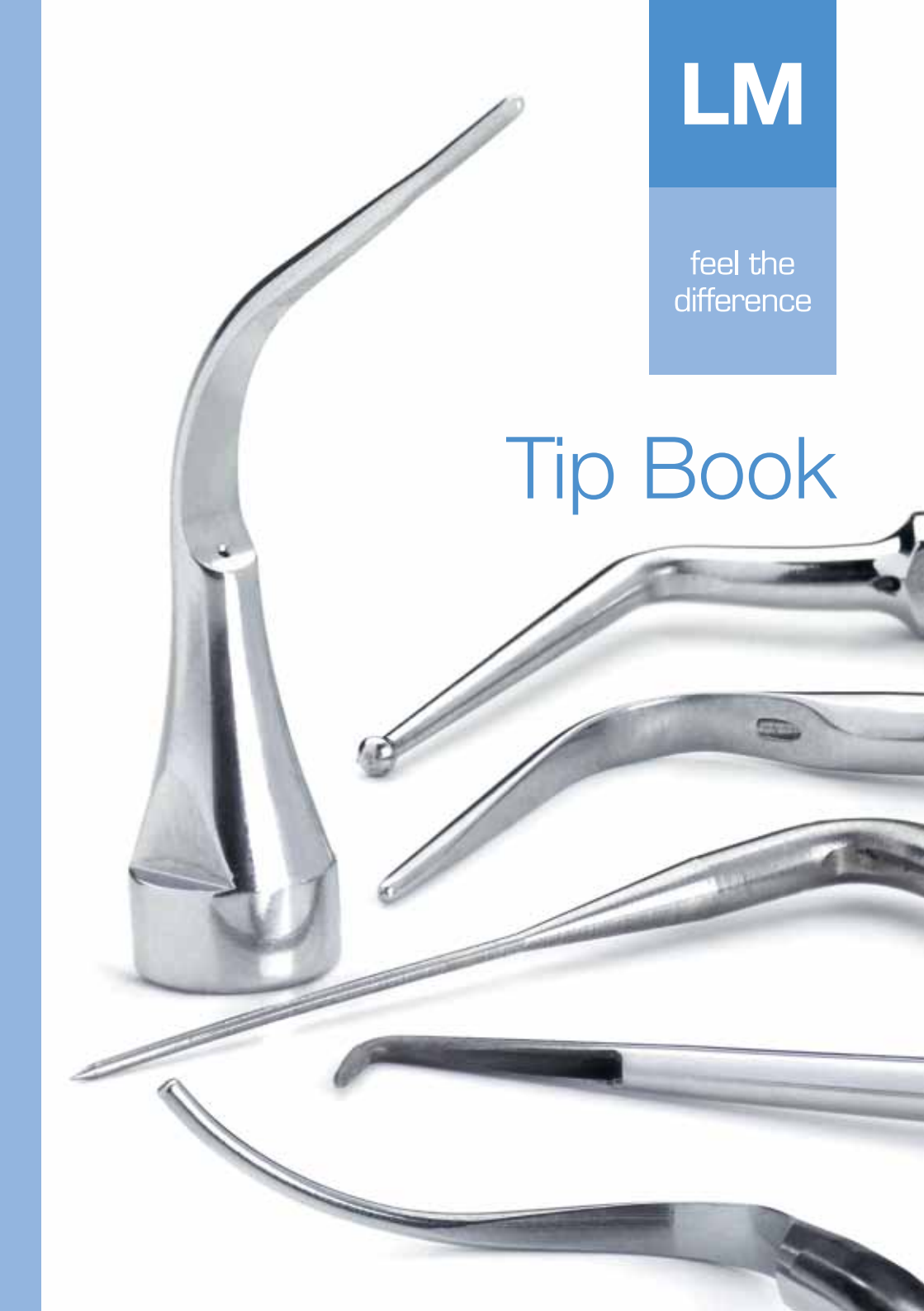
LM

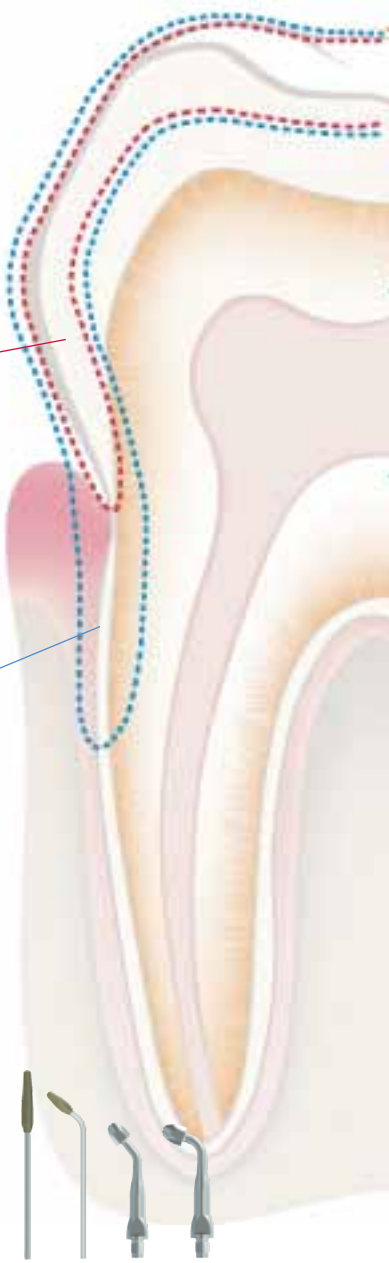
feel the difference

Tip Book

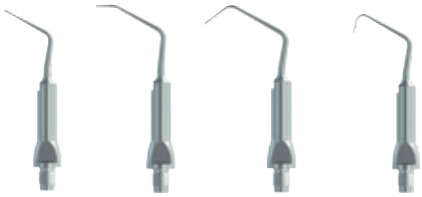


Multi-purpose ultrasonics

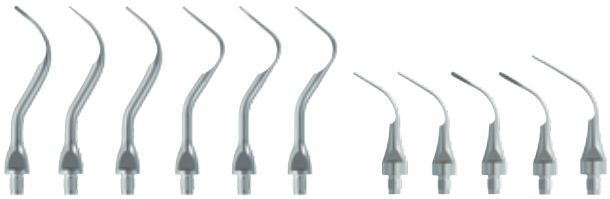
Ultrasonics is an excellent tool for much more than just scaling. Our wide tip range offers solutions for periodontics, endodontics, apical surgery including sterile tips, implantology and restorative treatments. The choice is yours!



Minimally invasive excavation
pages 18–21

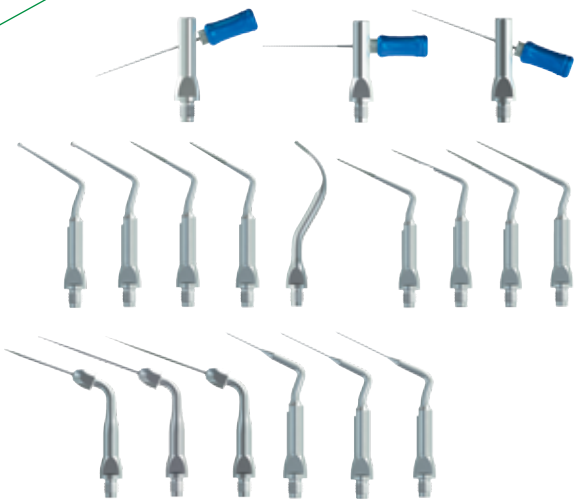


Scaling and instrument holders
pages 6–17



Special purpose
pages 38–41

Endodontics
pages 22–37



Apical surgery
pages 30–34

Sterile apical surgery 35–37

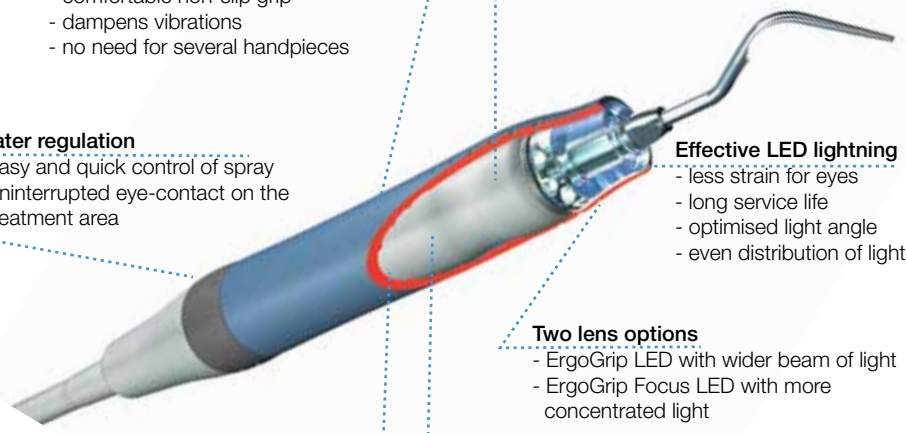
Note!
The tips presented in this book are compatible with all LM and Amdent ultrasonic table top and built-in devices.

LM-ProPower with excellent ergonomics!

Autoclavable silicone ErgoGrip
- comfortable non-slip grip
