

mectron

→ MECTRON  
PIEZOSURGERY® INSERTS





► THE ORIGINAL  
PIEZOELECTRIC  
BONE SURGERY –  
EVIDENCE-BASED!

 INDEX

- |  |                                    |   |
|--|------------------------------------|---|
| 4 Insert quality                                 | 29 Insert P2-3 SP                  | 52 Insert EL1 / Insert EL2                |
| 6 Indications                                    | 30 Insert MDI 1.9 / Insert MDI 2.2 | 53 Insert EL3 / Insert SLS                |
| 8 Basic Kit / Osteotomy Kit                      | 31 Insert MDI 2.5                  | 54 Insert SLE1 / Insert SLE2              |
| 9 Osteoplasty Kit / Retro Surgical Kit           | 32 Insert OT1 / Insert OT1A        | 55 Insert PR1 / Insert PR2                |
| 10 Sinus Lift Lateral Kit / Piezo Lift Kit       | 33 Insert OT2 / Insert OT3         | 56 Insert EN1 / Insert EN2                |
| 11 Piezo Lift Kit / Mini implant prep Kit        | 34 Insert OT4 / Insert OT5         | 57 Insert EN3 / Insert EN4                |
| 12 Implant Prep Kit Starter / Implant Prep Kit   | 35 Insert OT5A / OT5B              | 58 Insert ENSR / Insert ENSL              |
| 13 Implant Prep Kit Pro                          | 36 Insert OT6 / Insert OT7         | 59 Insert EN6R / Insert EN6L              |
| 14 Extraction Kit / Explantation Kit             | 37 Insert OT7A / Insert OT7-20     | 60 Insert EX1 / Insert EX2                |
| 15 Periodontal Surgery Kit / Resective Perio Kit | 38 Insert OT7S-4 / Insert OT7S-3 / | 61 Insert EX3                             |
| 16 Bone Expander Kits                            | 39 Insert OT8R / Insert OT8L       | 62 Insert EXP3-R / Insert EXP3-L          |
| 17 Sinus Physiolift® II Kits                     | 40 Insert OT9 / Insert OT11        | 63 Insert EXP4-R / Insert EXP4-L          |
| 18 Insert IMIS / PINS IM1, IM1S, 2-2.4, 2-3      | 41 Insert OT12 / Insert OT12S      | 64 Insert PS1 / Insert PP1                |
| 19 Insert IM1 AL / PINS IM1 AL, 2-2.4 AL, 2-3 AL | 42 Insert OT13 / Insert OT14       | 65 Insert PS2 / Insert PS6                |
| 20 Insert IM2A / Insert IM2P                     | 43 Insert SLO-H                    | 66 Insert PP10 / Insert PP11              |
| 21 Insert IM2A-15 / Insert IM2P-15               | 44 Insert PL1 / Insert PL2         | 67 Insert PP12                            |
| 22 Insert IM2.8A / Insert IM2.8P                 | 45 Insert PL3 / Insert OP1         | 68 Tipholder ICP, tip IC1                 |
| 23 Insert IM3A / Insert IM3P                     | 46 Insert OP2 / Insert OP3         | 69 Crown prep tips                        |
| 24 Insert IM3A-15 / Insert IM3P-15               | 47 Insert OP3A / Insert OP4        | 70 Bone Expanders                         |
| 25 Insert IM3.4A / Insert IM3.4P                 | 48 Insert OP5 / Insert OP5A        | 72 Sinus Physiolift® II                   |
| 26 Insert IM4A / Insert IM4P                     | 49 Insert OP6 / Insert OP6A        | 74 Enzymec                                |
| 27 Insert P2-3 / Insert P3-4                     | 50 Insert OP7 / Insert OP8         | 75 PIEZOSURGERY® insert box / Insert Tray |
| 28 Insert IM1 SP / Insert IM2 SP                 | 51 Insert OP9 / Insert SLC         | 76 Reference Numbers                      |

## ➡ INSERT QUALITY



➡ PRECISION  
A CNC controlled 5-dimensional sharpening machine cuts with an accuracy of up to  $0.1 \mu\text{m}$ . The whole cutting process for a single insert lasts up to 12 min.



➡ MATERIAL  
mectron surgical inserts are built with medical grade, high quality, stainless steel.

## ➡ HIGH END INSERTS FOR PROFESSIONALS

Each mectron surgical 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 visually inspected by Quality Control to guarantee optimal performance.

# INDICATIONS

→ SINUS LIFT TECHNIQUE CRESTAL APPROACH		→ SINUS LIFT TECHNIQUE LATERAL APPROACH		→ IMPLANT SITE PREPARATION		→ MINI DENTAL IMPLANT SITE PREPARATION		→ RIDGE EXPANSION		→ PERIOSTEUM PREPARATION		→ EXTRactions	
→ PIEZO-LIFT		→ SINUS PHYSIOLIFT		→ STANDARD		→ STANDARD		→ OPTIONAL		→ STANDARD		→ STANDARD	
PL1		IM1 SP	SLC	IM1S	IM1 AL	IM1S	MDI 1.9	OT7	PR1	EX1			
PL2		IM2 SP	SLO-H	IM2A	IM2A-15			OT4	PR2	EX2			
PL3		P2-3 SP	SLS	IM3A	IM2.8A	MDI 2.2		OP5		EX3			
		OT9	SLE1	IM4A	IM3A-15	MDI 2.5		→ OPTIONAL		PS2			
		CS1	SLE2	IM2P	IM3.4A			OT2					
		CS2	OP3	IM3P	IM2P-15			OT7A					
		PIN IM1	OT1	IM4P	IM2.8P			OT7S-4					
		PIN 2-2.4	EL1	OT4	IM3P-15			OT7S-3					
		PROBE SP	→ OPTIONAL	P2-3	IM3.4P			OT7-20					
				OT1A	P3-4			OT12					
				OT5				OT12S					
				OT5A				BONE EXPANDERS					
				OT5B									
				EL2									
				EL3									



→ EXPLANTATION		→ 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		→ STANDARD		→ STANDARD	
EXP3-R		OT7		OP3		OP7		OT1		OT7S-4		OP5A	PS1	DB2	
EXP3-L		OP5		OP1		PS2		OT5		OT7S-3		OP8	PS6	CROWN PREP TIPS	
EXP4-R		OT8L		→ OPTIONAL		EN1				→ OPTIONAL		OP9	PP10	TA12D90° Ø 1.2 mm	
EXP4-L		OT8R		OP2		EN2		OT7		OT7A		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	OP6A	TA16D60*	
		OT12				EN6L									
		OT12S				OP3									



► BASIC KIT



► EQUIPPED WITH:  
OP1, OP3, OT1, OT4, OT7, insert tray

► OSTEOTOMY KIT



► EQUIPPED WITH:  
OT7, OT7S-4, OT7S-3, OT8R, OT8L, insert tray

► OSTEOPLASTY KIT



► EQUIPPED WITH:  
OP1, OP3, OP3A, OT4, OP5, insert tray

► RETRO SURGICAL KIT



► EQUIPPED WITH:  
OP7, EN1, EN3, EN5R, EN5L, insert tray

→ SINUS LIFT LATERAL KIT\* → PIEZO LIFT KIT



→ EQUIPPED WITH:  
SLC, SLO-H, SLS, SLE1, SLE2, insert tray



→ EQUIPPED WITH:  
PL1, PL2, PL3, insert tray

→ SINUS LIFT KIT



→ EQUIPPED WITH:  
OT1, OT5, EL1, EL2, EL3, insert tray

→ MINI IMPLANT PREP KIT

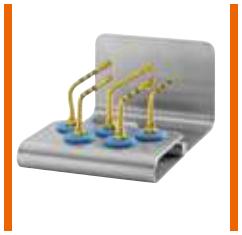


→ EQUIPPED WITH:  
IM1S, MDI 1.9, MDI 2.2, MDI 2.5, insert tray

↗ IMPLANT PREP KIT STARTER

↗ IMPLANT PREP KIT

↗ IMPLANT PREP KIT PRO



↗ EQUIPPED WITH:  
IM1S, IM2P, IM3P, OT4, P2-3, insert tray



↗ EQUIPPED WITH:  
IM1S, IM2A, IM2P, IM3A, IM3P, IM2P, OT4, insert tray



↗ EQUIPPED WITH:  
IM1S, IM2A, IM2P, IM3A, IM3P, OT4, IM4A, IM4P,  
P2-3, P3-4, 3 pins IM1S, 3 pins 2-2.4, insert tray

