# NENTRON



Newtron<sup>®</sup>, everyday, for every clinical situation



# Prophylaxis workflow

The World Health Organization estimates that oral diseases affect nearly 3.5 billion people, and is committed to improving the dental prevention management. In this regard, Acteon® assists the dentists in their prophylaxis procedures from diagnosis to treatment and follow up with a comprehensive range of products responding to the entire workflow.



> TREAT >

FOLLOW-UP





I like that ACTEON® offers a complete solution. With their devices, I love my job even more."

K.Vichos, Usa

I did not believe it but through months, I saw my mouth and my teeth becoming healthier through high-quality care. Now, I can smile without shame."

Wilson, K. Vichos' patient

DETECT

DIAGNOSE





# Efficacy and safety with Newtron<sup>®</sup> technology

The generator, the handpiece and the tip work in perfect harmony to get the best out of the **Newtron**<sup>®</sup> technology



## PRECISION

O Precise treatments thanks to the controlled linear vibrations

## PRESERVATION

• Tissue preservation with the automatic and continuous frequency adjustment

ON B, LED

THOM

• Comfort for the patient and practitioner thanks to the real time power adjustment

COMFORT

ACTEON<sup>®</sup> devices and instruments assist me daily, in ensuring a successful outcome to my patients

Dr Gorni, Italy

**Procedures** are done much quicker, much more effective and again much easier for both hygienist and the patient.

#### PERIODONTICS



### **ENDODONTICS**



### **PROPHYLAXIS**



## **Reduced nebulization Better visibility**

The irrigation is reduced and controlled, allowing better

FT'S FIGH

CORONAVIRI

GETHER

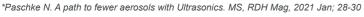
visibility and reducing nebulization. It is proven\* that the use of Newtron<sup>®</sup> at low power is bringing good results while decreasing the water volume to a drip and reducing the aerosols.

## Disinfecting effect

ACTEON

Thanks to a powerful cavitation, a biological

effect caused by the ultrasonic vibrations, the deposits are fragmented and removed with a disinfecting effect.



Г4

# A large range of tips meeting all the clinical needs

The widest range on the market with 80 different tips; with exclusive designs, alloys and coatings for clinical versatility.

Exclusive tips in Pure Titanium for implant cleaning.

#### **IMPLANT CARE**



### SURGICAL ENDODONTICS



#### **CONSERVATIVE AND RESTORATIVE DENTISTRY**



## **Ease** of use

## For smooth and safe procedures

## SIMPLE AND INTUITIVE SETTINGS WITH THE COLOR CODING SYSTEM



## **IRRIGATION SYSTEM OPTIMIZED TO ALL THE PROCEDURES**

Limit cross-contamination with 2 graduated tanks (300 mL or 500 mL) to add and mix disinfectant solutions directly, and to fill in during procedures.

Easy and precise flow adjustment for a powerful cavitation and the maximum tip efficiency: deposits fragmentation, disinfecting effect.

Thanks to the inner part of the handpiece in titanium, any type of irrigation solution including water, sodium hypochlorite and chlorhexidine, can be used.

## F.L.A.G.<sup>™</sup> FOR B.LED GUIDES THE PRACTITIONER FOR A PRECISE AND ACCURATE TREATMENT

Applied on teeth, F.L.A.G.™ for B.LED highlights the dental plaques when used under the Newtron® slim B.LED handpiece and guides the practitioner in his procedure.



• Enhances treatment accuracy and avoids the overuse of instruments, thus preserving healthy tissues.

• Enables practitioners to educate patients and to encourage compliance.



Without B.LED



With B.LED

## A DESIGN RESPONDS TO ERGONOMICS AND HYGIENE

Elegant device: flat glass surface, clean line and luminous power dial.

Adapted to practice: inclined front panel for better interaction with the practitioner and accessibility to the settings and the handpiece.







Meeting hygiene requirements: total hygiene watertightness, removable power adjustment knob for easy decontamination.