- dampens vibrations
- no need for several handpieces

Autoclavable handpiece
- increases hygiene

Water regulation
- easy and quick control of spray
- uninterrupted eye-contact on the treatment area



Effective LED lightning
- less strain for eyes
- long service life
- optimised light angle
- even distribution of light

Two lens options
- ErgoGrip LED with wider beam of light
- ErgoGrip Focus LED with more concentrated light

Sealed construction
- prevents contamination

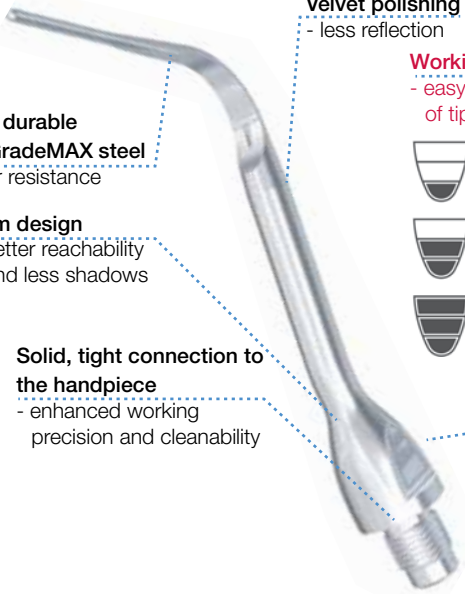
Smooth surface
- easy to wipe and clean

Options for sterile ultrasonic treatm

LM-ProPower SteriLED handpiece (LM 10084) is a quick and easy solution for sterile ultrasonic treatments. It features superior ergonomics and the liquid supply can be added directly on the handpiece with no extra components. The handpiece is compatible with the normal range of LM tips which enables numerous sterile and medicament applications in periodontics and endodontics.

