert tray 02900108
bag support rod 01380002

→ PIEZOSURGERY® touch → PIEZOSURGERY® white

→ ITEM/REFERENCE NUMBER
LED-handpiece, complete with cord 03120134
handpiece, complete with cord (compatible with PS white) 03120217
handpiece holder 02900105
mobile handpiece holder 03110015
handpiece LED-cone 03020158
handpiece metal cone 03020171
set of 8 tubes for pump 02900104
bone grafting set (liquid flow rate reducer) 02900106
protection foils (pack of 10 sterile pieces) 03230012
footswitch (PS touch) 02900102
footswitch (PS white) 02900114
suitcase (PS touch and PS white) 04440006

→ PIEZOSURGERY® I, II AND 3

→ ITEM/REFERENCE NUMBER
handpiece, complete with cord 03120023
handpiece holder (PSII + 3) 02900040
set of 8 tubes for pump (PSII + 3) (handpiece cord with metal connector) 02900039
set of 8 tubes for pump (PSII + 3) (handpiece cord with plastic connector) 02900104
tube-tube connector 00680027
footswitch (PSI + II) 02900020
footswitch (PS3) 02900078
peristaltic pump 03210006

→ WARNINGS

→ DIAMOND-COATED INSERTS

When the diamond chips wear out a reduction in cutting capacity and a consequent increase in temperature may occur. Use these inserts for a maximum of ten applications.

→ CUTTING INSERTS

When the nitriding wears out the cutting edge loses efficiency and a re-sharpening is unadvisable due to its limited life-span.

→ MEMBRANE SEPARATORS

For a greater life-span it is recommended to use it on low power.
High power can be useful if there are residual bony edges to be removed.



REFERENCE NUMBERS

→ ITEM/REFERENCE NUMBER	→ ITEM/REFERENCE NUMBER	→ ITEM/REFERENCE NUMBER			
basic set	01520001	insert IM2P	03510002	insert OT6	03370006
osteotomy set	01520010	insert IM2P-15	03510016	insert OT7	03370007
sinus lift lateral set	01520023	insert IM2.8A	03510025	insert OT7A	03370011
piezo lift set	01520024	insert IM2.8P	03510026	insert OT7S-4	03370014
sinus lift set	01520002	insert IM3A	03510003	insert OT7S-3	03370015
implant prep set pro	01520011	insert IM3A-15	03510017	insert OT7-20	03370017
extraction set	01520003	insert IM3P	03510004	insert OT8R	03370012
explantation set	01520021	insert IM3P-15	03510018	insert OT8L	03370013
resective perio set	01520022	insert IM3.4A	03510027	insert OT9	03370016
retro surgical set	01520005	insert IM3.4P	03510028	insert OT11	03370019
insert IM1S	03510019	insert IM4A	03510005	insert OT12	03370020
PIN IM1	03740002	insert IM4P	03510006	insert OT12S	03370021
PIN IM1S	03740007	insert P2-3	03510020	insert OT13	03370022
PIN 2-2.4	03740003	insert P3-4	03510021	insert OT14	03370023
PIN 2-3	03740001	insert OT1	03370001	insert SLO-H	03370025
insert IM1 AL	03510010	insert OT1A	03370008	insert PL1	03370026
PIN IM1 AL	03740004	insert OT2	03370002	insert PL2	03370027
PIN 2-2.4 AL	03740005	insert OT4	03370004	insert PL3	03370028
PIN 2-3 AL	03740006	insert OT5	03370005	insert OP1	03380001
insert IM2A	03510001	insert OT5A	03370009	insert OP2	03380002
insert IM2A-15	03510015	insert OT5B	03370010	insert OP3	03380003