Г<sub>7</sub>,

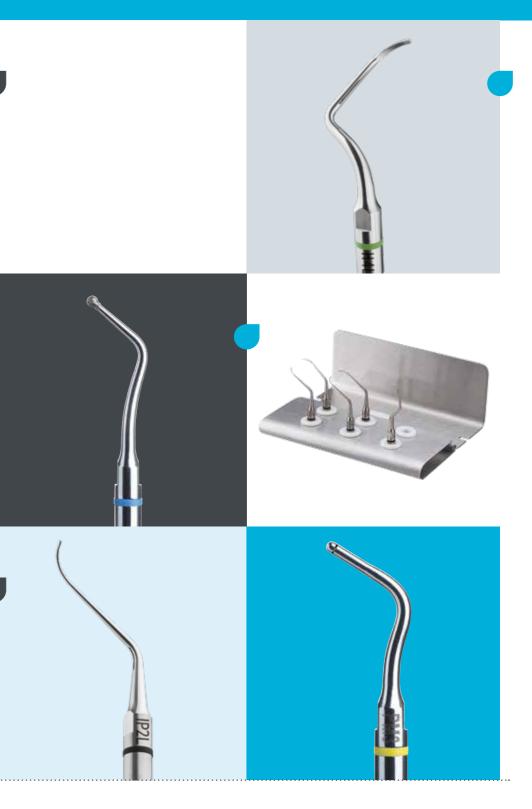
# A large and versatile range of tips

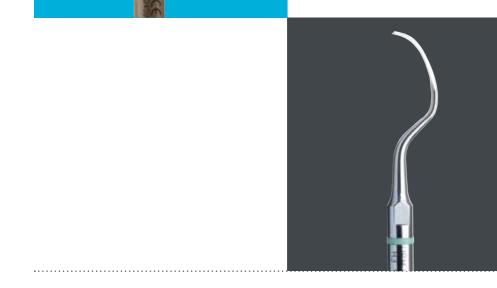


Specifically designed to meet all clinical needs, thanks to exclusive designs, alloys and coatings that respect the surfaces treated: enamel, crown, implant.









# Interacting in harmony with the handpiece and the device to deliver optimum performance



# **Periodontics Prophylaxis**









## Supra-gingival scaling



#### Universal tip Simple cases: gross supra-gingival scaling.

Tangential orientation to the surface. To-and-fro sweeping to "detach" the tartar whilst respecting the enamel.



#### Voluminous calculus Removal of significant supra-gingival deposits. 2 Apply the flat part to the tooth surfaces.

2

#### **Stains** 3

Removal of marks and stains (tobacco, tea, coffee, etc.). Apply the rounded extremity of the tip to the surface to be treated.

## Sub-gingival scaling and probing



Shallow pockets 10P Scaling of pockets less than 2-3mm deep.



10Z

#### **Medium pockets**

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

Efficient for maintenance treatment in patients with good dental hygiene.

hygiene



## Supra- and sub-gingival scaling



Slim tip Interproximal spaces scaling. Finer and longer than tip No.1, it is also powerful and robust.

## Supra-gingival scaling and interproximal spaces



10X

Interproximal spaces Its anatomical shape allow fast and efficient procedure





## Smooth biofilm elimination



#### Dental plaque and sub-gingival small deposits removal Oriented tangentially: its shape

adapts to the anatomy of the tooth for a painless and easy access.









to premolars and molars.



#### Interproximal scaling of narrow areas

Right-oriented for debridement and cleaning of medium pockets.

## **Periodontics**

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H4L F00114

## **Periodontal debridement**

H3

H4L

H4R



Initial periodontics, anterior sector Treatment of the incisor-canine block.

H3

F00369

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



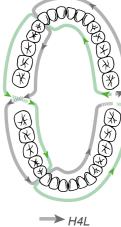
Periodontics for the premolar and molar sectors, left-oriented First instrument in the sequence for treating all the surfaces and the furcations.

• Maxillary: buccal and distal surfaces of sector 2, pivots at 13, then the buccal 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.



Periodontics for the premolar and molar sectors, right-oriented Second instrument in the sequence.

• Maxillary: palatine 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.



→ H4R

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



## **Root planing**



• Diamond-coated mini-tip for simple cases in the cervical area. • Also effective for the withdrawal of granulation tissue.





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



of abscesses.





# Anterior tooth root planing, diamond-coated tip 30 µm

This 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

Diamond-coated micro-probe for the treatment of furcations and narrow spaces.

The H2 tips are also effective for the treatment

## **Periodontics**



BDR



## **Biofilm disruption**



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



#### Long probe

**TK1-1L** Examination and maintenance of medium to deep pockets (> 4mm). Diagnosis aid during the debridement and irrigation of pockets.