Wide tip range – highest quality for all your needs

69 different tips – solutions for periodontics, endodontics, apical surgery, restorative and sterile treatments.



Velvet polishing
- less reflection

Working mode coding
- easy and safe setting of tip power

Max 40 %
Endo function: max 60 %

Max 70 %

Max 100 %

Extremely durable LM-DuraGradeMAX steel
- high wear resistance

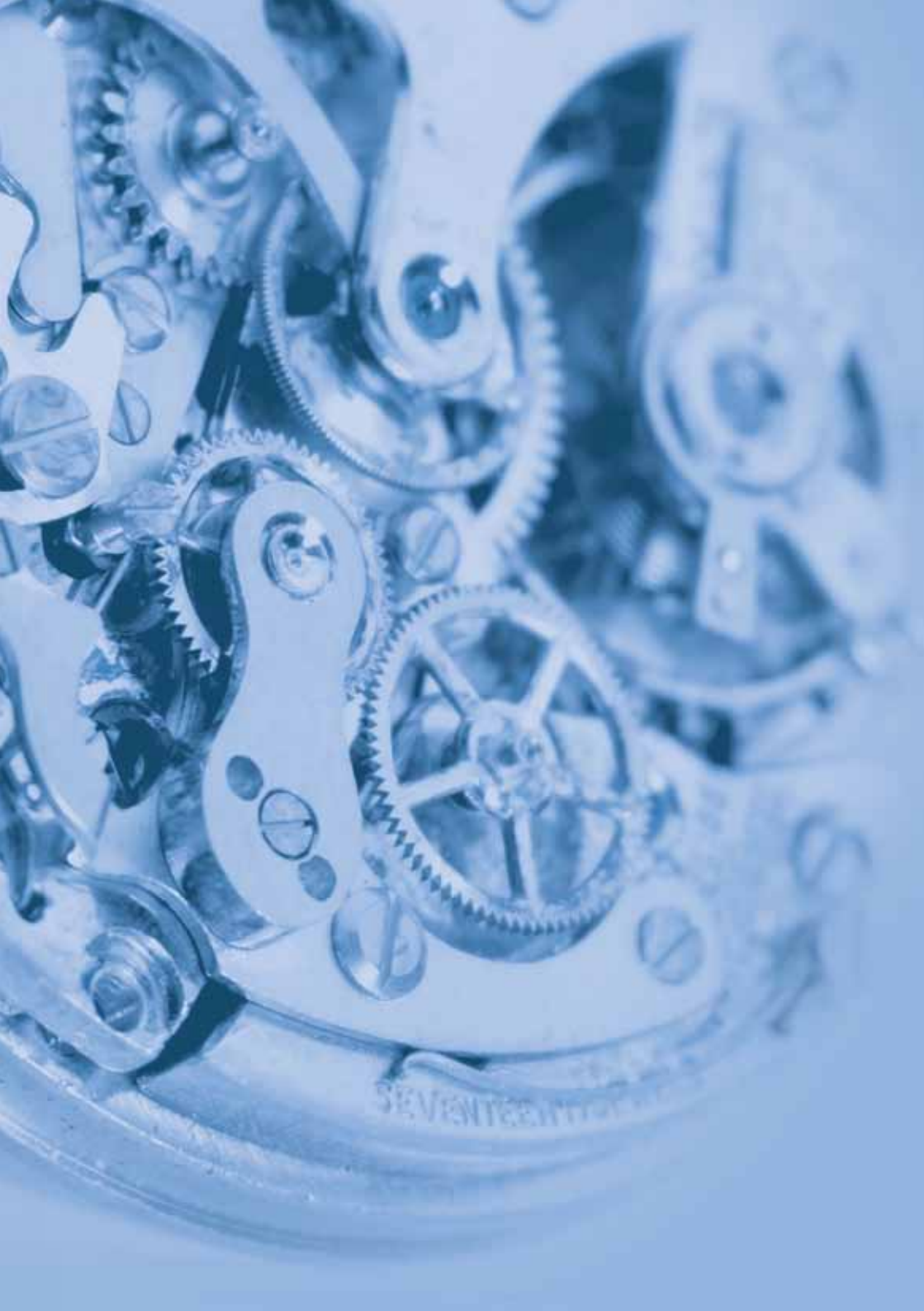
Slim design
- better reachability and less shadows

Solid, tight connection to the handpiece
- enhanced working precision and cleanability

Compatible with all LM and Amdent ultrasonic table top and built-in devices.

ents

LM-ProPower SteriKit (LM 10080) is a safe and reliable sterile system that bypasses current water supply completely. The SteriKit has pressurized irrigation system which allows easy and cost-efficient installation. There is no need for expensive peristaltic pump. All Amdent and LM ultrasonic devices can be upgraded with the SteriKit.



