

magnetic

M A L L E T



powered by



THE MAGNETIC MALLET



Osseotouch's contribution to more conservative and atraumatic dentistry is the patented All-in-One **Magnetic Mallet** which utilizes magnetic-dynamic force for procedures ranging from simple extractions to complex implantology and oral surgery procedures.

This innovative device represents a major technical and clinical breakthrough when compared with manual instruments and older technologies currently in use. Its design is the result of teamwork with clinicians from around the world who helped develop a device that allows doctors to perform both routine and complex procedures with more control, speed and effectiveness.

The Magnetic Mallet and its accessories are manufactured according to CE Standards and are FDA cleared.

CE



HOW DOES THE MAGNETIC MALLET FACILITATE MINIMALLY INVASIVE AND CONSERVATIVE SURGERY PROCEDURES?



+ 01

DRILL-FREE AND CUT-FREE PROCEDURES

It moves, replaces, re-shapes, condenses the bone. It never removes the bone, leaving soft tissues untouched.

+ 02

SPEED

The magneto-dynamic impulse delivers much more force than manual tools. This means increased effectiveness during a procedure.

+ 03

PRECISION

The kinetic energy forces are delivered precisely to the treatment area limiting dispersion to the craniofacial mass. This level of precision provides more comfort for the patient and greater accuracy for the doctor during the procedure.

+ 04

DIRECTIONALITY

The ergonomics of the handpiece allows the doctor to use only one hand to position the instrument exactly where needed, using a precise longitudinal movement that avoids deviations due to varying bone densities.

+ 05

VISIBILITY

Because no irrigation is required and only one hand is needed for use, the doctor's view has fewer obstructions. As a result, the instrument's depth of penetration is easily monitored, more precise and controlled.

+ 06

CONTROL

In each procedure in which the Magnetic Mallet is used, the forces are delivered in a precise, constant and predictable manner, giving the doctor total control during the procedure.

+ 07

COLD

The Magnetic Mallet does not generate heat in the bone; therefore, there is no need for irrigation. The mechanical friction between the instrument and the bone are developed within microseconds, a time frame not sufficient to increase the bone temperature.



WHAT ARE THE APPLICATIONS OF THE MAGNETIC Mallet?



+

for crestal approach

SINUS LIFT

IMPLANTS PLACEMENTS

in flapless technique

OSSEODENSIFICATION

with an ample range of osteotomes from 100mm to 550mm all are laser marked to easily see the progressive increases in diameter

RIDGE SPLITTING

in mandible and maxilla

CROWN REMOVER

is facilitated with a reversed handpiece and accessories

+

EXTRACTION

including ankylosed and wisdom teeth

+

WHAT IS THE PATENTED TECHNOLOGY OF THE MAGNETIC MALLET?

1. 5,000G's of acceleration.
2. Magneto-dynamic thrust.
3. Advanced electronic controller that allows the doctor to easily control the forces with simple turn of a dial.

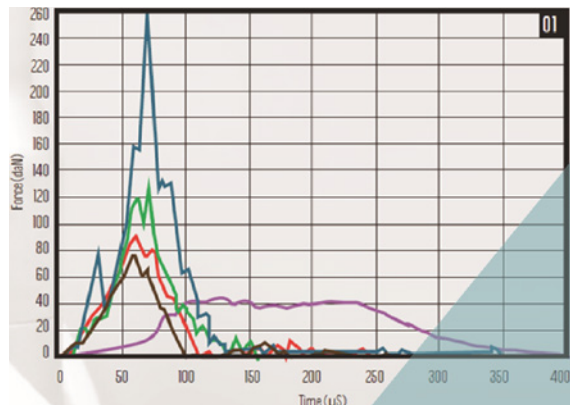
All this means that much more force is delivered just where the doctor needs it in a fraction of time as compared to using manual tools.

The graph shows the difference between the use of a hand mallet (purple line) and the Magnetic Mallet (blue line with standard handpiece at Force 4). It is 40 decaNewtons (hand mallet) versus 260 decaNewtons

(Magnetic Mallet) applied in micro-seconds. It is a force that allows the doctor to implement the procedures in a rapid, conservative and minimally invasive way.

It doesn't cut or drill, it conserves the bone and does not increase its temperature.