EXTRACTION KIT



EQUIPPED WITH:  
EX1, EX2, EX3, PS2, PS6, insert tray

EXPLANTATION KIT



EQUIPPED WITH:  
EXP3-R, EXP3-L, EXP4-L, EXP4-R, insert tray

PERIODONTAL SURGERY KIT



EQUIPPED WITH:  
PP1, PS2, PP10, PP11, PP12, insert tray

RESECTIVE PERIO KIT\*



EQUIPPED WITH:  
OT13, OT14, OP5A, OP8, OP9, insert tray

## → BONE EXPANDER KITS

### BONE EXPANDER KIT BASIC

→ EQUIPPED WITH:

- 1 expander of each type
- 1 ADM8
- 1 bone expander tray



→ 2.5 x 11.5 → 3.5 x 11.5 → 4.5 x 11.5 → 2.5 x 15 → 3.5 x 15 → 4.5 x 15 → ADM8 → ADR16 → ADR7 → RATCHET

16

### BONE EXPANDER KIT PRO

→ EQUIPPED WITH:

- 1 expander of each type
- 1 ADM8, 1 ADR16, 1 ADR7
- 1 ratchet
- 1 bone expander tray



→ 2.5 x 11.5 → 3.5 x 11.5 → 4.5 x 11.5 → 2.5 x 15 → 3.5 x 15 → 4.5 x 15 → ADM8 → ADR16 → ADR7 → RATCHET

## → SINUS PHYSIOLIFT® II KITS

### SINUS PHYSIOLIFT® II KIT BASIC

→ EQUIPPED WITH:

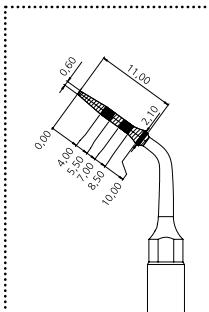
- Crestal sinus elevators 2 x CS1 and 2 x CS2
- Pressure control system: Physiolifter
- Ball shaped probe PROBE SP
- Micromotor and ratchet adapters: ADM10, ADR10
- Ratchet
- 3 silicone tubes with tube-tube connector
- 2 complete sealed tubes
- 3 sterile disposable syringes
- 2 insert trays
- Clinical Protocol and DVD

→ CS1 → CS2 → PHYSIOLIFTER → ADR10 → ADM10 → RATCHET → PLUG → PROBE SP → IM1 SP → IM2 SP → P2-3 SP → OT9



## IMS1

initial implant site preparation insert



diamond grain size 30 µm



### CUTTING ACTION

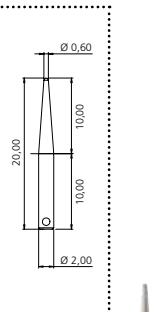
bone perforation

### CLINICAL APPLICATION

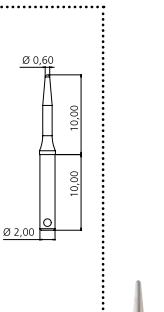
initial pilot osteotomy

## PINS

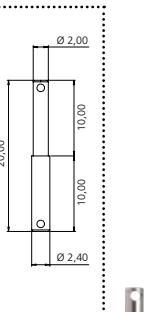
alignment pins



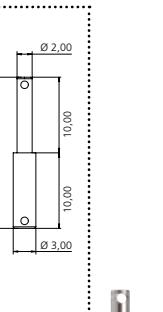
Ø 2,00



Ø 2,00



Ø 2,40



Ø 3,00

### CUTTING ACTION

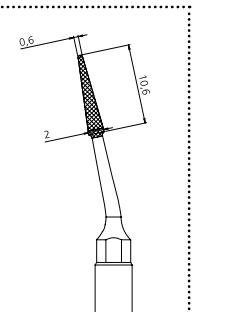
alignment pins, dedicated to  
IM1S, IM2 (Ø 2), IM3 (Ø 3), OT4 (Ø 2.4), IM1 SP

### CLINICAL APPLICATION

to check preparation axis alignment

## IM1 AL

insert for initial osteotomy in extraction sites



Ø 2,00



### CUTTING ACTION

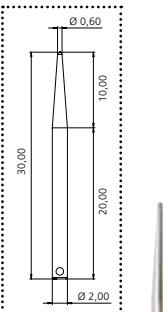
bone perforation

### CLINICAL APPLICATION

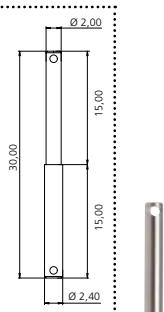
initial pilot osteotomy in extraction sites

## ALVEOLAR PINS

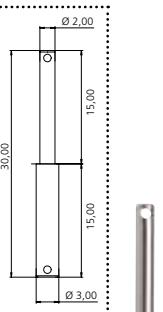
alignment pins



Ø 2,00



Ø 2,40



Ø 3,00

### CUTTING ACTION

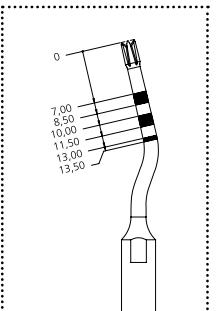
30 mm alignment pins, for extraction sites dedicated to  
IM1 AL, IM2A (Ø 2), OT4 (Ø 2.4), IM3A (Ø 3)