Scaling

Scaling

Scaling is precision work. Proper ultrasonic instrument selection is of primary importance in achieving complete periodontal debriment. Our wide variety of tips gives you the freedom to choose.

Heavy calculus removal

Tip **PE-31**

Used for lingual, buccal and approximal supragingival scaling.

Working mode

Tip **PE-32**

Used for lingual and buccal supragingival scaling.

Working mode

Tip **PE-39**

Used for universal, lingual and buccal supragingival scaling.

Working mode

Tip **PE-41A**

Used for universal, lingual and buccal supragingival scaling.

Working mode

Working mode coding:  **Max 40 %**  **Max 70 %**  **Max 100 %**

Scaling

Universal

Tip **PE-37**

Universal tip especially developed for subgingival scaling, furcations, supragingival fine scaling and spot removal.

Working mode

Tip **PE-37L**

Universal tip for subgingival scaling, furcations, supragingival fine scaling and spot removal. Tip angled to left for better access to furcations.

Working mode

Tip **PE-37R**

Universal tip for subgingival scaling, furcations, supragingival fine scaling and spot removal. Tip angled to right for better access to furcations.

Working mode

Tip **PE-41P**

Used for universal, lingual and buccal supragingival scaling. Can also be used for shallow pockets.

Working mode

Tip **PE-41AF**

Used for approximal supragingival scaling. Also suitable for lingual and buccal scaling.

Working mode

Tip **PE-41PF**

Used for lingual, buccal and approximal supragingival scaling.

Working mode

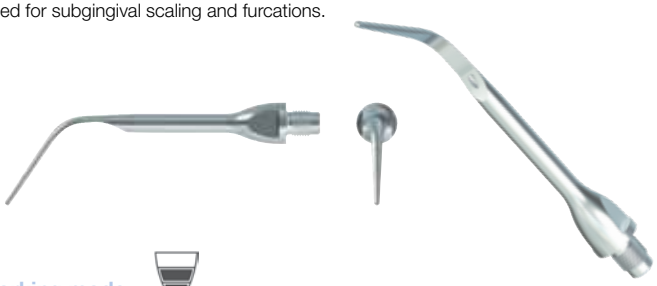
Working mode coding: Max 40 % Max 70 % Max 100 %

Scaling

Periodontics

Tip **PE-33**

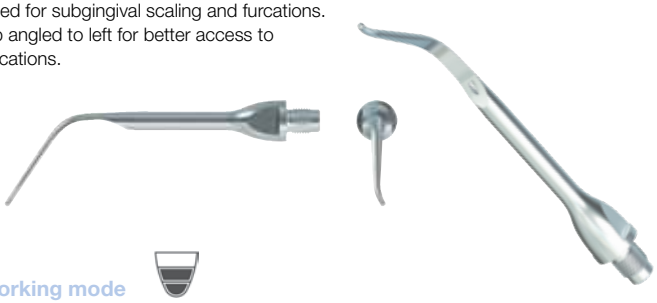
Used for subgingival scaling and furcations.



Working mode

Tip **PE-33L**

Used for subgingival scaling and furcations. Tip angled to left for better access to furcations.



Working mode

Tip **PE-33R**

Used for subgingival scaling and furcations. Tip angled to right for better access to furcations.

Working mode

Tip **PE-38**

Used for lingual and buccal subgingival scaling and furcations. Also suitable for supragingival fine scaling and spot removal.

Working mode

Tip **PE-38L**

Used for subgingival scaling and furcations. Also suitable for supragingival fine scaling and spot removal. Tip angled to left for better access to furcations.

Working mode

Tip **PE-38R**

Used for subgingival scaling and furcations. Also suitable for supragingival fine scaling and spot removal. Tip angled to right for better access to furcations.

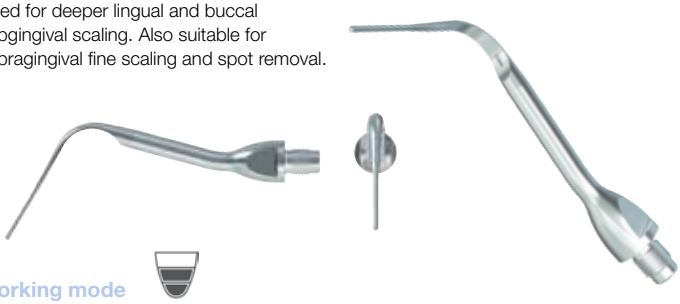
Working mode

Working mode coding:	Max 40 %	Max 70 %	Max 100 %

Scaling

Tip **PE-40**

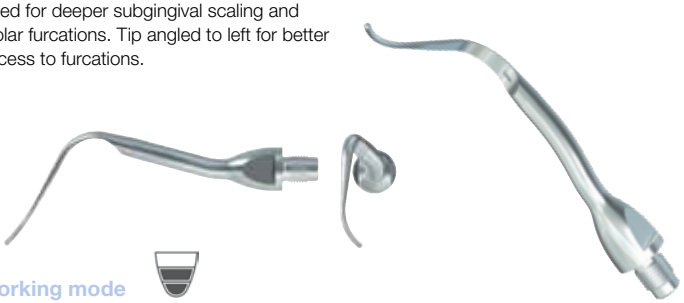
Used for deeper lingual and buccal subgingival scaling. Also suitable for supragingival fine scaling and spot removal.



