Tips are our expertise

Since ACTEON® EQUIPMENT developed the first ever piezoelectric scaler for dentistry, 45 years ago, we have constantly innovated in new electronics and ultrasonic tips. With continuous R&D investments, and partnership with clinicians, universities and dental experts worldwide, we have been able to develop a unique, world-renowned expertise, which is marketed in more than 135 countries.

Our goal is to provide clinical and technical innovations that meet dentists’ and dental hygienists’ requirements, as well as clinical applications and patients expectations evolution.

Having nearly 80 different tips, ACTEON® EQUIPMENT offers the widest range of instruments covering all clinical fields: prophylaxis, periodontics, implant care, endodontics and prosthetics.

For each indication, NEWTRON® tips are designed with exclusive alloys respecting the surfaces treated: enamel, prosthesis, implants.

The Color Coding System™ CCS intuitively associates each tip with one of the 4 available power ranges, for maximum efficacy and a sustainable tip use.

Exclusive and patented, NEWTRON® technology brings to treatments more preservation, efficacy and comfort.

Only our industrial procedures and stringent quality control can guarantee perfect tip adaptation on our ultrasonic generators. The electronics module, the handpiece and the tip are designed to interact in harmony and deliver optimum performance for you and your patients.

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Preserve teeth with perfect ultrasonic vibrations and steel tip quality

NEWTRON® technology and tips respond to practitioners clinical expertise.

The ultrasonic micro-oscillations transmitted from the handpiece to the tip generate perfectly linear movement. Therefore the tip undergoes to-and-fro movements in the axis of the handpiece.

The active area of each tip is located on the distal 2-3 mm. This working section may be applied on the surface to be treated, moving progressively from the crown to the root.

The linear movement of the tip can be used in various ways which are also complementary:

• sweeping: indicated for scaling and disrupting the biofilm
  ✔ the tip must be applied tangentially on the part to be treated, and
  used over its entire active section (fig.1)

• hammering: used to fragment large tartar deposits and remove cements
  ✔ the tip must be positioned facing the element to be detached, and
  used without pressure on its point (fig.2)

NEWTRON® technology, a guarantee of efficacy and safety

• Preservation
  ✔ controlled vibrations
  ✔ steel tip quality
  ✔ total irrigation control

• Efficacy
  ✔ frequency adjustment
  ✔ power regulation
  ✔ powerful cavitation

• Comfort
  ✔ linear and regular vibrations

The ultrasonic vibrations also cause a biological effect called cavitation, which has interesting benefits.

When a liquid is exposed to ultrasonic vibrations, the acoustic wave induces quite large pressure changes to create small bubbles of vapor called cavitation.

These bubbles are extremely unstable and burst violently, leading to the fragmentation and removal of the deposits.

In addition cavitation creates micro-bubbles of oxygen which have a cleansing, disinfectant effect.*

* Lea S.C. “Cavitation damage to ultrasonic scalers” - Dental Health 2008; 07:2-6
PROPHYLAXIS
Daily prevention and treatment
First step
supra-gingival scaling

Versatile, gentle
hygiene treatment

Universal tip
Recommended for simple cases: gross supra-gingival scaling.

Voluminous calculus
Indicated for the removal of significant supra-gingival deposits. Apply the flat part to the tooth surfaces.

Stains
Removal of marks and stains (tobacco, tea, coffee, etc.). The tip is used by applying the rounded extremity to the surface to be treated.

Slim tip
Developed for supra- and sub-gingival scaling. Its more active lateral edges make it suitable for scaling the interproximal spaces.

Interproximal
With its flat active part, it is particularly suitable for the interproximal spaces and supra-gingival scaling. Its anatomical shape allow fast and efficient procedure.

Stains
Removal of marks and stains (tobacco, tea, coffee, etc.).

Voluminous calculus
Indicated for the removal of significant supra-gingival deposits. Apply the flat part to the tooth surfaces.

Slim tip
With its flat active part, it is particularly suitable for the interproximal spaces and supra-gingival scaling. Its anatomical shape allow fast and efficient procedure.

