

ORAL HYGIENE

Varios Combi Pro / Varios series / Ti-Max S970 / Prophy-Mate neo / Perio-Mate / Contra-angles



CREATE IT.

Advanced oral care for dentists and hygienists

Removal of tartar and biofilm below and along the gum line together with tooth cleaning and polishing.

Significantly improves the results of periodontal treatment.

NSK's wide range of oral hygiene products satisfies all these scenarios.

To maintain teeth in a healthy condition over a long period which is of great importance for patients.

NSK supports your daily clinical practice with effective and comfortable to use professional oral care equipment such as our high-performance ultrasonic and powder devices.

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2 in 1

Ultrasonic Scaling × Powder Therapy



For oral hygiene specialists.

New from NSK, the global No.1 handpiece brand.

Varios Combi Pro

Two Maintenance Systems in One

Combining ultrasonic scaling and powder therapy for more effective and comfortable oral hygiene and biofilm control.



Ultrasonic scaling for all

Powder therapy for supragingival

Powder therapy for subgingival (as option)

Innovative New Design Enables Clinicians to Safely and Efficiently Combine Two Applications.

Two systems in one

NSK has combined ultrasonic treatment and powder therapy into a single professional treatment unit that streamlines procedures and saves time and space.

Automatically sets powder therapy functions for Supragingival or subgingival applications

The clinician simply attaches the relevant powder chamber, and the unit automatically selects the functions for supragingival or subgingival applications. This prevents selection errors.

Independent unit and chamber

The detachable chamber and handpiece make it possible to easily switch between supragingival and subgingival applications and make the unit extremely user and maintenance friendly.

No more clogging

By keeping the control unit, handpiece and handpiece hose separate the risk of powder blockages inside the unit has been completely eliminated. The components carrying powder and water are all easily accessible for maintenance and service.

Keeps both powder types separate

Separate chambers, handpieces, and handpiece hoses for supragingival and subgingival procedures eliminate the risk of powder mixing or powder entering the control unit.

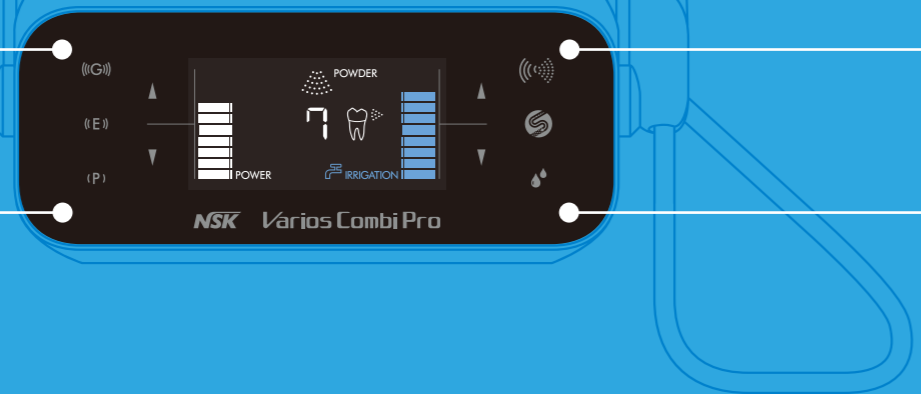
Optimizing Manoeuvrability

Clear Display

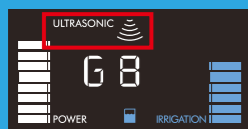
A clear function display enhances safety and efficiency by enabling clinicians to quickly confirm which programme is in use: supragingival, subgingival or ultrasonic, the 10 power levels and spray water volume.

Large LCD Panel

The LCD panel offers excellent visibility and contrast and is specially coated to resist powder scratches.



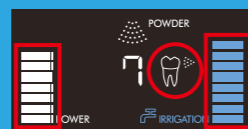
During Ultrasonic function



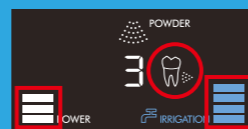
During Powder function



When using Supragingival



When using Subgingival



Automatic Switching

An automatic recognition sensor switches from ultrasonic to powder function when a handpiece is picked up from the holder.