01: Comparison of applied forces (daN / μ S): Magnetic Mallet Level 1,2,3,4 VS ManualSurgical Hammer Tests conducted at CNR - Centro Nazionale di Ricerca - University of Milan - MIUR



CONFIGURATION

STANDARD DEVICE



UNIT

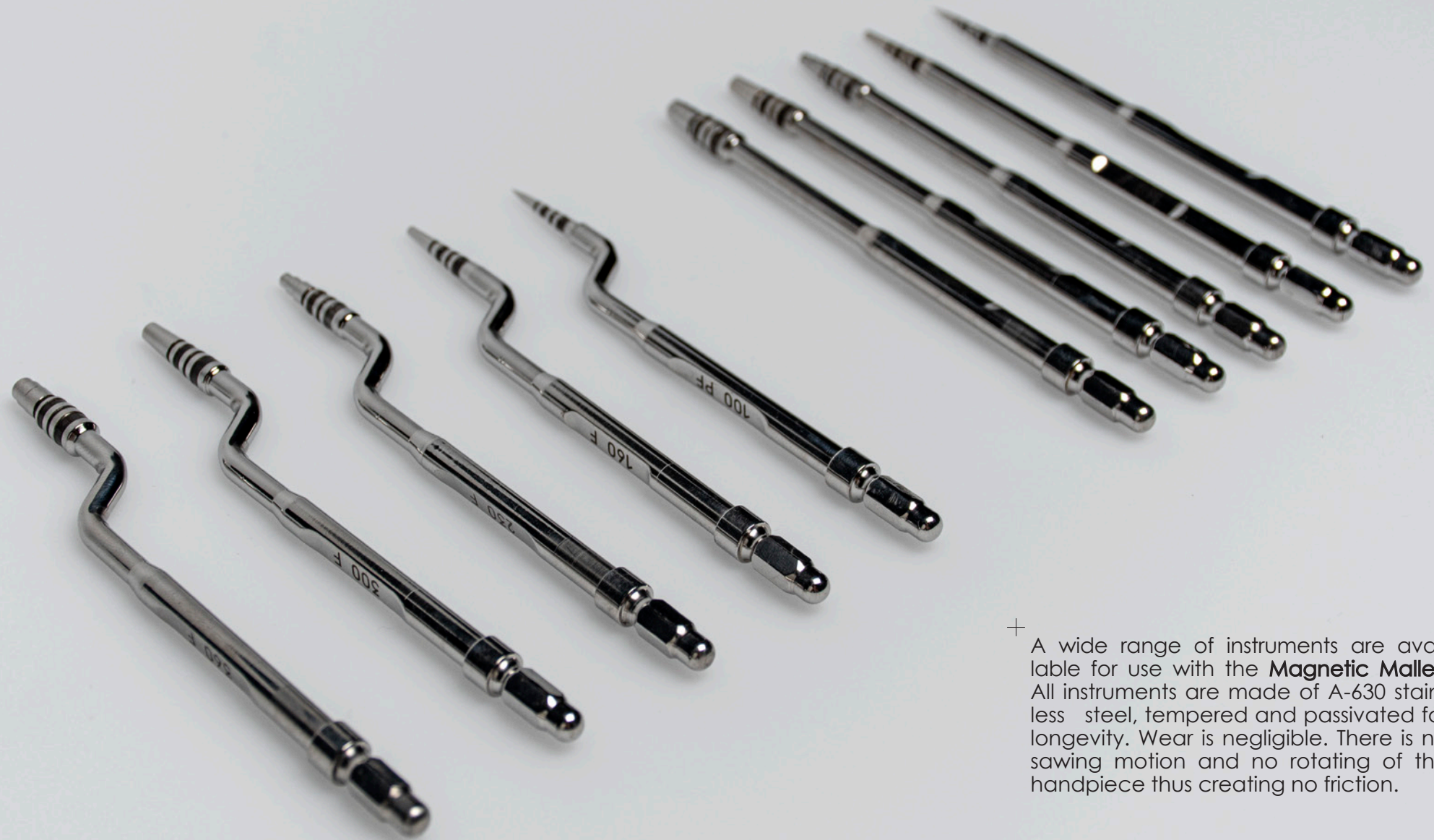
INSTRUMENT

The standard configuration includes 1 Instrument Kit of your choice.

STANDARD HANDPIECE

MONO-IMPULSE FOOT PEDAL

INSTRUMENTS



+ A wide range of instruments are available for use with the **Magnetic Mallet**. All instruments are made of A-630 stainless steel, tempered and passivated for longevity. Wear is negligible. There is no sawing motion and no rotating of the handpiece thus creating no friction.