Working mode

Tip **PE-40L**

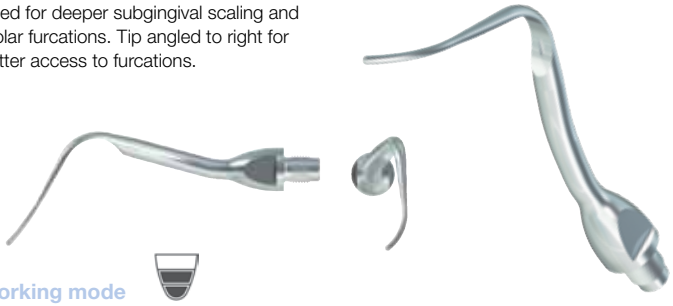
Used for deeper subgingival scaling and molar furcations. Tip angled to left for better access to furcations.



Working mode

Tip **PE-40R**

Used for deeper subgingival scaling and molar furcations. Tip angled to right for better access to furcations.



Working mode

Tip **PE-40H**

Used for deeper subgingival scaling. Especially suitable for lingual scaling of incisors.

Working mode

Tip **PE-41PS**

Used for deeper lingual and buccal subgingival scaling. Also suitable for supragingival fine scaling and spot removal.

Working mode

Working mode coding:  **Max 40 %**  **Max 70 %**  **Max 100 %**

Scaling

Implant maintenance

Tip **IM-1**

Used on implants for the removal of calculus on fixtures, abutments and crowns. The working end is coated with PEEK© material to avoid damaging or discolouring the implant. Used together with the instrument holders IH-1 or IH-2 (See p.17).

Pack of 4.

Working mode

Tip **IM-2**

Same design as IM-1, but the working end is angulated for better access to difficult-to-reach surfaces. Used together with the instrument holders IH-1 or IH-2.

Pack of 4.

Working mode

Working mode coding:  **Max 40 %**  **Max 70 %**  **Max 100 %**

Instrument holders

Tip **IH-1**

Holder for implant maintenance tips and AP-1 and AP-2 tips for apical surgery. Can also be used with endosonic files and other instruments with a diameter of 0.8 mm.

Working mode: See chosen instrument

Tip **IH-2**

IH-2 has the same shape and area of use as IH-1.

Working mode: See chosen instrument

Working mode coding: **Max 40 %** **Endo function: max 60 %** **Max 70 %** **Max 100 %**

Minimally invasive excavation

Minimally invasive excavation

With the aid of diamond-coated ultrasonic tips small preparations can be carried out without the unnecessary removal of the surrounding tooth substance. The tips can also easily be used for crown margins and cleaning fissures. The small diameter of the tips make them very suitable for treating children and the low noise level in comparison with rotating instruments is especially appreciated by nervous patients.

Tip **MI-1**

Straight tip, used primarily for incisors and more accessible surfaces.

Working mode

Tip **MI-2**

Slightly contra-angled, used for lingual and buccal work on molars.

Working mode

Tip **MI-3**

Contra-angled, used on lingual, buccal and distal areas.

Working mode

Tip **MI-4**

Heavily contra-angled, used on lingual, buccal and distal areas on molars and furcations.

Working mode

Working mode coding:	Max 40 %	Max 70 %	Max 100 %

Endodontics

Endodontics

Ultrasonic tips can be utilised in many areas in endodontics. They are truly excellent in the removal of posts, the removal of dentin in pulp chambers, finding and widening orifices, preparing canals, removing broken instruments and cleaning prepared canals.

Pulp chamber

Tip **EN-1**

Ball shaped tip used for the removal of crowns, bridges and a variety of posts set with various cementing agents. The tip is placed against the post and then moved in a circular fashion to remove it.

Working mode

Tip **EN-2**

Flat and round diamond-coated surface on the tip. Used for planing attached pulp stones from the pulp chamber floor. Compared to rotating instruments the risk of perforating the tooth is small.

Working mode

Tip **EN-3**

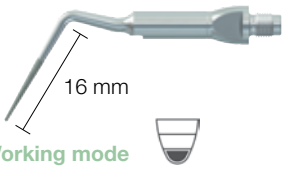
All-purpose, conical and diamond-coated tip primarily used in the pulp chamber for removing pulp stones, dentin and old fillings. Also for finding hidden openings.

Working mode

Caution! All endodontic tips are extremely sensitive and if not used correctly or with too much power or force they are subject to breakage. Do not exceed recommended working mode and always place the tip on the tooth surface before turning on the power.

Tip **EN-4**

Round diamond-coated tip for removing gross dentin, for moving access line angles, for cutting a groove in the mesial access wall to drop into the second mesial-buccal canal (MB2) systems, and for quickly and carefully unroofing pulp chambers.



Working mode

Tip **EN-12**

Flat and diamond-coated tip. Used in the pulp chamber for removing pulp stones and also for removal of dentin and old fillings. Compared to rotating instruments the risk of perforating the tooth is small.

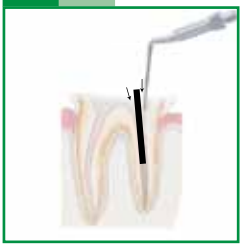
Working mode

Working mode coding: **Max 40 %** **Endo function: max 60 %** **Max 70 %** **Max 100 %**

Endodontics

Canal preparation

Tip **EN-5**



Used in the coronal and apical part of root canals. Amongst other things the tip can be used to trephine around posts, widen calcified canals, remove hard fillings and broken instrumens and other intra-canal obstructions.