Store Previous Settings

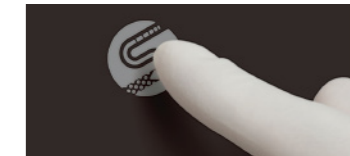
The system memory can store such treatment parameters as water volume, air pressure and ultrasonic power settings. Simply pick up the handpiece to switch settings.

* For powder functions, settings change when replacing the chamber.

Easy Maintenance

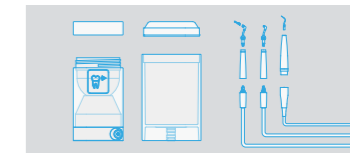
Auto-cleaning function

Auto-cleaning automatically cleans the handpiece and hose after powder or ultrasonic applications. During the cleaning cycle, the display shows the time remaining to complete the process which takes approximately 45 seconds from start to finish.



Easy maintenance

The nozzle, handpiece, handpiece hose and chamber are easy to disassemble.



Smooth surfaces for easy cleaning

The body is seamless and smooth, making it easy to remove powder residues. The display material has been treated with a scratch resistant coating.



Controls all Key Operations for Procedures

Multi-Foot Control

NSK extensively researched foot movement and sensory feeling when developing the Multi-Foot Control to enable clinicians to operate the unit hands-free to facilitate uninterrupted procedures. Just using the foot the user can switch ultrasonic or powder functions on or off and change power settings. Combined with a hanger, this offers complete hands-free operations.



Optional PERIO-SYSTEM

MODEL : Varios Combi Pro Perio Set ORDER CODE : Y1003042

Contents :

- PERIO-CHAMBER ● PERIO-Hose ● PERIO-Handpiece ● Perio-Mate nozzle tip ● Perio-Mate nozzle tip remover ● Perio-Mate powder



Varios Combi Pro Basic Set

MODEL : Varios Combi Pro Basic Set ORDER CODE : Y1002843

Contents :

- PROPHY-Handpiece with 60° Nozzle ● PROPHY-Hose ● PROPHY-CHAMBER ● FLASH pearl (5 pcs. x 15 g sachets) ● Maintenance kit ● VA2LUX-Handpiece ● VA2LUX-Hose ● 3 Scaling tips ● Sterilization case ● Irrigation bottle (400 mL) ● Foot control

Specifications :

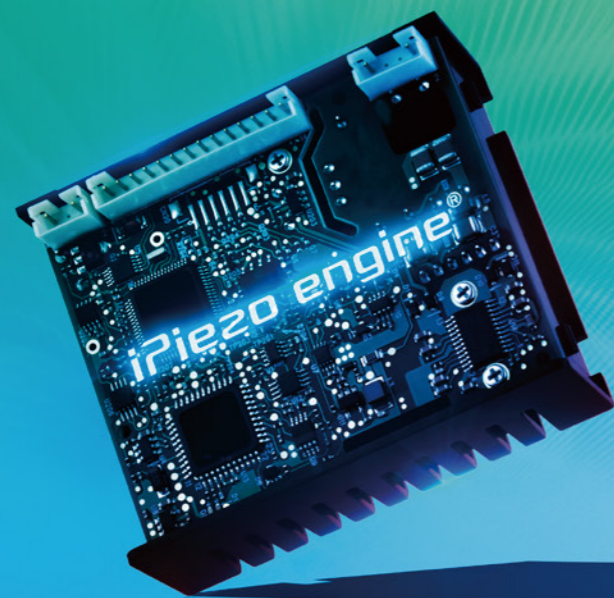
- Power supply : AC 100-240 V 50/60 Hz
- Frequency : 28-32 kHz
- Dimensions : W 225 x D 290 x H 162 (mm) (including chamber)
- Unit weight : 2.6 kg (Except attachment)
- Bottle volume : 400 mL



iPiezo engine®

The unique ultrasonic AI engine responds intelligently to tooth surface conditions

"I'd like to be better at scaling", "I'd like an easier way to remove deposits"
 We carefully considered the opinions of clinicians in the development of our unique next-generation AI ultrasound engine which is at the heart of the NSK ultrasonic series. The actions of the operator are transmitted accurately to the tip, as if it were an extension of the hand. This allows treatment to match tooth surface conditions. The result is faster and gentler treatment for patients and at the same time eco friendly as it operates efficiently with low power consumption.