Prophylaxis
Sub-gingival scaling and probing

**Shallow pockets**

Fine round instrument suitable for scaling pockets less than 2.3mm deep.

**Sub-gingival**

Recommended for scaling medium pockets (< 4mm). Removal of biofilm and soft deposits, while evaluating the depth of the pockets using the marks every 3mm.

**Diamond-coated ball tip 76μm**

- Preparation of the occlusal surface and cervical margins.
- Removal of hyper-mineralised dental structure.

**Distal ½ ball diamond-coated tip 76μm**

Preparation of the distal surface without lesions on the adjacent tooth surface.

**½ ball diamond-coated left-oriented tip, 76μm**

Curved 45° to the left, the EXL tip allows access to the lesion, particularly in posterior areas, without damaging adjacent teeth.

**½ ball diamond-coated right-oriented tip, 76μm**

Curved 45° to the right, the EXR tip allows access to the lesion, particularly in posterior areas, without damaging adjacent teeth.

*Takanashi H. “Effect of ultrasonic diamond tip on dentin bonding of composite” JADVR/AADR/CADR-2007; poster 1508

Excavus tips provide excellent abrasion quality due to the regularity of their diamond coating*

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Excavus Kit (Ref. F00739): supplied with EX1, EX2, EX3, EXL and EXR tips, a metal holder and an autoclavable universal wrench.
PERIODONTICS
Gentle, non-surgical periodontal treatments
**Periodontal debridement**

**Initial periodontics, anterior sector**
Ideal instrument for initial treatment; it makes treatment of the incisor-canine block possible. The guide edge is oriented parallel to the pocket.

**Periodontics for the premolar and molar sectors, left-oriented**
First instrument in the sequence for treating all the surfaces and the furcations.
- **Maxilla**: buccal and distal surfaces of sector 2, pivots at 13, then the buccal and mesial surfaces of sector 1.
- **Mandible**: lingual and mesial surfaces of sector 4, pivots at 43, then lingual and mesial surfaces of sector 3.

**Periodontics for the premolar and molar sectors, right-oriented**
Second instrument in the sequence, it follows the use of the H4L tip.
- **Maxilla**: palatine and mesial surfaces of sector 2, pivots at 13, then buccal and distal surfaces of sector 1.
- **Mandible**: lingual and mesial surfaces of sector 4, pivots at 43, then buccal and distal surfaces of sector 3.

The H3 tip is descended into the periodontal pocket without risk of injury to the ligament. The cavitation will lift the debris out.

The H4L and H4R tips make it possible to treat the whole mouth in a single session.

**Periodontics**

H3 / TK1-1S
H4L / TK2-1L
H4R / TK2-1R

**BDR Maintenance Kit (Ref. F00937):** supplied with TK1-1S, TK1-1L, TK2-1L and TK2-1R tips, an autoclavable plastic box and 4 green autoclavable torque wrenches.

**Biofilm disruption**

**Short probe**
Graduated every 3mm, the TK1-1S tip is recommended for examining shallow and medium pockets (< 4mm) and for the maintenance of simple cases.

**Long probe**
Recommended for examining and maintenance of medium to deep pockets (> 4mm). It is a diagnosis aid during the debridement and irrigation of pockets.

**Maintenance of the premolar and molar sectors, left-oriented**
Recommended for the maintenance of moderate to deep pockets and furcations. Equivalent to the Nabers probe.

**Maintenance of the premolar and molar sectors, right-oriented**
It is complementary to the TK2-1L tip and is recommended for the maintenance of moderate to deep pockets and furcations. Equivalent to the Nabers probe.

Perio Kit (Ref. F00936): supplied with No.1S, H3, H4L, and H4R tips, an autoclavable plastic box, one blue and 3 green autoclavable torque wrenches.
Root planing

**Anterior tooth root planing, diamond-coated tip 30 μm**
- Diamond-coated mini-tip recommended for simple cases in the cervical area.
- Also effective for the withdrawal of granulation tissue.

The H1 tip should be used without pressure and above the epithelial attachment because it is abrasive.

**Root planing of the premolar and molar sectors, left-oriented, diamond-coated tip 30 μm**
- Diamond-coated micro-probe recommended for the treatment of furcations and narrow spaces.