Working mode

Tip **EN-6**

Primarily used in the coronal area of the root canal to trephine around posts. Also for chasing calcified canals halfway up a root. The water supply is placed at the furthest extremity of the tip for increased rinsing and cooling of the treated area.

Working mode

Tip **EN-7**

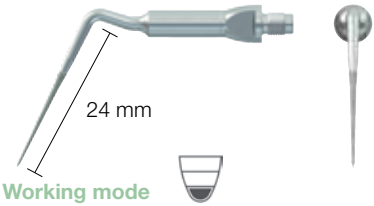
Same shape as tip EN-5, but 2 mm longer, and same areas of use. Used in the coronal, middle and apical one-thirds of roots.

Working mode

Caution! All endodontic tips are extremely sensitive and if not used correctly or with too much power or force they are subject to breakage. Do not exceed recommended working mode and always place the tip on the tooth surface before turning on the power.

Tip **EN-8**

Same shape as tip EN-5, but 7 mm longer, and same areas of use. Used in the coronal, middle and apical one-thirds of roots.



Working mode

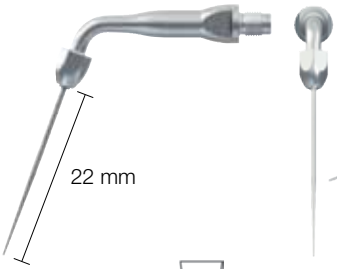
Tip **EN-13**

Diamond coated tip used in combination with the instrument holders IH-1, IH-2, IHs-1 or IHs-2 (see p.17). Used in the coronal and middle part of root canals. Used to remove posts, widen calcified canals, remove hard fillings, remove broken instruments and other intra-canal obstructions. Pack of 4.

Working mode

Tip **EN-14**

Used in combination with the instrument holders IH-1 and IH-2 (see p.17). Used as a plugger for lateral condensation of guttapercha. Pack of 4.



Working mode

Tip **EN-15**

Used in combination with the instrument holders IH-1, IH-2, IHs-1 or IHs-2 (see p.17). By using EN-15 in a fluid-filled root canal the ultrasonic vibrations clean the canal very efficiently. The resulting cavitation effect gives a proven high degree of cleanliness. Pack of 4.

Working mode

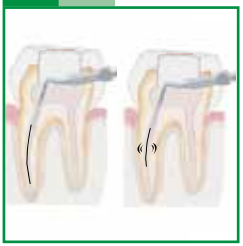
Working mode coding: Max 40 % Endo function: max 60 % | Max 70 % | Max 100 %

Endodontics

Removal of broken instruments

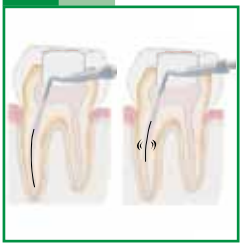
Tips EN-9, EN-10 and EN-11 are made of titanium and have no diamond coating. They hold a bend if applied forcefully. Titanium tips cut evenly and have an exceptional tactile sense. The small diameter makes them suitable for use in the apical part of root canals. Primary area of use is to isolate and remove broken instruments. Even broken instruments that are firmly stuck in the apical part of the root can often be removed by ultrasonic vibrations. Used in the mid and apical part of a root with illumination and magnification.

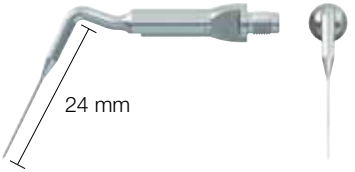
Tip **EN-9**



Working mode

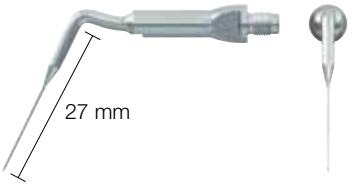
Tip **EN-10**





Working mode

Tip **EN-11**



Working mode

Caution! All endodontic tips are extremely sensitive and if not used correctly or with too much power or force they are subject to breakage. Do not exceed recommended working mode and always place the tip on the tooth surface before turning on the power.

File holders

FH-1, FH-2 and FH-3 are holders for hand files. By using the hand file in a fluid-filled root canal the ultrasonic vibrations clean the canal very efficiently. The resulting cavitation effect gives a proven high degree of cleanliness.

Tip

FH-1

Working mode

Tip

FH-2

Working mode

Tip

FH-3

Working mode

Working mode coding:	Max 40 % Endo function: max 60 %	Max 70 %	Max 100 %


SWISS
UNADJUSTED

Endodontics

Apical surgery

Endodontics

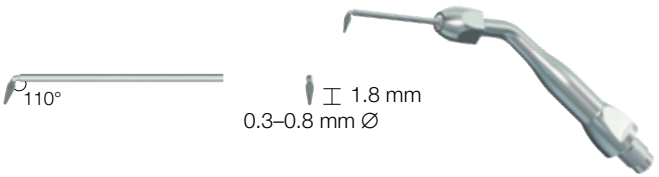
Apical surgery

The diamond-coated tips are used for opening and clearing the root when doing apical surgery. The long necks of the tips give excellent visibility and the ultrasonic vibrations in combination with the diamond coating give a higher degree of tactility and precision compared to rotating instruments.