→ ITEM/REFERENCE NUMBER	→ ITEM/REFERENCE NUMBER	→ ITEM/REFERENCE NUMBER			
insert OP3A	03380011	insert EN5R	02170007	crown prep set PS (DB2, AB1 and K7)	02160010
insert OP4	03380004	insert ENSL	02170008	tipholder DB2	03570002
insert OPS	03380005	insert EN6R	02170009	key AB1	03580001
insert OP5A	03380012	insert EN6L	02170010	dynamometric wrench K7	02900081
insert OP6	03380006	insert EX1	03400001	crown prep tip TA12D60	03590001
insert OP7	03380007	insert EX2	03400002	crown prep tip TA14D60	03590002
insert OP8	03380008	insert EX3	03400003	crown prep tip TA16D60	03590003
insert OP9	03380009	insert EXP3-R	03400004	crown prep tip TA12D90	03590004
insert SLC	03380013	insert EXP3-L	03400005	crown prep tip TA14D90	03590005
insert EL1	03390001	insert EXP4-R	03400006	crown prep tip TA16D90	03590006
insert EL2	03390002	insert EXP4-L	03400007	crown prep tip TA14D120	03590007
insert EL3	03390003	insert PS1	03180001	crown prep tip TA16D120	03590008
insert SLS	03390006	insert PS2	03180003	crown prep tip TF12D60	03590010
insert SLE1	03390007	insert PS6	03180005	crown prep tip TF16D60	03590011
insert SLE2	03390008	insert PP1	03180002	crown prep tip TF12D90	03590012
insert PR1	03390004	insert PP10	03180006	crown prep tip TF16D90	03590013
insert PR2	03390005	insert PP11	03180007	Enzymec bottle (1 liter)	03900001
insert EN1	02170001	insert PP12	03180008	Enzymec 4-bottle pac (4 liter)	03900002
insert EN2	02170002	tipholder ICP	03570003		
insert EN3	02170005	tip IC1 (5 pieces)	02900112		
insert EN4	02170006	implant cleaning set P. (ICP and 5 x IC1)	01520020		

APPROPRIATE SETTINGS FOR THE INSERTS



PIEZOSURGERY® touch PIEZOSURGERY® white

→ INSERT	FUNCTION
IMPLANT PREP	
IM1	special*
IM1 AL	implant
IM2A	implant
IM2A-15	implant
IM2P	implant
IM2P-15	implant
IM2.8A	implant
IM2.8P	implant
IM3A	implant
IM3A-15	implant
IM3P	implant
IM3P-15	implant
IM3.4A	implant
IM3.4P	implant
IM4A	implant
IM4P	implant
P2-3	implant
P3-4	implant

→ INSERT	FUNCTION
OSTEOTOMY	
OT1	cancellous / cortical
OT1A	cancellous / cortical
OT2	cancellous / cortical
OT4	cancellous / cortical
OT5	cancellous / cortical
OT5A	cancellous / cortical
OT5B	cancellous / cortical
OT6	cancellous / cortical
OT7	cancellous / cortical
OT7A	cancellous / cortical
OT7S-3	special*
OT7S-4	special*
OT7-20	cancellous / cortical
OT8L	cancellous / cortical
OT8R	cancellous / cortical
OT9	cancellous / cortical
OT11	cancellous / cortical
OT12	cancellous / cortical
OT12S	special*
OT13	cancellous / cortical
OT14	cancellous / cortical
SLO-H	cancellous / cortical
PL1	cancellous / cortical
PL2	cancellous / cortical
PL3	cancellous / cortical
OSTEOPLASTY	
OP1	cancellous / cortical
OP2	cancellous / cortical
OP3	cancellous / cortical
OP3A	cancellous / cortical
OP4	cancellous / cortical
OP5	perio
OP5A	perio / special
OP6	perio
OP7	cancellous / cortical
OP8	perio / special
OP9	cancellous / cortical
SLC	cancellous / cortical
SINUS MEMBRANE ELEVATION	
EL1	endo*
EL2	endo*
EL3	endo*
SLS	special*
SLE1	special*
SLE2	special*
PERIOSTEUM	
PR1	cancellous / cortical
PR2	cancellous / cortical
ENDO RETRO	
EN1	endo*
EN2	endo*
EN3	endo*
EN4	endo*
EN5R	endo*
EN5L	endo*
EN6R	endo*
EN6L	endo*
EXTRACTION	
EX1	cancellous / cortical
EX2	cancellous / cortical
EX3	cancellous / cortical
EXPLANTATION	
EXP3-R	special / cancellous / cortical
EXP3-L	special / cancellous / cortical
EXP4-R	special / cancellous / cortical
EXP4-L	special / cancellous / cortical
PERIO	
PP1	perio
PS1	perio
PS2	perio
PS6	perio
PP10	perio
PP11	perio
PP12	perio
IMPLANT CLEANING	
ICP + ICI	endo / perio
RESTORATIVE	
DB2	perio special

* Maximum power permitted



PIEZOSURGERY® 3

→	INSERT	MODE	POWER
IMPLANT PREP			
IM1S	BONE	SPECIAL*	
IM1 AL	IMPL	IMPLANT	
IM2A	IMPL	IMPLANT	
IM2A-15	IMPL	IMPLANT	
IM2P	IMPL	IMPLANT	
IM2P-15	IMPL	IMPLANT	
IM2.8A	IMPL	IMPLANT	
IM2.8P	IMPL	IMPLANT	
IM3A	IMPL	IMPLANT	
IM3A -15	IMPL	IMPLANT	
IM3P	IMPL	IMPLANT	
IM3P-15	IMPL	IMPLANT	
IM3.4A	IMPL	IMPLANT	
IM3.4P	IMPL	IMPLANT	
IM4A	IMPL	IMPLANT	
IM4P	IMPL	IMPLANT	
P2-3	IMPL	IMPLANT	
P3-4	IMPL	IMPLANT	