**Root planing of the premolar and molar sectors, right-oriented, diamond-coated tip 30 μm**
- Diamond-coated micro-probe recommended for the treatment of furcations and narrow spaces.

The H2 tips are also effective for the treatment of abscesses.

**Debridement of the premolar and molar sectors, left-oriented**
- Round micro-tip recommended for periodontal debridement in the presence of a fine periodontium and in narrow areas.
  - **Maxillary**: buccal and distal surfaces of sector 2, pivots at 13, then the palatine and mesial surfaces of sector 1.
  - **Mandibular**: buccal and distal surfaces of sector 4, pivots at 43, then lingual and mesial surfaces of sector 3.

Debridement of the premolar and molar sectors, right-oriented
- Second instrument in the sequence, it follows the use of the P2L tip.
- The double bend makes it possible to treat areas that are difficult to access (inter-radicular spaces, deep pockets).
  - **Maxillary**: buccal and mesial surfaces of sector 2, pivots at 13, then buccal and distal surfaces of sector 1.
  - **Mandibular**: lingual and mesial surfaces of sector 4, pivots at 43, then buccal and distal surfaces of sector 3.

The P2 tips can also be used to remove small amounts of excess cement when bonding fixed prostheses.

**Intro Perio Kit (Ref. F00718):** supplied with H1, H2L, H2R and H3 tips, an autoclavable plastic box and 4 green autoclavable torque wrenches.

**PerioPrecision Kit (Ref. F00739):** supplied with P2L, P2R and TK1-1S tips, an autoclavable plastic box and 3 green autoclavable torque wrenches.
IMPLANT CARE
Implant prevention and treatment
Periosoft Kit (Ref. F00906): supplied with 4 PH1 tips, 4 PH2L tips and 4 PH2R tips, an autoclavable plastic box and 3 autoclavable black wrenches.

ImplantProtect Kit (Ref. F02120): supplied with IP1, IP2L, IP2R, IP3L and IP3R tips, a metal holder and an autoclavable universal wrench.

Hygiene of anterior sector
Plastic micro-tip with universal curette shape for the treatment of the incisor/canine groups.
- Removal of the biofilm and low adherence deposits without scratching the prosthetic surfaces.
- Polishing the sulcus or grooves of natural teeth.
- Removal of the biofilm and low adherence deposits without scratching the prosthetic surfaces.
- Polishing the sulcus or grooves of natural teeth.

Hygiene of premolar and molar sectors, left-oriented
Plastic micro-tip with 13-14 curette shape for the removal of biofilm and low adherence deposits for the treatment of the posterior groups.
- Maintenance for the screws and abutment of the implant.
- Scaling of prosthesis.

Hygiene of premolar and molar sectors, right-oriented
Plastic micro-tip with 13-14 curette shape for the removal of biofilm and low adherence deposits for the treatment of the posterior groups.
- Maintenance for the screws and abutment of the implant.
- Scaling of prosthesis.

Debridement of the implant abutment and wide threads
Pure titanium tip with a wider extremity for implant abutment cleaning and large thread debridement.

Debridement of medium implant threads, left-oriented
Pure titanium tip with a similar shape to P2L tip for the debridement of medium-sized implant threads. The bend of the tip allows movement around the entire implant for total decontamination.

Debridement of medium implant threads, right-oriented
Pure titanium tip with a similar shape to P2R tip for the debridement of medium-sized implant threads. The approach may be non-surgical or open flap.

Debridement of narrow implant threads, right-oriented
Pure titanium tip with a pointed extremity suitable to reach narrow implant threads. All types of implants can be treated with these different tip sizes.

Debridement of narrow implant threads, left-oriented
Pure titanium tip with a pointed extremity suitable to reach narrow implant threads. All types of implants can be treated with these different tip sizes.

The new material for these tips makes it possible to clean and debride faster, and gives better breakage resistance.
Max. Power = 3 (Start of green mode).

ImplantProtect tips preserve implant surfaces.