Fitted with the next-generation ultrasonic AI engine, the iPiezo engine®

NSK's unique high-performance ultrasonic iPiezo engine allows for smooth operation as it transmits the operator's movements to the tip.

Feedback Function

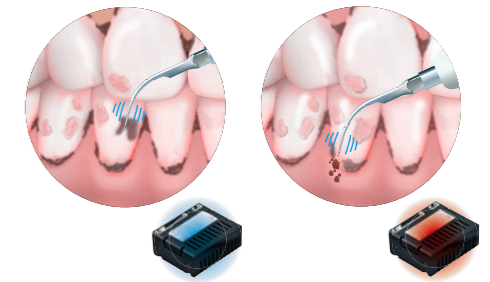
The NSK iPiezo engine supplies the appropriate power to the tip depending on the condition of the tooth surface. iPiezo engine provides a stable frequency output without dropping the power, even when removing hard calculus.

Auto Tuning Function

The Auto Tuning Function provides stable frequency to the tip at the selected power range. It allows the operator to feel the power output which ensures the optimum result.

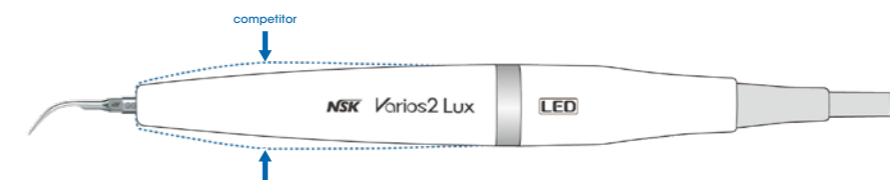
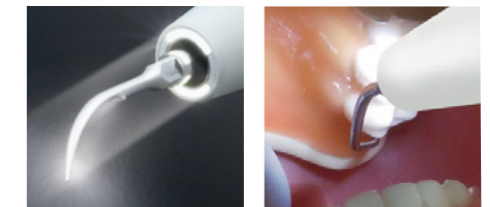
Allows for steady scaling

Conventional ultrasonic scalers lose power when moving from soft to hard tartar. The load on the end of the tip is automatically detected by the action of the iPiezo engine allowing for steady scaling without power-loss.



LED A slim highly-ergonomic LED handpiece

The ø9.5 mm slim tip of the Varios2 LUX handpiece makes it easy to operate throughout the entire oral cavity. The slim handpiece facilitates a smooth approach to difficult to access areas such as the molars. This provides freedom of movement in the oral cavity allowing the tip to be applied at the correct angle. The easy to grip ultra-light handpiece reduces strain on the hands and fingers. With a wide spectrum of close to natural light LED illumination, the view is always bright with high recognition capability.



Autoclave sterilization and thermo-disinfection are both possible, delivering high safety standards

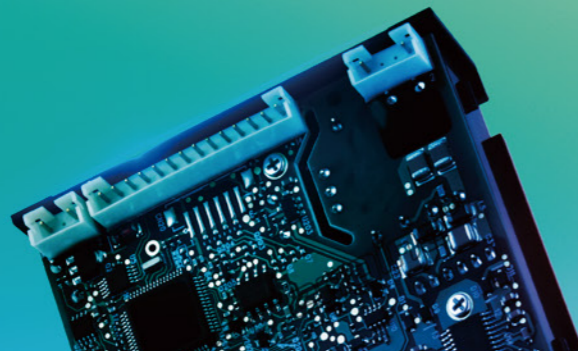


Sterilization Case

The handpiece, tips and tip wrenches can be sterilized together for your convenience.

Varios Series Be Smart.