The TK1 probe tips are used without pressure following the contour of the pockets and skimming over the root surface.



Maintenance of the premolar and molar sectors, left-oriented TK2-1L Maintenance of moderate to deep pockets and furcations. Equivalent to the Nabers probe.



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

perio Precision



## **Periodontal maintenance**



peridontium and in narrow areas.

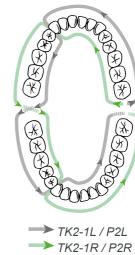
• Maxillary: buccal and distal surfaces of sector 2, pivots at 13, then the palatine and mesial surfaces of sector 1. • Mandibular: buccal and distal surfaces of sector 4, pivots at 43, then lingual and mesial surfaces of sector 3.



Second instrument in the sequence, after the P2L tip. 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 prosthesis.



#### Debridement of the premolar and molar sectors, right-oriented

The double bend makes it possible to treat areas that are difficult to access (inter-radicular



## **Implant Care**





## Implant and prosthesis prevention

PH1



#### 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.



#### Hygiene of premolar and molar sectors, left-oriented PH2L

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 PH2R

Plastic micro-tip with 13-14 curette shape for the removal of biofilm and low adherence deposits for the treatment of the posterior groups.

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).

# Pure Titanium

Pure titanium tips to preserve implant surfaces.

IP1 F02121

## **Treatment of peri-implantitis and maintenance**



debridement.





Debridement of medium implant threads, right-oriented Pure titanium tip with a similar shape to P2R for the debridement of medium-sized implant threads.

The approach may be non-surgical or open flap.



IP2R

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.



implant threads.

The black ring on these tips indicates their exclusive use on titanium. Max. Power = 5 (green)



#### Debridement of the implant abutment and wide threads

Pure titanium tip with a wider extremity for implant abutment cleaning and large thread

#### Debridement of medium implant threads, left-oriented

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

#### Debridement of narrow implant threads, right-oriented

Pure titanium tip with a pointed extremity suitable to reach the inner-most parts of narrow

**Endodontics** 



## *e*ndosuccess Canal Access Prep

The micro-blades are less aggressive than diamond and their coating makes these tips very durable.

CAP1 F88181

CAP2 CAP3 F88182 F88183 ET18D

F88017

**ETBD** 

F88020

## **Canal access preparation**

CAP1

CAP3

ET18D



#### Micro-blade tip length 12mm, taper 6% Active lateral part for:

- Finishing walls and polishing.
- · Removing temporary cement and dentinal residues. · Removing dentin overhangs.

Non-active end to prevent the risk of perforating the pulp chamber floor.



#### Micro-blade tip, length 9mm, taper 5%

Micro-blade tip, length 8mm, taper 6%

· Locating and opening the calcified canals.

The CAP3 tip has a very pointed extremity indicated for:

• Fragmenting calcifications or pulp stones in the pulp chamber.

Active lateral part and extremity used by sweeping method to remove dentine bridges. CAP2 • Location of the MB2 (2nd mesiobuccal canal) and search for hidden canals.

Due to its very sharp point, the CAP3 tip must be handled with care (visual aids recommended).

- Preparation of the pulp chamber.
- Removal of the dentine layer which may hide the access to the MB2 canal.



#### **Diamond-coated steel** tip 76µm, length 18mm, taper 5% • Finishing the access

cavity. Removing dentine overhangs, calcifications and filling materials.

 Loosening fiber posts. · Locating accessory canals.



Diamond-coated ball tip, length 20mm, taper 5% Searching for canals and locating calcified canals.

# *urisafe*



## Irrigation



- IRRISAFE Irrigation once the root canal has been prepared. • 20ml of irrigant (NaOCl) are injected into the canal.
  - Repeated 3x 1 minute in each canal.



### Files of different lengths and diameters, taper 2% instruments.

LIMESK For irrigation ultrasonic files are used with a disinfectant solution. To provide a final decontamination, use sodium hypochlorite until the smear layer is removed.

can therefore be pre-bent.



LIMES K10, 15, 25, 30

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

Irrisafe™ safely\* eliminates the smear layer, dentine debris and bacteria from the root canal. Its blunt tip prevents any risk of perforating the apex or the canal walls.

• Irrisafe™ is inserted 2mm short of the working length and activated by performing withdrawal movements to flush the debris and the smear layer upwards.