The black ring on these tips indicates their exclusive use on titanium.
Max. Power = 5 (green).
All state-of-the-art
ENDODONTICS
Canal access preparation

**EndoSuccess Canal Access Prep Kit**

- **CAP1** (Ref. F88181)
  - Micro-blade tip, length 12mm, taper 6%
  - The CAP1 tip is used with the active lateral part for:
    - Finishing walls and dentinal residues.
    - Removing temporary cement and dentinal overhangs.

- **CAP2** (Ref. F88182)
  - Micro-blade tip, length 9mm, taper 5%
  - The CAP2 tip has active lateral part and extremity and is used by sweeping method to remove dentinal bridges.
    - Location of the MB2 (2nd mesiobuccal canal) and search for hidden canals.
    - Preparation of the pulp chamber.
    - Removal of the dentine layer which may hide the access to the MB2 canal.

- **CAP3** (Ref. F88183)
  - Micro-blade tip, length 8mm, taper 6%
  - The CAP3 tip has a very pointed extremity indicated for:
    - Locating and opening the calcified canals.
    - Fragmenting calcifications or pulp stones in the pulp chamber.
    - Loosening fiber posts.
    - Locating accessory canals.

- **ET18D** (Ref. F88017)
  - Diamond-coated steel tip, length 18mm, taper 5%
  - The ET18D tip is a diamond-coated tip for:
    - Finishing the access cavity.
    - Removing dentine overhangs, calcifications and filling materials.

- **ETBD** (Ref. F88020)
  - Diamond-coated ball tip, length 20mm, taper 5%
  - Diamond-coated ball tip for searching for canals and locating calcified canals.

Canal irrigation

**Irrisafe™**

- Safely eliminates the smear layer, dentine debris and bacteria from the root canal.
- Blunt tip prevents any risk of perforating the apex or the canal walls.

**Passive ultrasonic irrigation (PUI) files of different lengths and diameters**

- **IRRI 20, 25**
  - Files K 10, 15, 25, 30

- **Files of different lengths and diameters, taper 2%**
  - The K files adapt to many sizes of canal:
    - Ø 10 length 21mm and 25mm
    - Ø 15 length 21mm and 25mm
    - Ø 25 length 21mm and 25mm
    - Ø 30 length 21mm and 25mm
  - The indications for K files are irrigation, withdrawal of calcified dentine and gutta percha, and the withdrawal of broken instruments.
  - For irrigation ultrasonic files are used with a disinfectant solution. To provide a final decontamination, use sodium hypochlorite until the smear layer is removed.

**EndoSuccess Canal Access Prep Kit**

- Supplied with CAP1, CAP2 and CAP3 tips, metal holder and autoclavable universal wrench.


Retreatment tip, length 20mm, taper 6%
The ET20 steel tip is used in the 1st coronal third:
• Extraction of filling material, silver points, broken instruments.
• Removal of debris and the smear layer.

Diamond-coated retreatment tip, 30 μm, length 20mm, taper 5%
The ET20D tip in diamond-coated steel is used in the 1st coronal third to remove very hard materials by brushing the walls.

Diamond coating of the ET20D tip increases the cutting and lateral abrasion effect.

Titanium-Niobium tip, length 20mm, taper 3%
Suggested tip for retreatment in the middle and apical thirds and the extraction of broken instruments.

Short Titanium-Niobium tip, length 15mm, taper 4%
The ET25S (short) tip is designed for retreatment in the coronal third and the isthmuses.

The Titanium-Niobium alloy of the ET25 range allows perfect transmission of the ultrasonic vibrations and tip flexibility.

Long Titanium-Niobium tip, 25mm, taper 3%
The ET25L (long) is suitable for retreatment in the apical third and long, straight canals.

ET25 tips can be pre-formed for the treatment of curved canals.

Fine condenser, length 40mm, taper 4%
The SO4 tip is designed for lateral condensation of gutta percha by heating effect. It is used dry, without irrigation.

ET20
Ref. F88011
Retreatment tip, length 20mm, taper 6%
The ET20 steel tip is used in the 1st coronal third:
• Extraction of filling material, silver points, broken instruments.
• Removal of debris and the smear layer.