NSK offers a wider range of progressively intelligent ultrasonic treatments with our unique next-generation AI engine and 70 varieties of tips



Varios 970 Optic LED Multifunction Portable Unit for Extreme Versatility

The smart compact design provides high-performance

The functionality required for ultrasonic applications is available in the most-advanced model in our compact series, the Varios 970. Our high-capacity 2 bottle system allows users to focus on safe treatment without worrying about water irrigation. Simple daily maintenance with auto rinse function and seamless body design. Through intensive study of user feedback we have managed to achieve high operability and safety.

Large LED Display

The large LED display has a 10 stage numeric power display and bar graph to show the irrigation volume.

Beyond this, intuitive layout of operating keys minimize user errors. Power adjustment and function selection can be performed easily and reliably.



Large Solution Bottles

The two bottles can be placed and removed easily and can be used for any type of irrigation to complement treatment. Large 400 mL bottles deliver ample irrigation capacity and reduced chair time. Repeated tests of our components and material studies ensure high durability even when used extensively with antiseptic irrigation solutions.



Improved Durability Against Antiseptic Solutions

The introduction of the resin based water pipe of the bottle, pump and handpiece, assures dramatically improved durability as it substantially reduces the corrosion and rust caused by the residuum of antiseptic solutions.



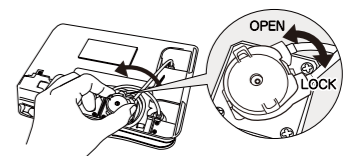
Auto Cleaning Mode

The Auto Cleaning Mode flushes the tubing, handpiece and tips at the push of a button when required. The two channels can be flushed independently.



Easy Replaceable Irrigation Pump

As you are able to replace the components of the irrigation system yourself, most issues can be dealt with on site.



Varios 970 Complete Sets Optic Varios 970 Optic Complete Set

MODEL : VA970 LUX ORDER CODE : Y1001168

Non-Optic Varios 970 Non-Optic Complete Set

MODEL : VA970 ORDER CODE : Y1001175



Contents :

- Control unit ● Handpiece ● Handpiece cord ● 3 Scaling tips ● Foot control (FC-70)
- 2 x Irrigation bottles ● 3 x Tip wrench with torque limiter ● AC power cord ● Sterilization case

Specifications :

- Power supply : AC 230 V 50/60 Hz
- Frequency : 28-32 kHz
- Max. output : 11 W (G mode)
- Dimensions : W 160 x D 270 x H 190 (mm) (Including bottle)
- Unit weight : 2.1 kg (Except attachment)
- Bottle volume : 400 mL (x2 bottles)

Varios 370

Optic LED
Non-Optic

Compact Multipurpose Control Unit at Your Fingertips

Varios 370 has been especially developed to offer a compact, portable control unit allowing easy installation into any dental unit. It is simple to operate and suitable for a variety of clinical procedures.



Advantages

- Powered by iPiezo engine
- Potable ultra compact body
- Simple and intuitive operation control panel



Varios 370 Units Installation Examples



On the dental console arm with Stand (optional).



On/Under the dental bracket table with Control Unit Holder.



Varios 370 Complete Sets



Optic Varios 370 Optic Complete Set
MODEL : VA370 LUX ORDER CODE : Y1001388

Non-Optic Varios 370 Non-Optic Complete Set
MODEL : VA370 ORDER CODE : Y1001391

Contents :
• Control unit with handpiece cord • Control unit holder • AC adaptor • Handpiece • Handpiece holder
• Water filter set • Foot control (FC-71) • 3 Scaling tips • Tip wrench with torque limiter

Specifications :
• Power supply : AC 100-240 V 50/60 Hz • Dimensions : W 80 x D 115 x H 32 mm (without knob and cord)
• Frequency : 28-32 kHz • Unit weight : 0.43 kg (without attachment)
• Max. output : 11 W (G mode)

Varios 570

Optic LED

Compact and Versatile

Varios 570 offers three power modes selectable to the tip connected to the handpiece; "G"(general), "E"(endo) and "P"(perio). Power level can be fine-turned within the range of given power mode. In particular, P mode offers minimal yet steady power for more effective periodontic treatment.