→	INSERT	MODE	POWER
OSTEOTOMY			
OT1	BONE	SPONGIOUS / CORTICAL	
OT1A	BONE	SPONGIOUS / CORTICAL	
OT2	BONE	SPONGIOUS / CORTICAL	
OT4	BONE	SPONGIOUS / CORTICAL	
OT5	BONE	SPONGIOUS / CORTICAL	
OT5A	BONE	SPONGIOUS / CORTICAL	
OT5B	BONE	SPONGIOUS / CORTICAL	
OT6	BONE	SPONGIOUS / CORTICAL	
OT7	BONE	SPONGIOUS / CORTICAL	
OT7A	BONE	SPONGIOUS / CORTICAL	
OT75-3	BONE	SPECIAL*	
OT75-4	BONE	SPECIAL*	
OT7-20	BONE	SPONGIOUS / CORTICAL	
OT8L	BONE	SPONGIOUS / CORTICAL	
OT8R	BONE	SPONGIOUS / CORTICAL	
OT9	BONE	SPONGIOUS / CORTICAL	
OT11	BONE	SPONGIOUS / CORTICAL	
OT12	BONE	SPONGIOUS / CORTICAL	
OT12S	BONE	SPECIAL*	
OT13	BONE	SPONGIOUS / CORTICAL	
OT14	BONE	SPONGIOUS / CORTICAL	
SLO-H	BONE	SPONGIOUS / CORTICAL	
PL1	BONE	SPONGIOUS / CORTICAL	
PL2	BONE	SPONGIOUS / CORTICAL	
PL3	BONE	SPONGIOUS / CORTICAL	
OSTEOPLASTY			
OP1	BONE	SPONGIOUS / CORTICAL	
OP2	BONE	SPONGIOUS / CORTICAL	
OP3	BONE	SPONGIOUS / CORTICAL	
OP3A	BONE	SPONGIOUS / CORTICAL	
OP4	BONE	SPONGIOUS / CORTICAL	
OP5	ROOT	PERIO	
OP5A	ROOT	PERIO	
	BONE	SPECIAL	
OP6	ROOT	PERIO	
OP7	BONE	SPONGIOUS / CORTICAL	
OP8	ROOT	PERIO	
	BONE	SPECIAL	
OP9	BONE	SPONGIOUS / CORTICAL	
SLC	BONE	SPONGIOUS / CORTICAL	
SINUS MEMBRANE ELEVATION			
EL1	ROOT	ENDO*	
EL2	ROOT	ENDO*	
EL3	ROOT	ENDO*	
SLS	BONE	SPECIAL*	
SLE1	BONE	SPECIAL*	
SLE2	BONE	SPECIAL*	
PERIOSTEUM			
PR1	BONE	SPONGIOUS / CORTICAL	
PR2	BONE	SPONGIOUS / CORTICAL	
ENDO RETRO			
EN1	ROOT	ENDO*	
EN2	ROOT	ENDO*	
EN3	ROOT	ENDO*	
EN4	ROOT	ENDO*	
EN5R	ROOT	ENDO*	
EN5L	ROOT	ENDO*	
EN6R	ROOT	ENDO*	
EN6L	ROOT	ENDO*	
EXTRACTION			
EX1	BONE	SPONGIOUS / CORTICAL	
EX2	BONE	SPONGIOUS / CORTICAL	
EX3	BONE	SPONGIOUS / CORTICAL	
EXPLANTATION			
EXP3-R	BONE	SPECIAL / SPONGIOUS / CORTICAL	
EXP3-L	BONE	SPECIAL / SPONGIOUS / CORTICAL	
EXP4-R	BONE	SPECIAL / SPONGIOUS / CORTICAL	
EXP4-L	BONE	SPECIAL / SPONGIOUS / CORTICAL	
PERIO			
PP1	ROOT	PERIO	
PS1	ROOT	PERIO	
PS2	ROOT	PERIO	
PS6	ROOT	PERIO	
PP10	ROOT	PERIO	
PP11	ROOT	PERIO	
PP12	ROOT	PERIO	
IMPLANT CLEANING			
ICP + IC1	ROOT	ENDO / PERIO	
RESTORATIVE			
DB2	ROOT	PERIO	
	BONE	SPECIAL	