### CLINICAL APPLICATION

to check preparation axis alignment

## IM2A

2 mm Ø implant site preparation insert



► CUTTING ACTION

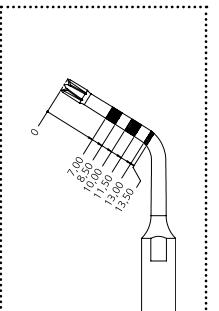
bone perforation

► CLINICAL APPLICATION

pilot osteotomy in anterior region

## IM2P

2 mm Ø implant site preparation insert



► CUTTING ACTION

bone perforation

► CLINICAL APPLICATION

pilot osteotomy in posterior region

## IM2A-15

2 mm Ø implant site preparation insert



► CUTTING ACTION

bone perforation

► CLINICAL APPLICATION

pilot osteotomy in anterior region

## IM2P-15

2 mm Ø implant site preparation insert



► CUTTING ACTION

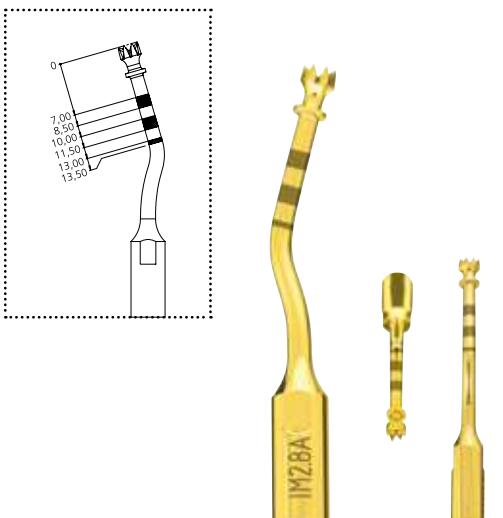
bone perforation

► CLINICAL APPLICATION

pilot osteotomy in posterior region

## ⇨ IM2.8A

2.8 mm Ø implant site preparation insert

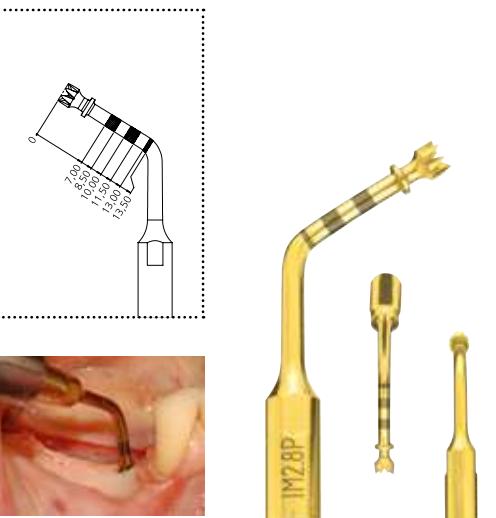


⇨ CUTTING ACTION  
bone perforation

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

## ⇨ IM2.8P

2.8 mm Ø implant site preparation insert

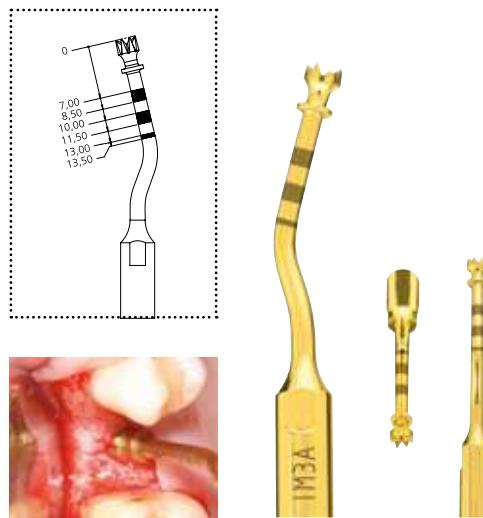


⇨ CUTTING ACTION  
bone perforation

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

## ⇨ IM3A

3 mm Ø implant site preparation insert

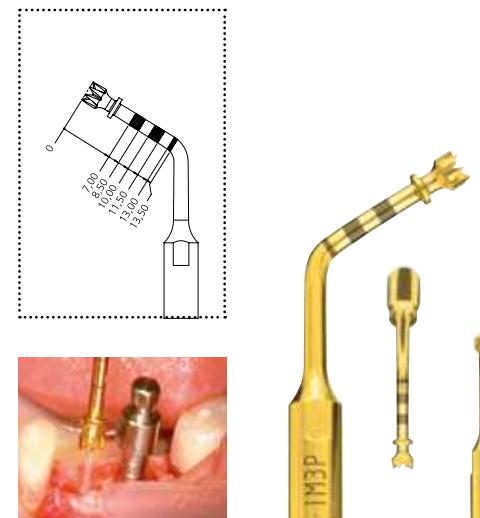


⇨ CUTTING ACTION  
bone perforation

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

## ⇨ IM3P

3 mm Ø implant site preparation insert

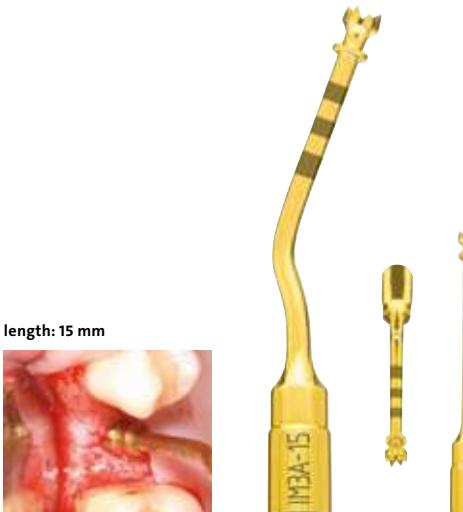


⇨ CUTTING ACTION  
bone perforation

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

## ⇨ 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

## ⇨ IM3P-15

3 mm Ø implant site preparation insert

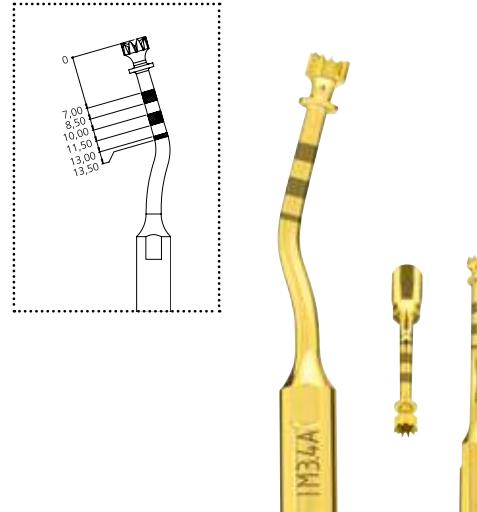


⇨ CUTTING ACTION  
bone perforation

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

## ⇨ IM3.4A

3.4 mm Ø implant site preparation insert

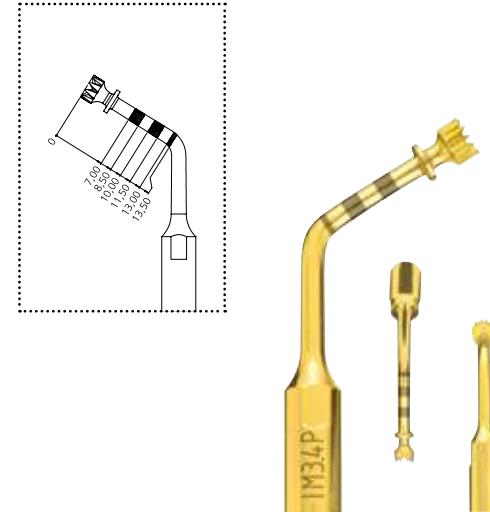


⇨ CUTTING ACTION  
bone perforation

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

## ⇨ IM3.4P

3.4 mm Ø implant site preparation insert

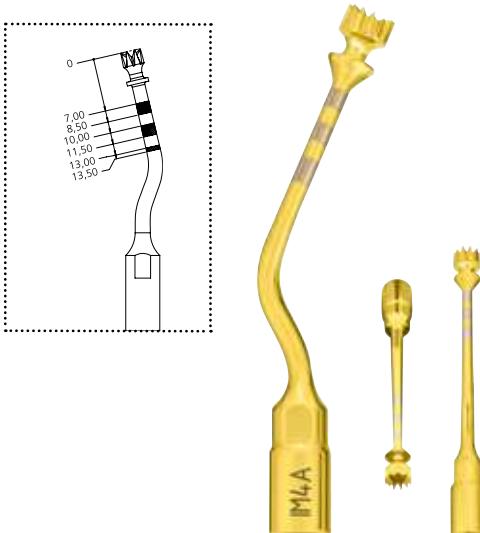


⇨ CUTTING ACTION  
bone perforation

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

## IM4A

4 mm Ø implant site preparation insert



► CUTTING ACTION

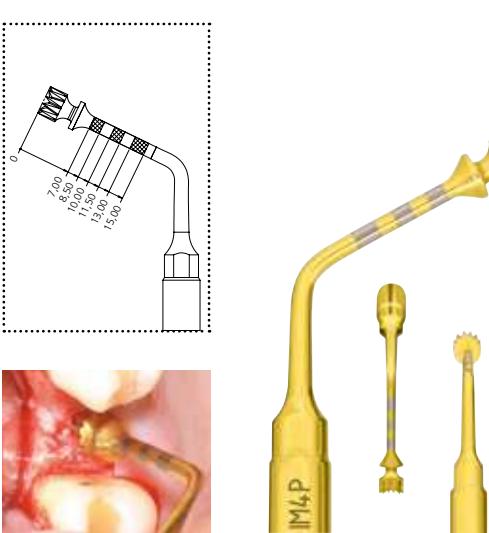
bone perforation

► CLINICAL APPLICATION

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

## IM4P

4 mm Ø implant site preparation insert



► CUTTING ACTION

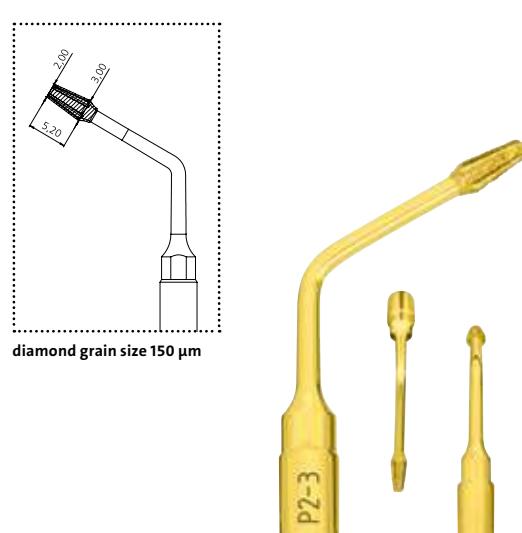
bone perforation

► CLINICAL APPLICATION

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

## P2-3

pilot implant site preparation insert



► CUTTING ACTION

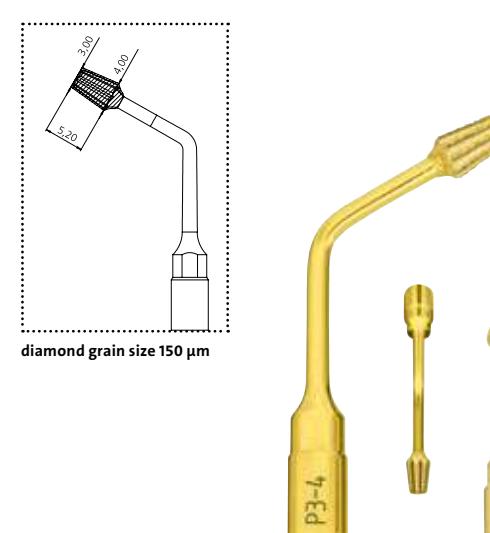
micrometric osteotomy

► CLINICAL APPLICATION

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

## P3-4

pilot implant site preparation insert



► CUTTING ACTION

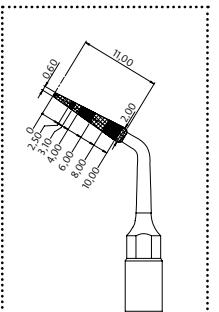
micrometric osteotomy

► CLINICAL APPLICATION

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

## IM1 SP

initial implant site preparation insert



► CUTTING ACTION

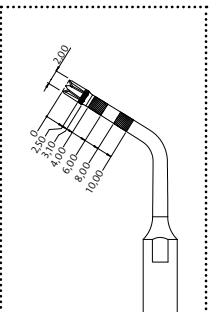
bone perforation

► CLINICAL APPLICATION

initial osteotomy in Sinus Physiolift® technique

## IM2 SP

implant site preparation insert



► CUTTING ACTION