Advantages

- Powered by iPiezo engine
- Compact and appropriatesized body design
- User friendly and intuitive operation control panel



Varios 570 Complete Set

Optic Varios 570 Optic Complete Set



MODEL : VA570 LUX ORDER CODE : Y1001746

Contents :

• Control unit with handpiece cord • AC adaptor • Handpiece • Water filter set • Water supply connector • Foot control (FC-70) • 3 Scaling tips • Tip wrench with torque limiter

Specifications :

• Power supply : AC 100-240 V 50/60 Hz	• Dimensions : W 160 x D 135 x H 65 (mm)
• Frequency : 28-32 kHz	• Unit weight : 0.43 kg
• Max. output : 11 W (G mode)	

Varios 170

Optic LED
Non-Optic

Integrated Multi Function Ultrasonic Scaler

The Smallest Module for Easy Integration into New and Existing Dental Equipment

Varios 170 is the world's smallest built-in optic control module. It features the NSK iPiezo engine which ensures stable power output all the times. The slimmer and extremely lightweight handpiece with twin LED is easily added to the existing handpiece delivery unit and is controlled via the existing foot control.

Varios 170 Complete Sets

Optic Varios 170 Optic Complete Set MODEL : VA170LUXS1 ORDER CODE : Y1001351

Non-Optic Varios 170 Non-Optic Complete Set MODEL : VA170S1 ORDER CODE : Y1001352

Contents :

• Built in module • Handpiece • Handpiece cord • 3 Scaling tips • 3 x Tip replacement wrench with torque limiter • Sterilization case

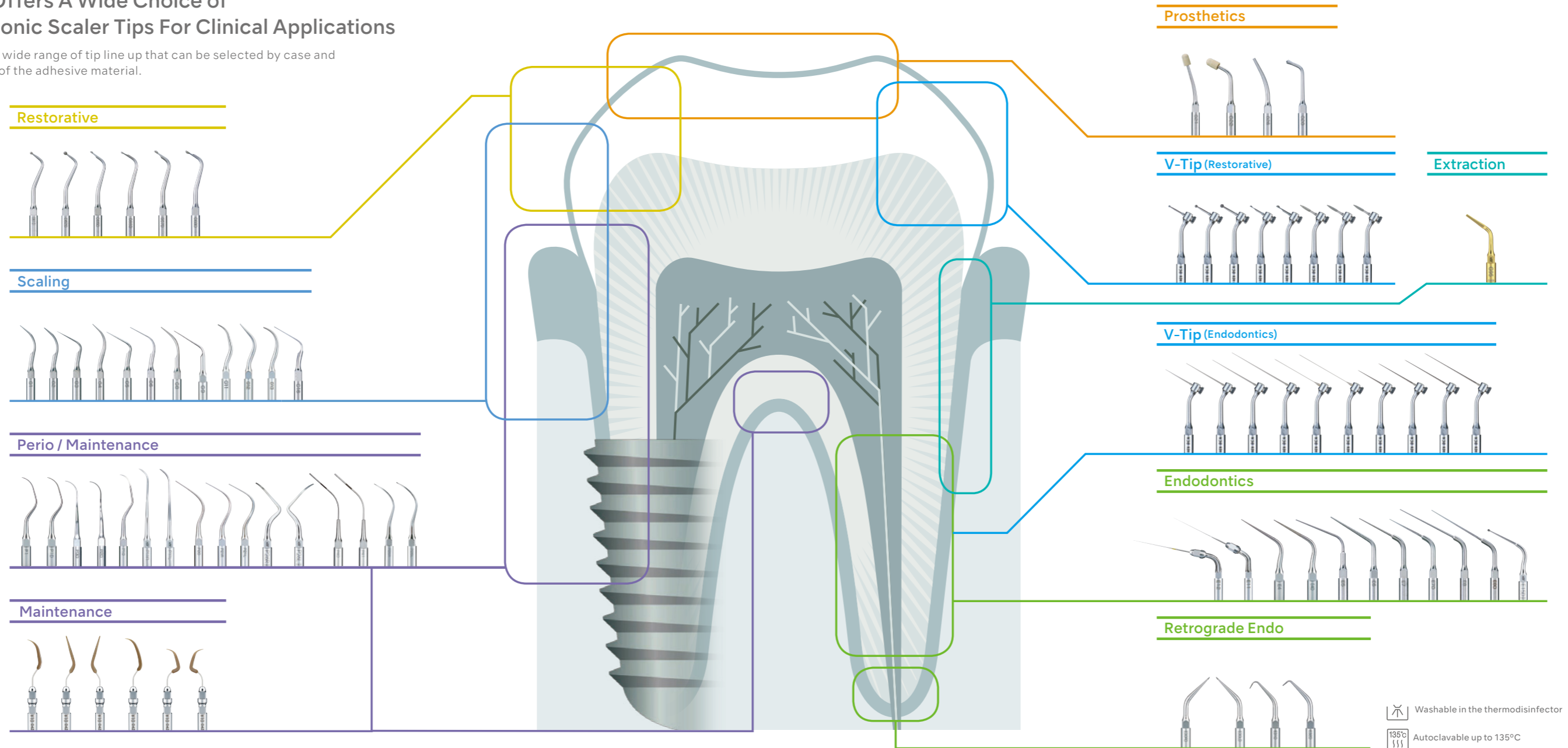
Specifications :