*Maximum power permitted



PIEZOSURGERY®

→ INSERT	MODE	POWER
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IMPLANT PREP

IM1S	BOOSTED	C
IM1 AL	BOOSTED	C
IM2A	BOOSTED	C
IM2A-15	BOOSTED	C
IM2P	BOOSTED	C
IM2P-15	BOOSTED	C
IM2.8A	BOOSTED	C
IM2.8P	BOOSTED	C
IM3A	BOOSTED	C
IM3A -15	BOOSTED	C
IM3P	BOOSTED	C
IM3P-15	BOOSTED	C
IM3.4A	BOOSTED	C
IM3.4P	BOOSTED	C
IM4A	BOOSTED	C
IM4P	BOOSTED	C
P2-3	BOOSTED	C
P3-4	BOOSTED	C

→ INSERT	MODE	POWER
OSTEOTOMY		
OT1	BOOSTED	C
OT1A	BOOSTED	C
OT2	BOOSTED	C
OT4	BOOSTED	C
OT5	BOOSTED	C
OT5A	BOOSTED	C
OT5B	BOOSTED	C
OT6	BOOSTED	C
OT7	BOOSTED	C
OT7A	BOOSTED	C
OT7S-3	BOOSTED	C
OT7S-4	BOOSTED	C
OT7-20	BOOSTED	C
OT8L	BOOSTED	C
OT8R	BOOSTED	C
OT9	BOOSTED	C
OT11	BOOSTED	C
OT12	BOOSTED	C
OT12S	BOOSTED	C
OT13	BOOSTED	C
OT14	BOOSTED	C
SLO-H	BOOSTED	C
PL1	BOOSTED	C
PL2	BOOSTED	C
PL3	BOOSTED	C
OSTEOPLASTY		
OP1	BOOSTED	C
OP2	BOOSTED	C
OP3	BOOSTED	C
OP3A	BOOSTED	C
OP4	BOOSTED	C
OP5	HIGH	2 - 3
OP5A	HIGH	2 - 3
OP6	ROOT	2 - 3
OP7	BOOSTED	C
OP9	BOOSTED	C
SLC	BOOSTED	C
SINUS MEMBRANE ELEVATION		
EL1	LOW	1
EL2	LOW	1
EL3	LOW	1
SLS	BOOSTED	C
SLE1	BOOSTED	C
SLE2	BOOSTED	C
PERIOSTEUM		
PR1	BOOSTED	C
PR2	BOOSTED	C
ENDO RETRO		
EN1	LOW	1
EN2	LOW	1
EN3	LOW	1
EN4	LOW	1
EN5R	LOW	1
EN5L	LOW	1
EN6R	LOW	1
EN6L	LOW	1
EXTRACTION		
EX1	BOOSTED	C
EX2	BOOSTED	C
EX3	BOOSTED	C
EXPLANTATION		
EXP3-R	BOOSTED	C
EXP3-L	BOOSTED	C
EXP4-R	BOOSTED	C
EXP4-L	BOOSTED	C
PERIO		
PP1	HIGH	2 - 3
PS1	HIGH	2 - 3
PS2	HIGH	2 - 3
PS6	HIGH	2 - 3
PP10	HIGH	2 - 3
PP11	HIGH	2 - 3
PP12	HIGH	2 - 3
IMPLANT CLEANING		
ICP + IC1	HIGH	2 - 3
	LOW	1
RESTORATIVE		
DB2	HIGH BOOSTED	2 - 3 A

↗ IMPLANT SITE PREPARATION SEQUENCE

↗ PIEZOSURGERY® IMPLANT SITE PREPARATION INSERTS

↗ IMPLANTS 3.2 – 3.3		↗ IMPLANTS 3.7 – 3.8		↗ IMPLANTS 4.0 – 4.1		↗ IMPLANTS 4.8 – 5.0	
INSERT SEQUENCE	BONE QUALITY	INSERT SEQUENCE	BONE QUALITY	INSERT SEQUENCE	BONE QUALITY	INSERT SEQUENCE	BONE QUALITY
IM1S		IM1S		IM1S		IM1S	
IM2	L	IM2		IM2		IM2	
P2-3*		P2-3*		P2-3*		P2-3*	
IM2.8	M	IM2.8	L	IM3	L	IM3	
IM3	H	IM3	M	P3-4*		P3-4*	
		P3-4*		IM3.4	M	IM4	LM
		IM3.4	H	CORTICAL BONE TAP TOOL	H	CORTICAL BONE TAP TOOL	H

L low bone density
M medium bone density
H hard bone density

* only crestal cortical



NOTE

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• PIEZOSURGERY white PIEZOSURGERY® white