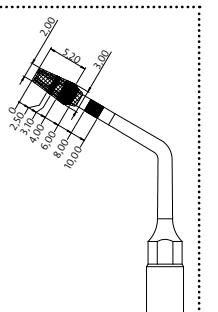
bone perforation

► CLINICAL APPLICATION

osteotomy in Sinus Physiolift® technique

## P2-3 SP

implant site preparation insert



► CUTTING ACTION

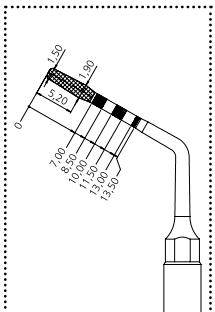
bone perforation

► CLINICAL APPLICATION

removal of sinus basal cortex in Sinus Physiolift® procedure

## MDI 1.9

mini dental implant insert



► CUTTING ACTION

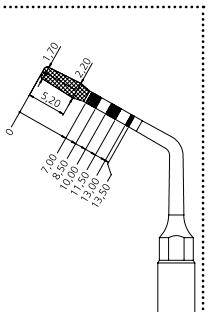
bone perforation

► CLINICAL APPLICATION

osteotomy technique for mini implants site preparation

## MDI 2.2

mini dental implant insert



► CUTTING ACTION

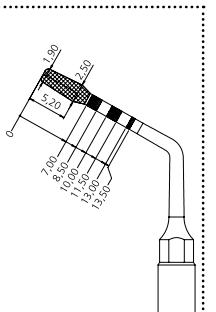
bone perforation

► CLINICAL APPLICATION

osteotomy technique for mini implants site preparation

## MDI 2.5

mini dental implant insert



► CUTTING ACTION

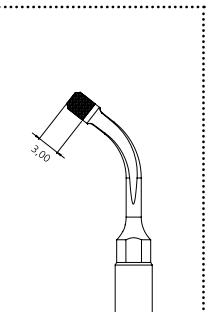
bone perforation

► CLINICAL APPLICATION

osteotomy technique for mini implants site preparation

→ OT1

sinus bony window osteotomy insert

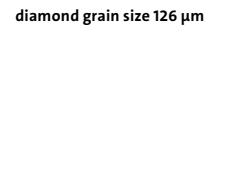
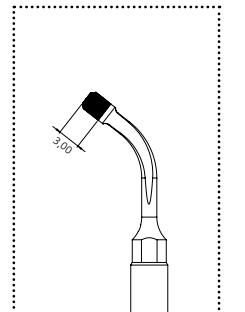


→ CUTTING ACTION  
micrometric osteotomy (about 1 mm)

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

→ 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)

→ OT2

basic scalpel



→ CUTTING ACTION  
osteotomy

→ CLINICAL APPLICATION  
osteotome of great precision in anatomically thin structures (for example, ridge expansion, interdental corticotomies, non traumatic nasal spine)

→ OT3

swallow-tailed osteotome

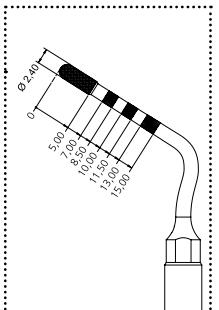


→ CUTTING ACTION  
osteotomy

→ CLINICAL APPLICATION  
mandibular corticotomy, block harvesting, fragmenta osteotomy

## → OT4

differential implant site preparation insert



→ 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

## → OT5

osteoplasty and osteotomy insert

Ø 1.7 – diamond grain size 91 µm



→ 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

## → OT5A

osteoplasty and osteotomy insert

Ø 1.9 – diamond grain size 91 µm



→ 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

## → OT5B

osteoplasty and osteotomy insert

Ø 1.7 – diamond grain size 126 µm



→ 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

→ OT6

bony saw 0.75 mm

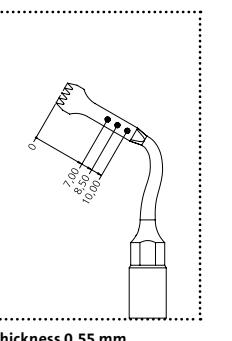


→ CUTTING ACTION  
high effectiveness osteotomy

→ CLINICAL APPLICATION  
osteotomy of large bone sections during maxillofacial surgery

→ OT7

principal micro-saw 0.55 mm



thickness 0.55 mm

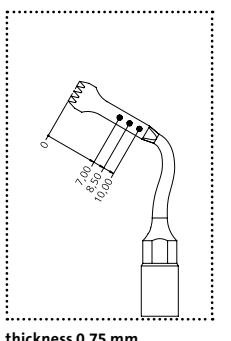


→ CUTTING ACTION  
high effectiveness osteotomy

→ CLINICAL APPLICATION  
the osteotomy technique in maxilla and mandible:  
ridge expansion, corticotomy technique, bone block grafting

→ OT7A

principal micro-saw 0.55 mm



thickness 0.75 mm

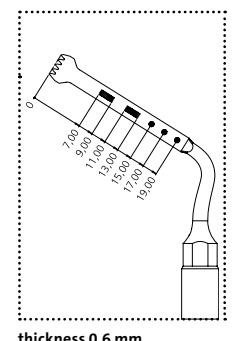


→ CUTTING ACTION  
high effectiveness osteotomy

→ CLINICAL APPLICATION  
the osteotomy technique in maxilla and mandible:  
ridge expansion, corticotomy technique, bone block grafting

→ OT7-20

micro-saw, length 20 mm



thickness 0.6 mm

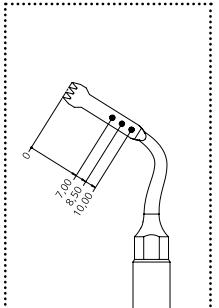


→ CUTTING ACTION  
micrometric osteotomy or osteoplasty

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

## ↗ OT7S-4

special micro-saw 0.35 mm (4 teeth)