INSTRUMENTS KITS



OSTEOTOMES
KIT



EXTRACTION
KIT

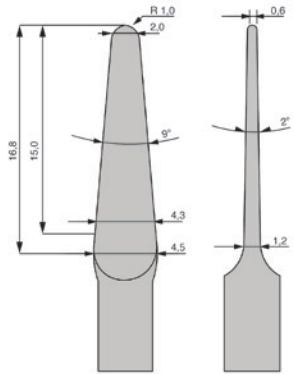


RIDGE SPLIT
KIT

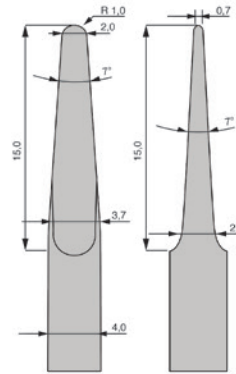
All instruments are provided in a 10 items autoclavable surgical box. Each kit includes 10 instruments, 5 straight and 5 curved.

The curvature is 9mm to offer a best access to the posteriors.

EXTRACTION KIT

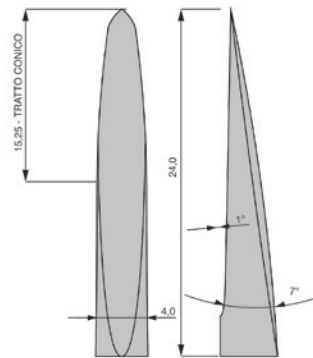


EXTRACTOR

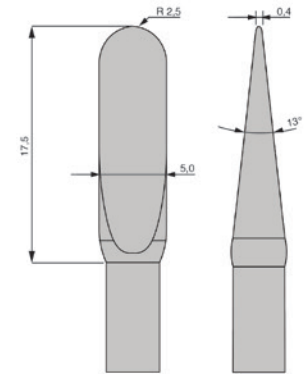


EXTRACTOR FOR WISDOM TEETH SHORT

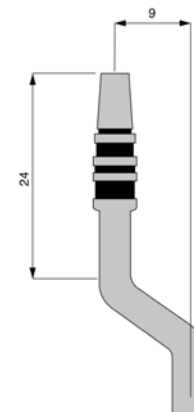
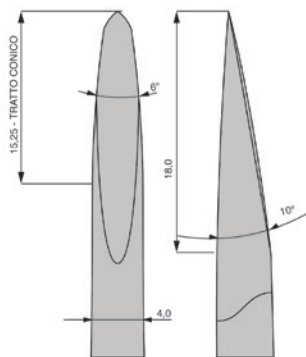
EXTRACTOR LONG BLADE



EXTRACTOR FOR WISDOM TEETH LONG

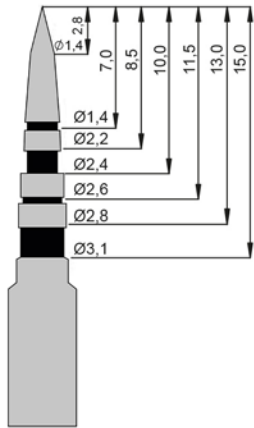


EXTRACTOR SHORT BLADE

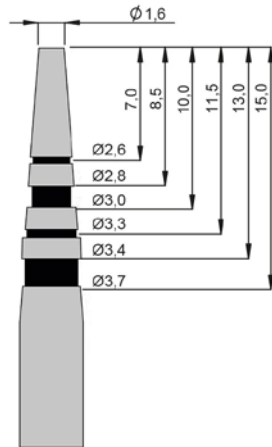


All instruments are provided in the 10 items box with their curved analogs to operate in the posteriors. The curvature is 9mm. Each kit includes 10 instruments. The 5 shown above and 5 matching in double bend (curved) design to operate in the posterior. The curvature/offset is 9mm.