Apical surgery tips are also available as sterile versions. See pages 35–37 for more information!

Tip **AP-1**

Used in combination with the instrument holders IH-1, IH-2, IHs-1 or IHs-2 (see p.17) With the aid of the instrument holder the AP-1 can be turned to precisely the angle needed for the treatment. Available in a pack of four.



Working mode

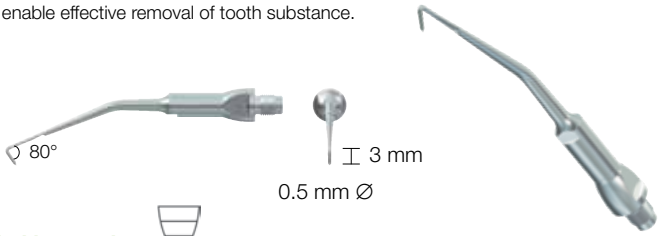
Tip **AP-2**

Same area of use as AP-1. AP-2 has a slimmer design and is therefore better suited for small roots. Available in a pack of four.

Working mode

Tip **AP-3**

AP-3 can be used as a universal tip on all teeth. The outermost 3 mm of the tip is diamond-coated to enable effective removal of tooth substance.



Working mode

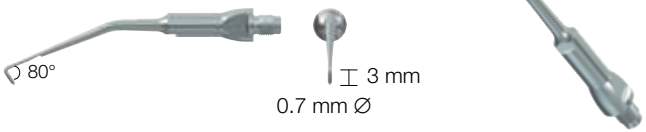
Caution! All apical surgery tips are extremely sensitive and if not used correctly or with too much power or force they are subject to breakage. Do not exceed recommended working mode and always place the tip on the tooth surface before turning on the power.

Endodontics

Apical surgery

Tip **AP-4**

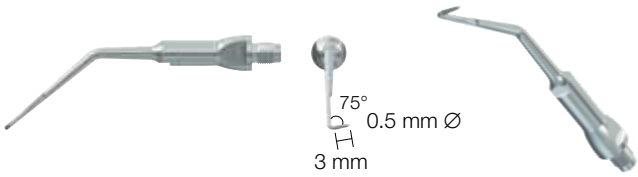
Same shape and area of use as AP-3, but is 0,7 mm in diameter making it more suitable for larger roots.



Working mode

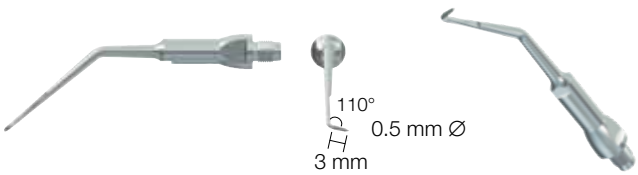
Tip **AP-5**

Designed for use on molar roots in the maxillary right and mandibular left.



Working mode

Tip **AP-6**



Working mode

Working mode coding:	**Max 40 %**	**Max 70 %**	**Max 100 %**

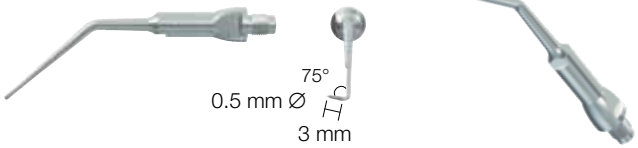
Endodontics

Apical surgery

Apical surgery tips are also available as sterile versions. See pages 35 -37 for more information!

Tip **AP-7**

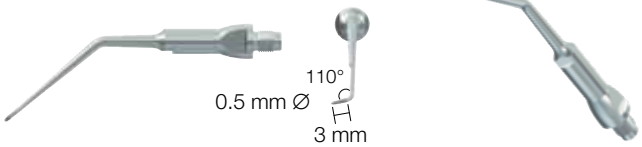
Designed for use on molar roots in the maxillary left and mandibular right.



Working mode

Tip **AP-8**

Designed for use on the roots of molars in the maxillary left and mandibular right.



Working mode

Caution! All apical surgery tips are extremely sensitive and if not used correctly or with too much power or force they are subject to breakage. Do not exceed recommended working mode and always place the tip on the tooth surface before turning on the power.

Working mode coding:	**Max 40 %**	**Max 70 %**	**Max 100 %**

Endodontics

Sterile apical surgery

Tips that allow sterile apical surgery. Treatment can be done with sterile water or desinfectants. The diamond-coated tips are used for opening and clearing the root. The long necks of the tips give excellent visibility and the ultrasonic vibrations in combination with the diamond coating give a higher degree of tactility and precision compared to rotating instruments.

Tip **APs-3**

Tip for sterile treatment. Used as a universal tip on all teeth. The outermost 3 mm of the tip is diamond-coated to enable effective removal of tooth substance.

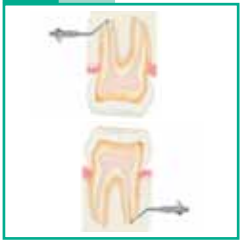
Working mode

Tip **APs-4**

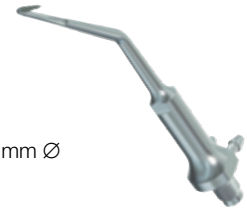
Tip for sterile treatment. Same shape and area of use as AP-3s, but is 0.7 mm in diameter making it more suitable for larger roots.