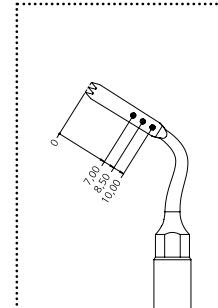
► CUTTING ACTION  
high effectiveness and precision osteotomy

► CLINICAL APPLICATION

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

## ↗ OT7S-3

special micro-saw 0.35 mm (3 teeth)



► CUTTING ACTION  
high precision osteotomy

► CLINICAL APPLICATION

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

## ↗ OT8R

angled micro-saw 0.6 mm



right

## ↗ OT8L

angled micro-saw 0.6 mm



left

► CUTTING ACTION  
horizontal osteotomy

► CLINICAL APPLICATION

all the osteotomy technique in maxilla and mandible bone block grafting

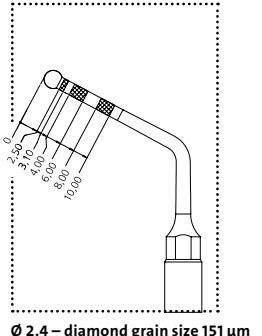
► CUTTING ACTION  
horizontal osteotomy

► CLINICAL APPLICATION

all the osteotomy technique in maxilla and mandible bone block grafting

## → OT9

osteoplasty and osteotomy insert



### → CUTTING ACTION

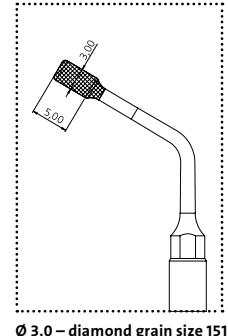
micrometric osteotomy or osteoplasty

### → CLINICAL APPLICATION

to finalize the osteotomy or osteoplasty near delicate anatomic structures; removal of the sinus basal cortex in Sinus Physiolift® procedure; insert with double irrigation to avoid overheating

## → OT11

osteoplasty and osteotomy insert



### → CUTTING ACTION

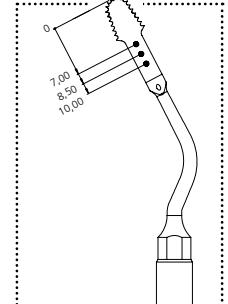
micrometric osteotomy or osteoplasty

### → CLINICAL APPLICATION

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

## → OT12

circular micro-saw 0.35 mm



### → CUTTING ACTION

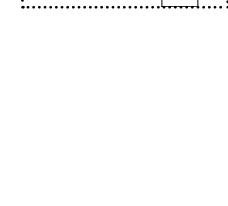
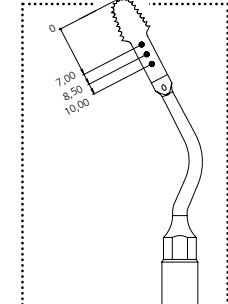
high effectiveness and precision osteotomy

### → CLINICAL APPLICATION

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

## → OT12S

circular micro-saw 0.25 mm



### → CUTTING ACTION

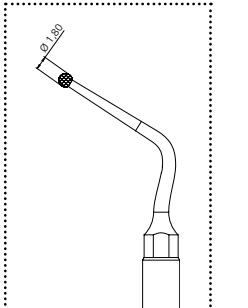
high effectiveness and precision osteotomy

### → CLINICAL APPLICATION

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

## OT13

osteoplasty and osteotomy insert

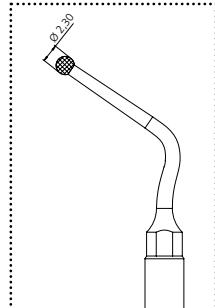


► CUTTING ACTION  
micrometric osteotomy or osteoplasty

► CLINICAL APPLICATION  
non-traumatic bone defect preparation in resective periodontal surgery

## OT14

osteoplasty and osteotomy insert

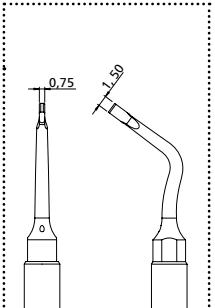


► CUTTING ACTION  
micrometric osteotomy or osteoplasty

► CLINICAL APPLICATION  
non-traumatic bone defect preparation in resective periodontal surgery

## SLO-H

sinus bony window osteotomy insert



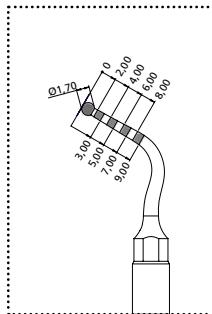
► CUTTING ACTION  
high precision osteotomy

► CLINICAL APPLICATION  
to finalize the bone window osteotomy  
to gain access to the sinus membrane



## PL1

osteoplasty and osteotomy insert



PL1



► CUTTING ACTION

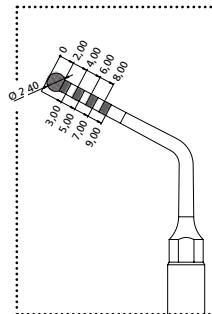
micrometric osteotomy or osteoplasty

► CLINICAL APPLICATION

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

## PL2

osteoplasty and osteotomy insert



PL2



► CUTTING ACTION

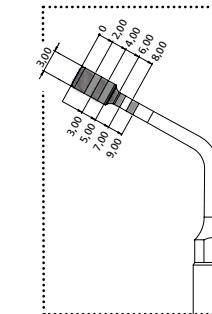
micrometric osteotomy or osteoplasty

► CLINICAL APPLICATION

sinus floor consumption and initial membrane elevation  
during crestal sinus lift procedure (PIEZO-LIFT)

## PL3

osteoplasty and osteotomy insert



PL3



► 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)

## OP1

scraper



OP1



► CUTTING ACTION

high efficiency bone osteoplasty

► CLINICAL APPLICATION

bone remodelling and harvesting of bone chips

→ OP2

back action scalpel



→ CUTTING ACTION  
osteoplasty

→ CLINICAL APPLICATION  
bone osteotomy, remodelling and  
removal of inflammatory tissue

→ OP3

principal osteoplasty insert



→ CUTTING ACTION  
universal osteoplasty

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

→ OP3A

principal osteoplasty insert

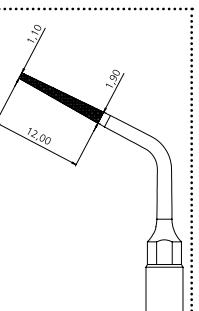


→ CUTTING ACTION  
universal osteoplasty

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

→ OP4

crown lengthening file



→ CUTTING ACTION

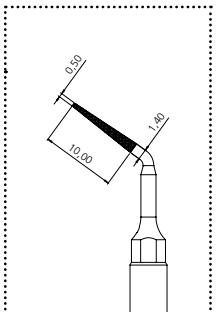
micro-osteoplasty

→ CLINICAL APPLICATION  
interproximal osteoplasty and root planing



## OP5

### root debridement insert

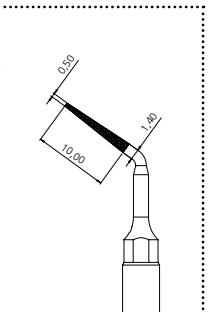


► CUTTING ACTION  
micro-osteoplasty

► CLINICAL APPLICATION  
root debridement and root planing during  
resective and regenerative periodontal surgery

## OP5A

### root debridement insert

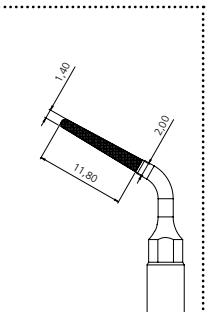


► CUTTING ACTION  
micro-osteoplasty

► CLINICAL APPLICATION  
root debridement and root planing during  
resective and regenerative periodontal surgery