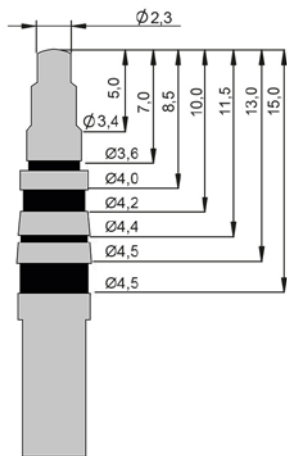
OSTEOTOMES KIT



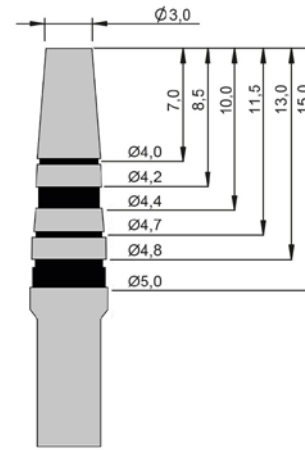
**OSTEOTOME
DIA 100 SHARP TIP**



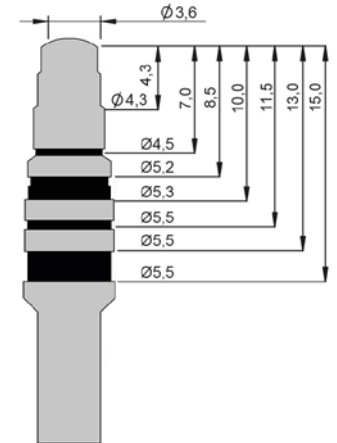
**OSTEOTOME
DIA 160**



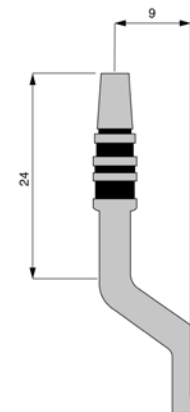
**OSTEOTOME
DIA 230**



**OSTEOTOME
DIA 300**

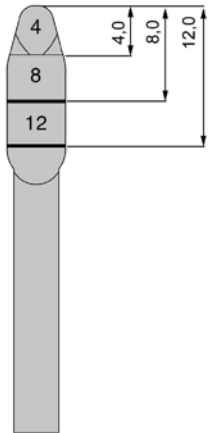


**OSTEOTOME
DIA 360**

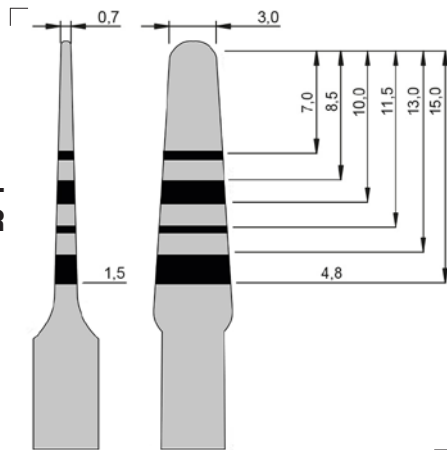


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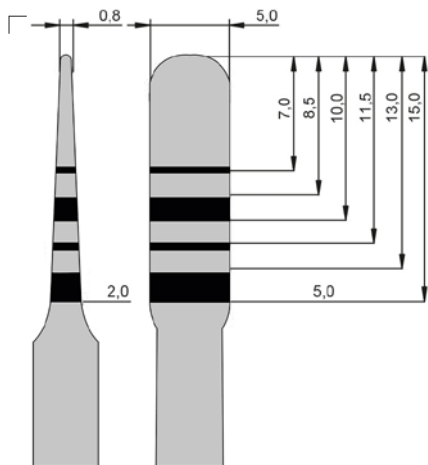
RIDGE SPLIT KIT