Working mode

Tip **APs-5**



Designed for sterile treatment of molar roots in the maxillary right and mandibular left.



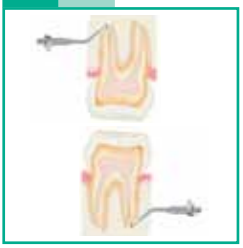
Working mode

Caution! All apical surgery tips are extremely sensitive and if not used correctly or with too much power or force they are subject to breakage. Do not exceed recommended working mode and always place the tip on the tooth surface before turning on the power.

Endodontics

Sterile apical surgery

Tip **APs-6**



Designed for sterile treatment of molar roots in the maxillary right and mandibular left.

Working mode

Tip **APs-7**

Designed for sterile treatment of molar roots in the maxillary left and mandibular right.

Working mode

Tip **APs-8**

Designed for sterile treatment of the molar roots of molars in the maxillary left and mandibular right.

Working mode

Working mode coding:	Max 40 %	Max 70 %	Max 100 %

Endodontics

Sterile apical surgery

Tip **IHs-1**

Sterile instrument holder for use with AP-1 and AP-2 tips for apical surgery. Can also be used for endosonic files and other instruments with a diameter of 0.8 mm.

Working mode: See chosen instrument

Tip **IHs-2**

Same shape and area of use as IHs-1.

Working mode: See chosen instrument

Caution! All apical surgery tips are extremely sensitive and if not used correctly or with too much power or force they are subject to breakage. Do not exceed recommended working mode and always place the tip on the tooth surface before turning on the power.

Working mode coding:	**Max 40 %**	**Max 70 %**	**Max 100 %**

Special purpose

Special Purpose

Ultrasonic technology can today be used for much more than just scaling and endodontics. Ultrasonic tips can be used to remove crowns, for amalgam condensation and for the application of thixotropic cementation.

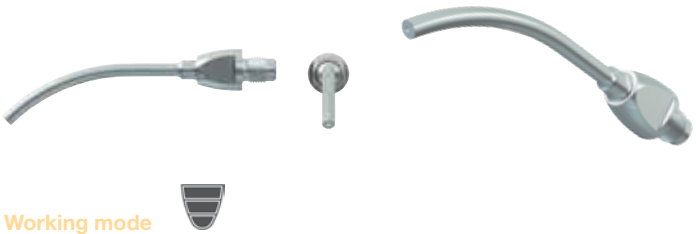
Tip **SP-34**

Used for removing crowns and inlays.

Working mode

Tip **SP-34S**

Same shape and area of use as SP-34, but with a smaller diameter to make inaccessible areas reachable.



Working mode

Tip **SP-35**

Used for amalgam condensation.

Working mode

Tip **SP-35A**

Used for applying thixotropic cementation together with crowns and inlays. The extremity of the tip is covered in plastic so does not damage the crown or inlay.

Working mode

Tip **SP-35B**

Same shape and area of use as SP-35A, but with a considerably more open angle.

Working mode

Tip **SP-35C**

Same shape and area of use as SP-35B, but with a considerably more open angle.

Working mode

Working mode coding:	 **Max 40 %**	 **Max 70 %**	 **Max 100 %**

Wrench selection

Attachment and removal of tips

Wrench **LM-10089S**

Universal tip wrench

Wrench **LM-10089**

Universal plastic tip wrench

Wrench **LM-10088S**

Torque tip wrench

Wrench **LM-10037**

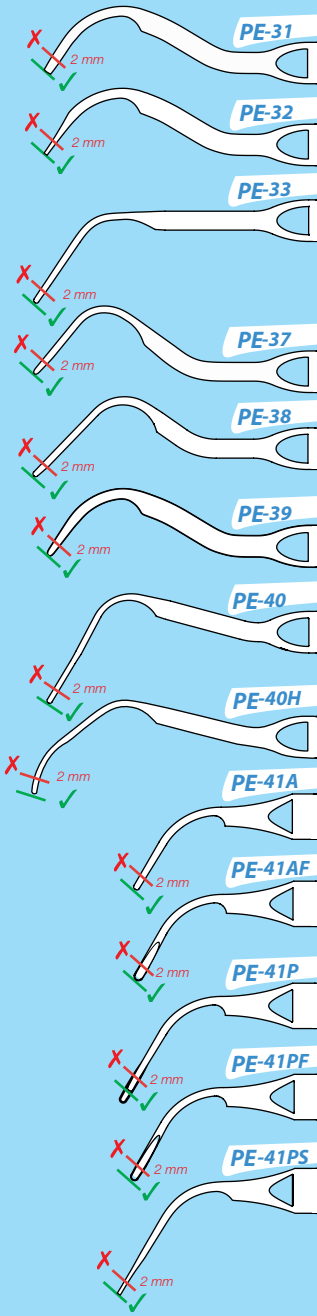
Wrench for file holders

Check your tips!

Remember to check your periodontal tips with this template regularly. When a tip is worn down more than 2 mm replace it to

....increase efficiency and accessibility
....increase patient comfort
....increase safety
....save time and money.

Place the tip on the diagram to check for wear.



The tips presented in this book are compatible with all LM and Amdent ultrasonic table top and built-in devices.

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