## OP6

### micro-root-preparation

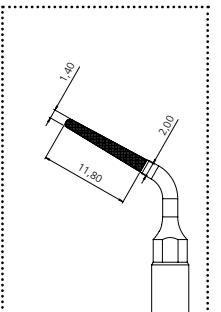


► CUTTING ACTION  
micro-root preparation

► CLINICAL APPLICATION  
root preparation in periodontal surgery

## OP6A

### micro-root-preparation



► CUTTING ACTION  
micro-root preparation

► CLINICAL APPLICATION  
root preparation in periodontal surgery

## OP7

endodontic osteoplasty insert

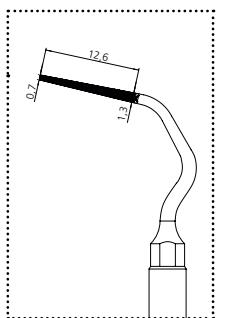


► CUTTING ACTION  
micro-osteoplasty

► CLINICAL APPLICATION  
peri-apical maxillary bone osteotomy access, inflammatory tissue removal

## OP8\*

crown lengthening file / perio file

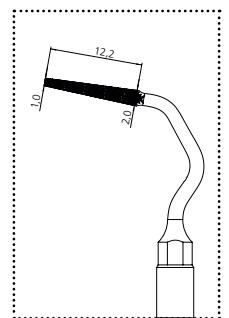


► CUTTING ACTION  
micro-osteoplasty

► CLINICAL APPLICATION  
Interproximal osteoplasty without damaging adjacent root surfaces

## OP9

crown lengthening file / perio file

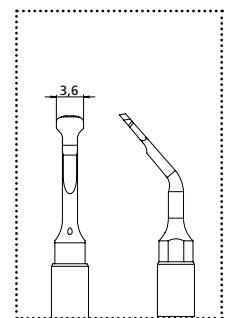


► CUTTING ACTION  
micro-root preparation

► CLINICAL APPLICATION  
Interproximal osteoplasty without damaging adjacent root surfaces

## SLC

osteoplasty insert



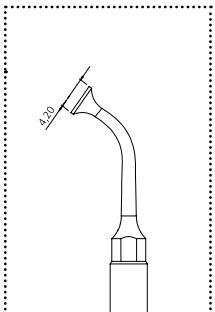
► CUTTING ACTION  
universal osteoplasty

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



## EL1

sinus membrane separator



### CUTTING ACTION

schneiderian membrane separation from bony walls

### CLINICAL APPLICATION

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

## EL2

sinus membrane separator angled at 100°



### CUTTING ACTION

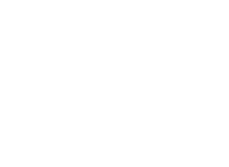
non-cutting elevator of the sinus membrane

### CLINICAL APPLICATION

separation of the sinus membrane in internal zones

## EL3

sinus membrane separator angled at 140°



### CUTTING ACTION

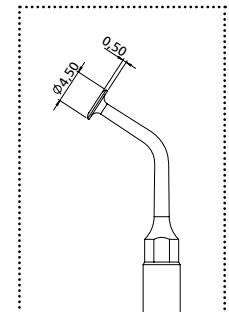
non-cutting elevator of the sinus membrane