Diamond-coated retreatment tip, 30 μm, length 20mm, taper 5%
The ET20D tip in diamond-coated steel is used in the 1st coronal third to remove very hard materials by brushing the walls.

Diamond coating of the ET20D tip increases the cutting and lateral abrasion effect.

Titanium-Niobium tip, length 20mm, taper 3%
Suggested tip for retreatment in the middle and apical thirds and the extraction of broken instruments.

Short Titanium-Niobium tip, length 15mm, taper 4%
The ET25S (short) tip is designed for retreatment in the coronal third and the isthmuses.

The Titanium-Niobium alloy of the ET25 range allows perfect transmission of the ultrasonic vibrations and tip flexibility.

Long Titanium-Niobium tip, 25mm, taper 3%
The ET25L (long) is suitable for retreatment in the apical third and long, straight canals.

ET25L
Ref. F88022

SO4
Ref. F88007
Fine condenser, length 40mm, taper 4%
The SO4 tip is designed for lateral condensation of gutta percha by heating effect. It is used dry, without irrigation.
Apical Surgery

EndoSuccess Apical Surgery Kit (Ref. F00069): supplied with AS3D, AS6D, AS9D, ASLD and ASRD tips, a metal holder and an autoclavable universal wrench.

Micro-Retro Kit (Ref. F00912): supplied with P14, P15LD and P15RD tips, an autoclavable plastic box and 3 autoclavable yellow wrenches.

The Apical Surgery kit, with its unique 3-6-9mm concept, offers a controlled retrograde endodontic treatment with greater preservation of bone and dental tissue.

The micro-retro tips make minimum treatment possible providing fast healing.

The AS9D tip should first be introduced into the canal and oriented in the root axis before being advanced to prevent the creation of a "false route".

The ASRD tip is recommended for apical surgery of premolars and molars. The P14D tip is recommended for the preparation of canals in anterior teeth. The P14D tip is recommended for the preparation of canals in anterior teeth.

Retro Surgery

Universal retro surgery tip, diamond-coated 30μm, length 5mm, taper 7%

Right-oriented retro surgery tip, diamond-coated 30μm, length 5mm, taper 7%

Left-oriented retro surgery tip, diamond-coated 30μm, length 5mm, taper 7%

The P15RD is recommended for the preparation of premolar and molar canals.

The P15RD is recommended for the preparation of premolar and molar canals.

S12-70D

Retro surgery tip angled at 70°, diamond-coated 30μm, length 5mm, taper 9%

The S12-70D tip is recommended for the treatment of posterior areas, in canals that are difficult to access or roots with specific orientations.

The P14D tip is recommended for the preparation of canals in anterior teeth.

The P14D tip is recommended for the preparation of canals in anterior teeth.

Endosuccess Apical Surgery Kit (Ref. F00069): supplied with AS3D, AS6D, AS9D, ASLD and ASRD tips, a metal holder and an autoclavable universal wrench.

Micro-Retro Kit (Ref. F00912): supplied with P14, P15LD and P15RD tips, an autoclavable plastic box and 3 autoclavable yellow wrenches.
PROSTHESIS & ESTHETICS
Perfection to the limit
Prosthetic finishing with chamfered shape

1. Preparation, rounded edge, diamond-coated tip 76 μm
   - First instrument of the ultrasonic sequence, following the rotary phase.
   - Intracanalicular dentin preparation and positioning of finishing line.

2. Finishing, rounded edge, diamond-coated tip 46 μm
   - Correction of irregularities in the finish line and start of polishing.
   - Its diamond coating, less dense than on the PM1, makes it possible to obtain a cutting edge finish.

3. Polishing, rounded edge, smooth
   - This entirely smooth instrument is last in the finishing sequence, improving the condition of the surface at the cervical limit before impression taking.

Prosthetic finishing with shoulder shape

1. Preparation, shoulder shape, diamond-coated tip 76 μm
   - First instrument of the ultrasonic sequence, after the rotary phase.
   - Penetration of the sulcus to continue preparation the dentine, in order to correct the “lip” of the preparation and obtain a shoulder-shape finishing line.

2. Finishing, shoulder shape, diamond-coated tip 46 μm
   - Shoulder shape finishing line without risk of a lesion in the attachment system, and beginning of polishing thanks to its lower grit diamond-coating.