Irrigation, withdrawal of calcified dentine and gutta percha, and withdrawal of broken

K files are very sharp instruments and should be handled with precision. However they are flexible and

<sup>Г</sup>19

## **Endodontics**



Retreatment



## **Canal Retreatment**



Retreatment tip, length 20mm, taper 6% Used in the 1<sup>st</sup> 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% **ET20D** Used in the 1<sup>st</sup> coronal third to remove very hard materials by brushing the walls. The diamond coating of the ET20D tip increases the cutting and lateral abrasion effect.



**ET25** 

#### Titanium-Niobium tip, length 20mm, taper 3%

Retreatment in the middle and apical thirds and the extraction of broken instruments. The Titanium-Niobium alloy of the ET25 range allows perfect transmission of the ultrasonic vibrations and tip flexibility\*.



Short Titanium-Niobium tip, length 15mm, taper 4% ET25S Retreatment in the coronal third and the isthmuses.

\* E.W. Collings Applied superconductivity, metallurgy and physics of titanium alloys 1985













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**Endodontics** 







## **Apical surgery**

AS3D

Diamond-coated universal tip 30µm, length 3mm, taper 9% Apical surgery of anterior teeth. It should be used without pressure, at the lowest possible effective power.



Diamond-coated tip 30µm, length 6mm, taper 9% Second instrument in the sequence, used to obtain a preparation length of 5mm at least.



#### Diamond-coated tip 30µm, length 9mm, taper 8%

Used for complex cases and for the preparation of the root canal up to the coronal third. The diamond coating is only present on the extremity of the instrument not to over-prepare the canal.

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



Right-oriented tip, diamond-coated 30µm, length 3mm, taper 10% Apical surgery of premolars and molars.

ASLD

Left-oriented tip,diamond-coated 30µm, length 3mm, taper 10% Apical surgery of premolars and molars.

It should be used with very light pressure.

# *e*ndosurgery



S12-70D F00118

## **Retro surgery**



orientations





Preparation of canals in anterior teeth.

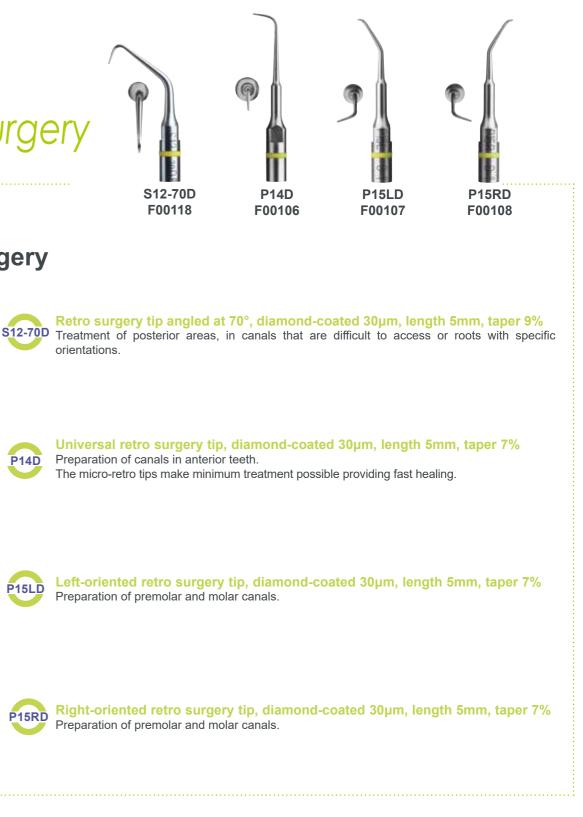








Preparation of premolar and molar canals.





## **Conservative & restorative dentistry**



Perfectmargin



## **Prosthetic finishing with chamfered shape**







#### Finishing, rounded edge, diamond-coated tip 46 µm PM2 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.



PM3

PM4

#### 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.



### Corono-radicular preparation, conical, diamond-coated 46 µm

After the rotating phase, the PM4 tip is used to:

- Prepare the upper 1/3 of canal chamber. · Shape anatomically the connection cone.
- · Clean the root walls.
- · Smooth the entry cones for the anatomical posts.





## **Prosthetic finishing with shoulder shape**



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.



PMS2 polishing thanks to its lower grit diamond-coating.