### CLINICAL APPLICATION

separation of the sinus membrane in internal zones

## SLS

sinus membrane separator

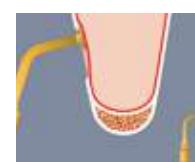


### CUTTING ACTION

sinus membrane separator

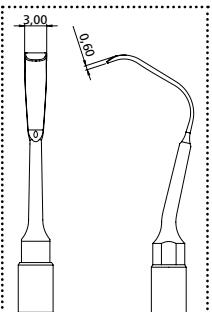
### CLINICAL APPLICATION

sinus membrane separation from the bony window margins



## → SLE1

sinus membrane elevator



→ CUTTING ACTION

elevator to cut Sharpey's fibers from the endosteum

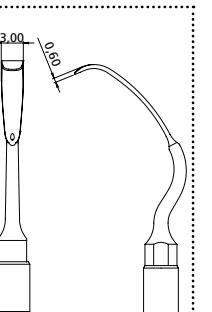
→ CLINICAL APPLICATION

sinus membrane elevation from the sinus floor



## → SLE2

sinus membrane elevator



→ CUTTING ACTION

elevator to cut Sharpey's fibers from the endosteum

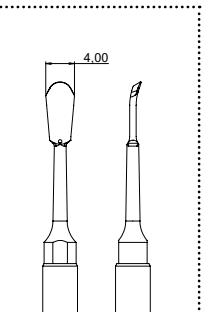
→ CLINICAL APPLICATION

sinus membrane elevation from the palatal wall



## → PR1

piezoelectric flap reflection, 4 mm width



→ CUTTING ACTION

periosteum elevator

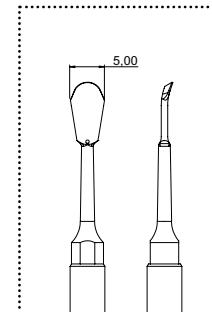
→ CLINICAL APPLICATION

subperiostal preparation



## → PR2

piezoelectric flap reflection, 5 mm width



→ CUTTING ACTION

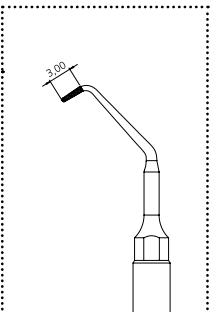
periosteum elevator

→ CLINICAL APPLICATION

subperiostal preparation

↗ EN1

diamond-coated endo apical debrider 3 mm



↗ CUTTING ACTION  
efficient canal cleaning

↗ CLINICAL APPLICATION  
apical root debridement

↗ EN2

smooth endo apical debrider 3 mm

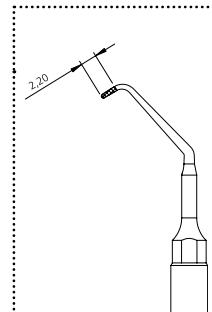


↗ CUTTING ACTION  
gentle canal cleaning

↗ CLINICAL APPLICATION  
gentle apical root debridement

↗ EN3

diamond-coated endo apical debrider 2.2 mm



↗ CUTTING ACTION  
efficient canal cleaning

↗ CLINICAL APPLICATION  
apical root debridement

↗ EN4

smooth endo apical debrider 2.2 mm

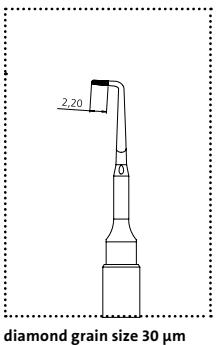


↗ CUTTING ACTION  
gentle canal cleaning

↗ CLINICAL APPLICATION  
gentle apical root debridement

↗ EN5R

right angled, diamond-coated endo apical debrider 2.2 mm

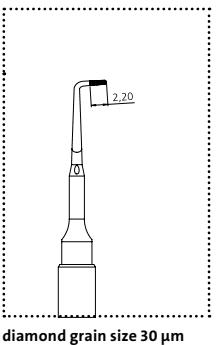


↗ CUTTING ACTION  
efficient canal cleaning

↗ CLINICAL APPLICATION  
apical root debridement

↗ EN5L

left angled, diamond-coated endo apical debrider 2.2 mm



↗ CUTTING ACTION  
efficient canal cleaning

↗ CLINICAL APPLICATION  
apical root debridement

↗ EN6R

right angled, smooth endo apical debrider 2.2 mm



↗ CUTTING ACTION  
efficient canal cleaning

↗ CLINICAL APPLICATION  
apical root debridement

↗ EN6L

left angled, smooth endo apical debrider 2.2 mm



↗ CUTTING ACTION  
efficient canal cleaning

↗ CLINICAL APPLICATION  
apical root debridement

→ EX1

principal extraction scalpel

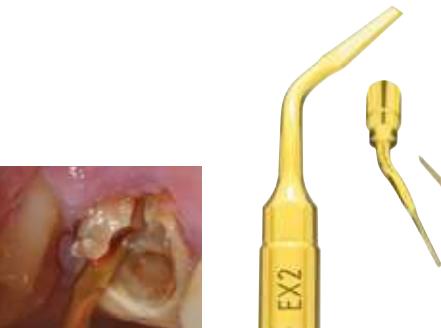


→ CUTTING ACTION  
delicate osteotomy

→ CLINICAL APPLICATION  
to cut off the ankylosis, root fraction techniques

→ EX2

angled extraction scalpel



→ CUTTING ACTION  
micrometric osteotomy

→ CLINICAL APPLICATION  
analogue to EX1 in the posterior regions

→ EX3

angled extraction scalpel

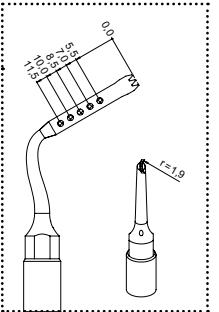


→ CUTTING ACTION  
micrometric osteotomy

→ CLINICAL APPLICATION  
analogue to EX1 in the posterior regions

## EXP3-R

explantations

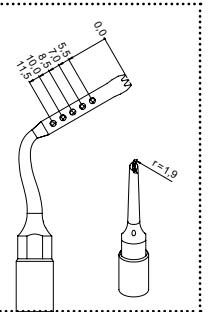


► CUTTING ACTION  
peri-implant osteotomy

► CLINICAL APPLICATION  
explantations

## EXP3-L

explantations

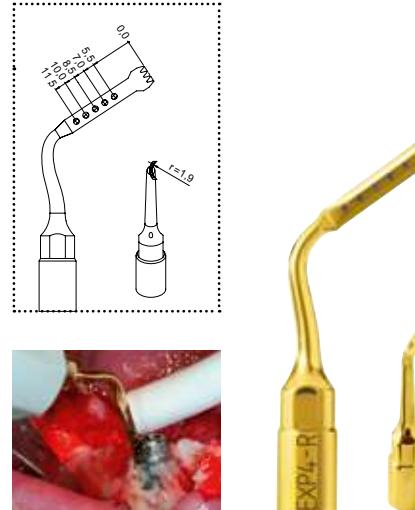
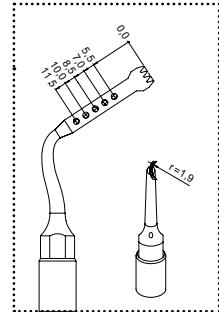


► CUTTING ACTION  
peri-implant osteotomy

► CLINICAL APPLICATION  
explantations

## EXP4-R

explantations

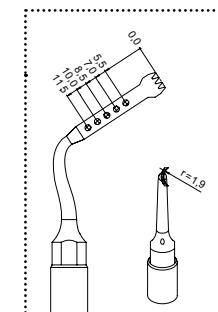


► CUTTING ACTION  
peri-implant osteotomy

► CLINICAL APPLICATION  
explantations

## EXP4-L

explantations



► CUTTING ACTION  
peri-implant osteotomy

► CLINICAL APPLICATION  
explantations

↗ PS1

periodontal curette



↗ CUTTING ACTION  
gentle scaling

↗ CLINICAL APPLICATION  
root scaling

↗ PP1

principal root planing insert



↗ CUTTING ACTION  
root surface micro-smoothening

↗ CLINICAL APPLICATION  
root planing

↗ PS2

principal periodontal scaler



↗ CUTTING ACTION  
powerful scaling

↗ CLINICAL APPLICATION  
scaling and inflammatory tissue removal fractured root apex extraction

↗ PS6

angled curette



↗ CUTTING ACTION  
gentle scaling

↗ CLINICAL APPLICATION  
root scaling

→ PP10

gentle perio anatomic insert



- CUTTING ACTION  
root surface micro-smoothening
- CLINICAL APPLICATION  
gentle subgingival concrements removal



→ PP11

left and right angled, gentle perio anatomic insert



- CUTTING ACTION  
root surface micro-smoothening
- CLINICAL APPLICATION  
gentle subgingival concrements removal



→ PP12

left and right angled, gentle perio anatomic insert

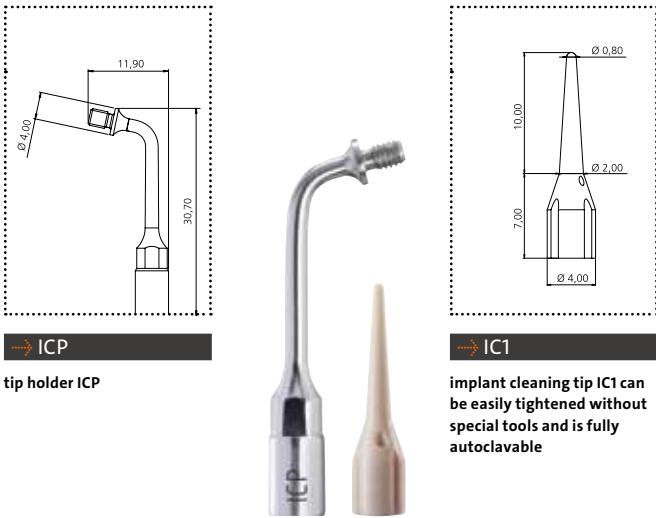


- CUTTING ACTION  
root surface micro-smoothening
- CLINICAL APPLICATION  
gentle subgingival concrements removal



## ↗ ICP + IC1

### implant cleaning



#### ↗ CUTTING ACTION

gentle and safe cleaning action of the implant surface

#### ↗ CLINICAL APPLICATION

efficient and soft cleaning of implants and restorations

## ↗ CROWN PREP TIPS

### preparation and finishing of subgingival margins



#### ↗ CUTTING ACTION

micro-smoothening

#### ↗ CLINICAL APPLICATION

ultrasonic finishing of the cervical margin

#### ↗ CHAMFER TECHNIQUE

##### → LENGTH 10 MM → DIAMOND COATING

diameter	D120	D90	D60
1.2 mm		TA12D90	TA12D60
1.4 mm	TA14D120	TA14D90	TA14D60
1.6 mm	TA16D120	TA16D90	TA16D60

#### ↗ TA14D60

crown prep tip

# ↗ BONE EXPANDERS

## Dr. Sentineri's technique

### ↗ DESCRIPTION

Only the initial portion is threaded. When the smooth coronal portion comes into contact with the bone, instead of penetrating into it, it displaces it, facilitating lateral expansion. Compatible with implantology micromotor or ratchet.

### ↗ CLINICAL APPLICATION

- Technique for expanding the atrophic alveolar ridge
- Lateral bone condensation technique
- Alternative to the maxillary sinus elevation technique



70

### ↗ AVAILABLE EXPANDERS

2.5 x 11.5



3.5 x 11.5



4.5 x 11.5



2.5 x 15



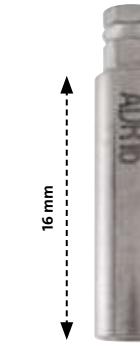
3.5 x 15



4.5 x 15  
(Ø x length, in mm)



Long adapter for  
ratchet



Short  
adapter for  
ratchet



Adapter for  
micromotor



71

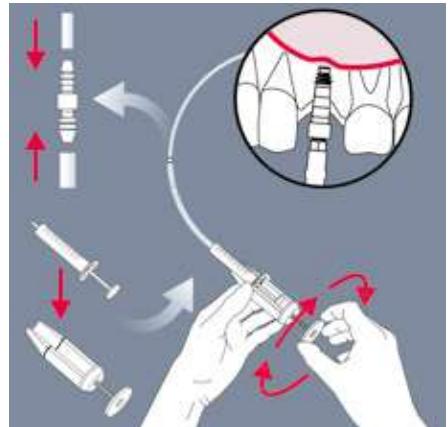
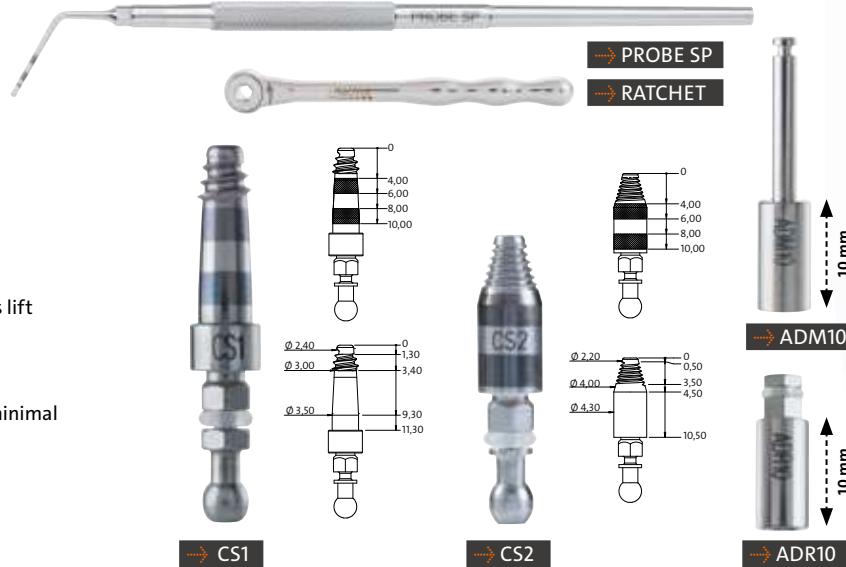
# SINUS PHYSIOLIFT® II