3. Polishing, shoulder shape, smooth
   - Polishing and improvement in the surface.
Ceramic veneers finishing

**Diamond-coated ball 107 μm**
Perform cuts on the incisal edge, by controlling the depth with the round tip radius. Then join the depth cuts to obtain an homothetic reduction of 1.5mm. Complete the vestibular reduction.

**Diamond-coated external spoon 107 μm**
After gingival retraction with Expazy®, place the gingival finishing lines margins using the PMV2 tip parallel to the surface to be prepared. Place the interproximal finishing lines using the PMV2 and 3 tips, with chuck maintained perpendicular on the surface.

**Diamond-coated internal spoon 107 μm**
Place the initial margins in butt-margin using the PMV3 tip, perpendicular to the prepared surface. Then join the incisal and proximal finish lines with the PMV2/3.

**Smooth external spoon**
Polish the interproximal and gingival finishing lines with PMV4 and 5 tips, with chuck maintained perpendicular on the surface.

**Smooth internal spoon**
Polish the interproximal and gingival finishing lines with PMV4 and 5 tips, with chuck maintained perpendicular on the surface.

**Smooth ball**
Polish the vestibular surface and the incisal finishing lines.

Loosening and condensation

**Loosening with spray**
Recommended for the loosening of root canal posts, in combination with endodontic retreatment tips, and crowns.
Apply the 5AE tip on the lingual or palatine surface and the buccal surface, before finishing with the occlusal surface. Use the flat extremity of the instrument held firmly against the tooth.

**Condensation, Piezocem**
Condensation tip for inlays or onlays on posterior teeth.
The application is performed by sequences of ten seconds each time, until the prosthesis is perfectly integrated into the cavity.

**Loosening tip (post removal)**
Powerful steel tip for loosening posts and crowns. Used with irrigation, in contact with the prosthetic element to be loosened and at maximum power.

**Prosthesis & Esthetics**

PerfectMargin Veneers Kit (Ref. F02020):
- supplied with PMV1, PMV2, PMV3, PMV4, PMV5 and PMV6 tips,
- a metal holder and an autoclavable universal wrench.

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* This medical device is a health product which carries CE marking under this regulation. Read the instructions in the leaflet accompanying the product carefully. Discontinued by PIERRE ROLLAND®. Date advertising established: April 2015. Update available at www.acteongroup.com
**NON GENUINE ACTEON® EQUIPMENT TIPS MAY COST YOU A LOT MORE**

ACTEON® EQUIPMENT has always designed tips that respect the tooth's anatomy and vibrate in perfect harmony with the handpiece. The potential imperfections in compatibility of brand x tips, both physical and electronic, may cause risks and premature wear of equipment.

**Risks for the patient**
- Risk of damaging patient's tissues (enamel, cement, etc.).
- Risk of breaking the tip, possibly with the broken piece being swallowed or inhaled by the patient, or lost in the tissues.

**Risk for the equipment**
Risk of handpiece heating (meaning a loss in electromechanical output), which could lead to handpiece damage.

**Loss of efficiency**
Tip wear alters its efficiency (-2mm = -50% efficiency), reduces its roughness, vibration and movement.

Understandably, ACTEON® EQUIPMENT’s liability - both legal and with regard to warranty of parts and accessories - cannot be engaged for damages that arise from the use of any other than genuine accessories.

You always come back to ACTEON® EQUIPMENT tips.

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**ADJUSTMENT OF THE IRRIGATION FLOW IS ESSENTIAL**

In order to obtain good drop-by-drop suitable for periodontal treatments, and a spray that does not create aerosol, the adjustment of the irrigation must be adapted to each tip:

1/ Set the irrigation flow rate to 0 and the power to 3 on the ultrasonic generator.
2/ Hold the handpiece with the tip pointing upwards.
3/ Adjust the spray by progressively increasing the flow rate so that the irrigation sprays the tip point with drop-by-drop.
4/ Set the machine to the required power.
5/ Start working with aspiration close to the tip.

You always come back to ACTEON® EQUIPMENT tips.