#### Polishing, shoulder shape, smooth Polishing and improvement in the surface. PMS3 cement adhesion

PerfectMargin Rounded and Shoulder tips have a laser marking at 1mm to control their penetration in the sulcus.





#### Finishing, shoulder shape, diamond-coated tip 46 µm

Shoulder shape finishing line without risk of a lesion in the attachment system, and beginning of

Finishing with a smooth tip enables a better quality of impression taking and provides better

When the yellow setting of the ultrasonic generator is used, PM2 and PMS2 can be used for polishing the dentine.









## Ceramic veneers finishing

PMV1

PMV2



#### 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 ExpasyI<sup>™</sup>, 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 PMV3 tips, with chuck maintained perpendicular on the surface.



PMV3

#### Diamond-coated internal spoon 107 µm

Place the incisal 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 PMV5 tips, with chuck maintained perpendicular on the surface.

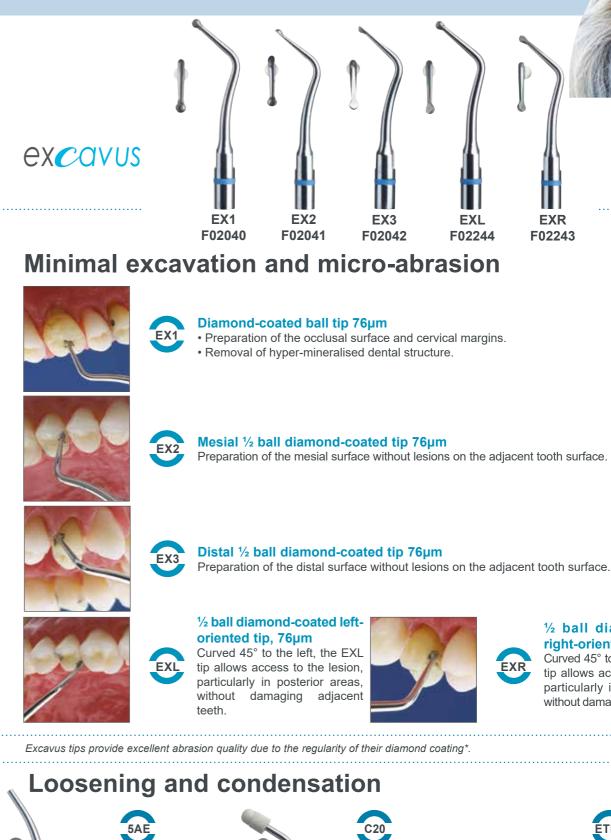


#### Smooth internal spoon

Polish the interproximal and gingival finishing lines with PMV4 and PMV5 tips, with chuck maintained perpendicular on the surface.

#### Smooth ball PMV

Polish the vestibular surface and the incisal finishing lines.



Loosening of root canal posts with spray

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.

Perform sequences of 10 sec each time, until the prosthesis is perfectly integrated into the cavity. In general 2 or 3 sequences are sufficient; after each sequence remove the excess cement from the margin edges.

teeth.

#### <sup>1</sup>/<sub>2</sub> 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.

## Condensation, Piezocem

For inlays or onlays on posterior





#### Loosening tip (post removal)

The ETPR tip has profiled and concave shape. It provides greater efficacy on the posterior teeth.



# **Dedicated kits for your daily practice**

## scaling

Supra- and sub-gingival scaling N° 1, N° 1S, N° 10X, H3 tips, 4 autoclavable dynamometric wrenches Ref. F00934

## hygiene

Versatile, gentle hygiene treatment N° 1, N° 1S, N° 10Z, TK1-1S tips, 4 autoclavable dynamometric wrenches Ref. F00935

## ex Cavus

Minimal excavation and micro-abrasion EX1, EX2, EX3, EX-L, EX-R tips, autoclavable metal support and universal wrench Ref. F00739



## perio Precision

Periodontal maintenance P2L, P2R, TK1-1S tips, 3 autoclavable dynamometric wrenches Ref. F00939





## endo-one

perio*d*ontics

N° 1S, H3, H4L, H4R

tips, 4 autoclavable

Root planing

Ref. F00936

Periodontal debridement,

dynamometric wrenches

Endodontic treatments CAP1, CAP2, CAP3, ET25, ETPR tips, 4 Irrisafe 25-21 mm blister, autoclavable metal support and universal wrench Ref. F00732