## ► DESCRIPTION

A minimally invasive technique of maxillary sinus elevation by the crestal approach using screw elevators and hydrodynamic pressure.

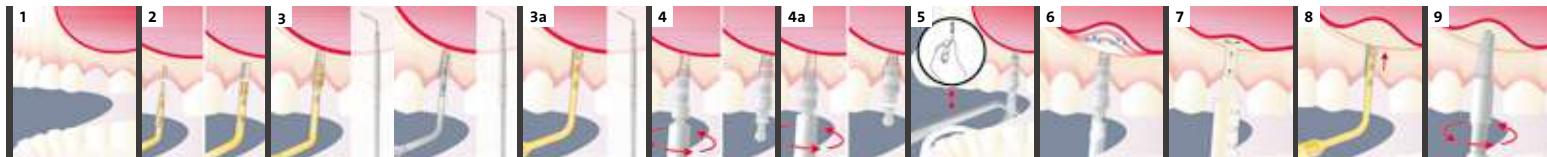
## ► CLINICAL APPLICATION

- Elevation of the sinus membrane with micrometric precision by means of hydrodynamic pressure
- Watertight sinus elevators CS1 or CS2 for hydrodynamic sinus lift
- Atraumatic technique not requiring the use of hammer and osteotome
- Implant site preparation using PIEZOSURGERY® – the new insert P2-3 SP allows to remove the sinus basal cortex with minimal risk of penetrating into sinus cavity due to its conical shape
- Multiple implant placement can be performed
- A flapless procedure can be performed in some cases



After preparation of the site with PIEZOSURGERY®, the CS1 or CS2 elevator is introduced, and the tube connected to a syringe containing 2 ml of physiological saline solution is then inserted in the CS1 or CS2. With the SINUS PHYSIOLIFT® II protocol, it is possible to elevate the Schneiderian membrane safely, controlling the pressure of the liquid by means of the attached Physiolifter device.

## ► SINGLE IMPLANT SINUS LIFT



## ► MULTIPLE IMPLANT SINUS LIFT



SINUS PHYSIOLIFT®

## ENZYMEC

### enzymatic detergent

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



## PIEZOSURGERY® INSERT BOX ↗ INSERT TRAY



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

- stainless steel tray with depth markings
- for sterilization and storage

# REFERENCE NUMBERS

→ ITEM/REFERENCE NUMBER	→ ITEM/REFERENCE NUMBER	→ ITEM/REFERENCE NUMBER			
basic kit	01520006	PIN 2-2.4 AL	03740005	ADR16	03790003
osteotomy kit	01520010	PIN 2-3 AL	03740006	ratchet	02270005
osteoplasty kit	01520014	insert IM2A	03510001	crestal sinus elevator CS1	03920001
retro surgical kit	01520005	insert IM2P	03510002	crestal sinus elevator CS2	03920002
sinus lift lateral kit	01520023	insert IM2A-15	03510015	insert IM1 SP	03510011
piezo lift kit	01520024	insert IM2P-15	03510016	insert IM2 SP	03510022
sinus lift kit	01520002	insert IM2.8A	03510025	insert P2-3 SP	03510024
mini implant prep kit	01520016	insert IM2.8P	03510026	physiolifter	02900097
implant prep kit starter	01520017	insert IM3A	03510003	PROBE SP	03920003
implant prep kit	01520018	insert IM3P	03510004	ADM10	03790004
implant prep kit pro	01520019	insert IM3A-15	03510017	ADR10	03790005
extraction kit	01520003	insert IM3P-15	03510018	silicone tube with tube-tube connector	02900098
explantation kit	01520021	insert IM3.4A	03510027	complete sealed tube	02900099
periodontal surgery kit	01520012	insert IM3.4P	03510028	insert tray physiolift® (small)	02900100
resective perio kit	01520022	insert IM4A	03510005	insert tray physiolift® (large)	02900101
bone expander basic kit	03770006	insert IM4P	03510006	insert MDI 1.9	03510012
bone expander kit pro	03770007	insert P2-3	03510020	insert MDI 2.2	03510013
sinus physiolift® II kit basic	03770011	insert P3-4	03510021	insert MDI 2.5	03510014
sinus physiolift® II kit pro	03770012	expander 2.5 x 11.5	03780001	insert OT1	03370001
insert IM1S	03510019	expander 3.5 x 11.5	03780003	insert OT1A	03370008
PIN IM1	03740002	expander 4.5 x 11.5	03780005	insert OT2	03370002
PIN IM1S	03740007	expander 2.5 x 15	03780002	insert OT3	03370003
PIN 2-2.4	03740003	expander 3.5 x 15	03780004	insert OT4	03370004
PIN 2-3	03740001	expander 4.5 x 15	03780006	insert OT5	03370005
insert IM1 AL	03510010	ADM8	03790001	insert OT5A	03370009
PIN IM1 AL	03740004	ADR7	03790002	insert OT5B	03370010

→ ITEM/REFERENCE NUMBER	→ ITEM/REFERENCE NUMBER	→ ITEM/REFERENCE NUMBER	
insert OT6	03370006	insert OP6A	03380010
insert OT7	03370007	insert OP7	03380007
insert OT7A	03370011	insert OP8	03380008
insert OT7-20	03370017	insert OP9	03380009
insert OT7S-4	03370014	insert SLC	03380013
insert OT7S-3	03370015	insert EL1	03390001
insert OT8R	03370012	insert EL2	03390002
insert OT8L	03370013	insert EL3	03390003
insert OT9	03370016	insert SLS	03390006
insert OT11	03370019	insert SLE1	03390007
insert OT12	03370020	insert SLE2	03390008
insert OT12S	03370021	insert PR1	03390004
insert OT13	03370022	insert PR2	03390005
insert OT14	03370023	insert EN1	02170001
insert SLO-H	03370025	insert EN2	02170002
insert PL1	03370026	insert EN3	02170005
insert PL2	03370027	insert EN4	02170006
insert PL3	03370028	insert ENSR	02170007
insert OP1	03380001	insert EN5L	02170008
insert OP2	03380002	insert EN6R	02170009
insert OP3	03380003	insert EN6L	02170010
insert OP3A	03380011	insert EX1	03400001
insert OP4	03380004	insert EX2	03400002
insert OP5	03380005	insert EX3	03400003
insert OP5A	03380012	insert EXP3-R	03400004
insert OP6	03380006	insert EXP3-L	03400005

mectron s.p.a.,  
via Loreto 15/A, 16042 Carasco (Ge), Italia,  
tel +39 0185 35361, fax +39 0185 351374

→ [www.mectron.com](http://www.mectron.com) or [mectron@mectron.com](mailto:mectron@mectron.com)

© Copyright mectron S.p.A., Carasco, Italy  
All rights reserved. Texts, pictures and graphics of mectron brochures are protected by copyright  
and other protection laws. Without written approval of mectron S.p.A. the contents may not be  
copied, distributed, changed or made available to third parties for commercial purposes.