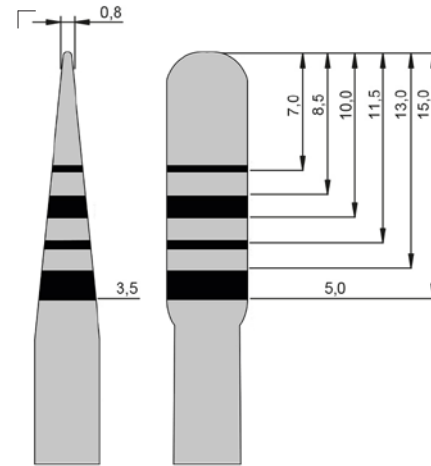
INITIAL SPLIT BLADE



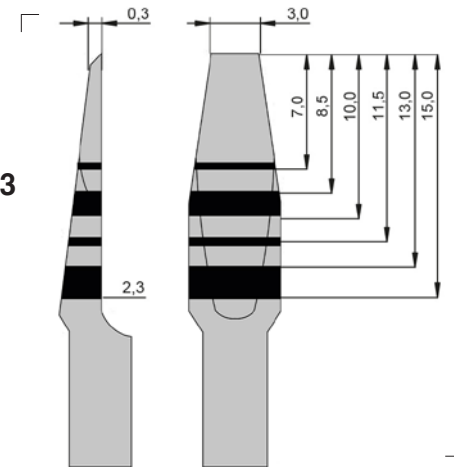
INITIAL EXPANDER



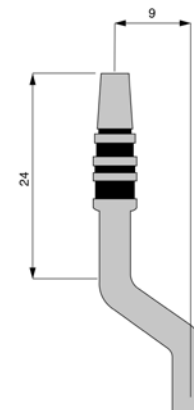
EXPANDER 1



EXPANDER 2

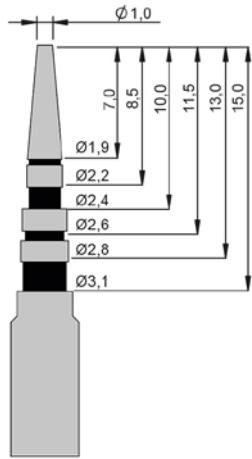


EXPANDER 3

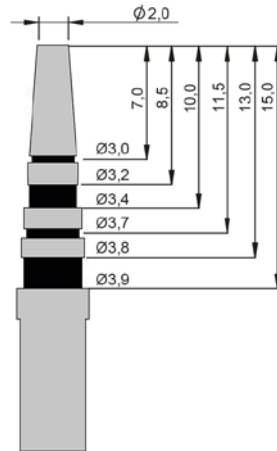


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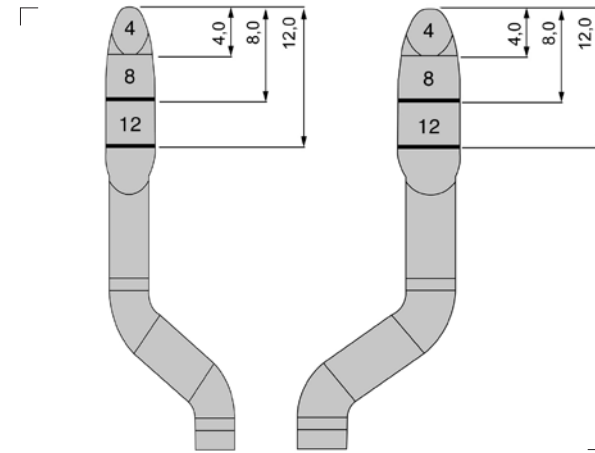
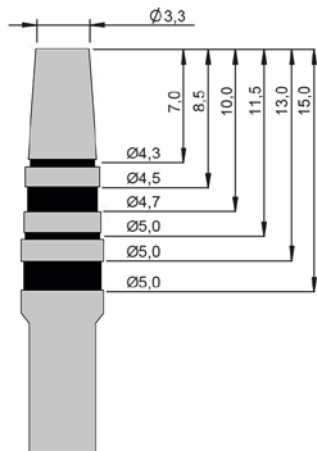
SPECIAL INSTRUMENTS



**OSTEOTOME
DIA 100**

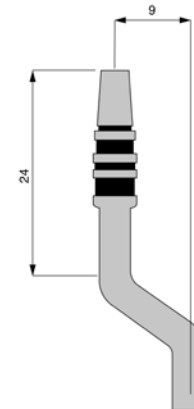
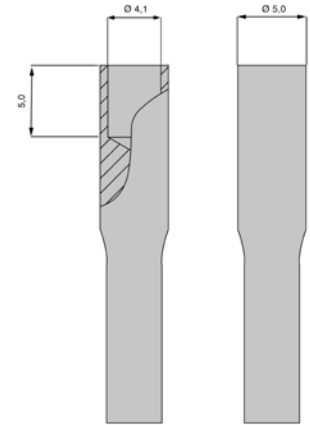


**OSTEOTOME
DIA 330**



**INITIAL SPLIT
BLADE
2 & 3**

**IMPLANT
INSERTER**



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THE HANDPIECE PLUS



+ The **handpiece PLUS** delivers 30% more force compared to the standard handpiece. It provides a higher effectiveness allowing more comfort for the patient.

It is a perfect solution as second handpiece to optimize time management during sterilization of the standard handpiece and to facilitate procedures in D1 and D2 bone.

The **handpiece PLUS** is used with the same base unit and instruments as the standard handpiece.

+

THE CROWN REMOVER



This **Crown Remover** handpiece is used with the regular Magnetic Mallet base power unit. It works in reverse and makes crown removal much easier and quicker.

The crown remover can be used with all 4 force settings available with the **Magnetic Mallet**.

It is delivered with a stainless steel case containing 3 instruments specifically designed for crown and bridge removal.



+ **Meta Ergonomica**, located in Milan, Italy has developed and patented the use of magneto-dynamic forces in oral surgery. Its mission is to design and manufacture medical devices that allow implementation of procedures in a controlled, precise and conservative manner.

Meta Ergonomica is ISO13485:2016 certified by Tuv Rheinland S.r.l. (1936)

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Management System
EN ISO 13485:2016
www.tuv.com
ID 9105068970



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