## endosuccess

Canal access preparation CAP1, CAP2, CAP3 tips, autoclavable metal support and universal wrench Ref. F88180





## *p*erfectmargin

**Prosthetic finishing** 







## *e*ndosuccess

**Canal Retreatment** ET18D, ET20, ET25, ET25S, ETBD, ETPR tips, autoclavable metal support and universal wrench Ref. F00737



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## perfectmargin

Prosthetic finishing with shoulder shape PMS1, PMS2, PMS3, PM4 tips, autoclavable metal support and universal wrench



*p*erfectmargin

**Ceramic veneers** finishing PMV1, PMV2, PMV3, PMV4 tips, autoclavable metal support and universal wrench Ref. F02020





## mplantProtect

Treatment of periimplantitis and maintenance IP1, IP2L, IP2R, IP3L, IP3R tips, autoclavable metal support and universal wrench Ref. F02120





### *e*ndosuccess

**Apical Surgery** AS3D, AS6D, AS9D, ASLD, ASRD tips,autoclavable metal support and universal wrench Ref. F00069

# Efficacy and safety

# How to recognize a worn tip?

## **CHOOSE THE ACTEON® ORIGINAL TIPS** TO GET THE FULL PERFORMANCE OF YOUR NEWTRON<sup>®</sup> ULTRASOUNDS GENERATOR

## For a maximum performance and safety, tips must be renew

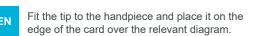
The active part of the tip is located on the last 3 mm. When the tip is worn, the action is limited and some key indicators can help the practitioner to identify a worn tip:

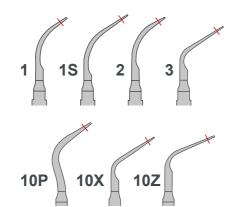
- O Lack of results, because the oscillation of the tip is limited
- Pain for the patient, because of the increase of the power needed
- Overwarming of the surface
- Fatigue for the practitioner, because more pressure is needed to have a good result

For an optimal performance and the safety of your patients, it is important to change the tips on a regular basis, and not use worn tips.

### **ACTEON® IS PROVIDING A TIP CARD WHICH GIVES INFORMATION ON THE WEAR OF THE TIP.**







H<sub>2</sub>L

H4L



Acteon®'s liability - both legal and with regard to the warranty of parts and accessories - can't be engaged for the damages that might arise from the use of other than Acteon® Original tips, such as:

Г<sub>30</sub>

#### Acteon<sup>®</sup> Original tips certify performance and safety

Our genuine Acteon® tips have been designed to bring the best performance, efficiency and safety with Newtron®.

> • Lack of performance • Break-up of the device • Safety of the patient

#### NEWTRON PSXS BeLED VERSATILE AND AUTONOMOUS

Handpiece: LED NEWTRON<sup>®</sup> SLIM B.LED blue ring (F12900) white ring (F12905)

Dental plaque disclosing liquid F.L.A.G.™ for B.LED Irrigation: 300ml tank (500ml tank in option: F62005) Irrigation flow rate: 5 - 40 ml/min

Handpiece weight: 48g Device weight: 2100g Overall dimensions (LxWxH): 260x185x140mm

## NEWTRON DESIGN AND ERGONOMIC

Handpiece: LED NEWTRON® SLIM B.LED blue ring (F12900) white ring (F12905)

Dental plaque disclosing liquid F.L.A.G.™ for B.LED Irrigation: Connected to the water supply Pressure: 1 to 5 bars

Handpiece weight : 48g Device weight: 1650g Overall dimensions (LxWxH): 155x185x100mm





# COMPACT AND EFFICIENT

Handpiece: Not LED SP NEWTRON<sup>®</sup> (F12281)

Pressure: 1 to 5 bars

Irrigation: Connected to the water supply

Handpiece weight: 52g Device weight: 1600g Overall dimensions (LxWxH): 129x160x87mm

Newtron Booster, Newtron P5 XS, Newtron P5 XS B.Led: Dental Ultrasonic Control Console Class IIa medical devices - CE0459 (GMED) For professional dental use only. Manufacturer: SATELEC<sup>®</sup> - France Read carefully the instructions for use available on www.acteongroup.com Updated on: 07/2021

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iece: LED RON® SLIM BLED

> Pressure: Handpiece ina liquid Device wei