• Power supply : AC 24 V ±10% (or DC 24-36 V)	• Dimensions : W 63 x D 54 x H 26 (mm)
• Frequency : 28-32 kHz	• Module weight : 59 g
• Max. output : 11 W	

Tip Variation

NSK Offers A Wide Choice of Ultrasonic Scaler Tips For Clinical Applications

There is a wide range of tip line up that can be selected by case and the state of the adhesive material.



Washable in the thermodisinfectant
Autoclavable up to 135°C

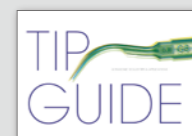
Scaling / Perio tip cross section & characteristics of the tip types

Varios tips have distinct appearances, and also different cross-sections, component materials and surface finishes. The tip is selected by case and the state of the adhesive material. This makes for effective use without undue impact on the tooth surface or soft tissue.

Cross-section / tip	Material / tip end	Results of scaling treatment	Kind to teeth	For
G1, G5, G6 G8, G9, G16	Metallic mirror finish	⊙	△	Scaling at and below the gumline
P1, P20 P21R/L, P25R/L	Metallic mirror finish	△	⊙	Stain removal at and below the gumline / maintenance
P1D, P2D, P3D	Metal diamond machining	○	○	Scaling below the gum line (adjacent surface / bifurcation)

Cross-section / tip	Material / tip end	Results of scaling treatment	Kind to teeth	For
P10 P11R/L, P26R/L	Metallic sharp edge	⊙	△	Scaling below the gumline
P40, P41	Metallic, lateral tip, two point water irrigation	△	⊙	Irrigation
V-P10, V-P11R/L V-P12, V-P26R/L	Plastic	○	○	Prosthetic repair work Implants

See Tip Guide for details.



Ti-Max S970 Optic Non-Optic Air Scalers

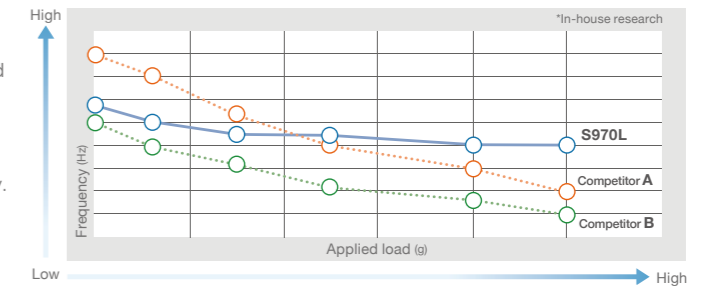
Air Scaler Evolution Supporting a Broad Spectrum of Care

The S970 air scaler offers a wide power range with easy swivel power adjustment and an extensive tip range for a wide variety of applications ranging from general scaling and root canal irrigation to minimally invasive procedures. The wide range of applications, comfortable grip and ease of maintenance makes the S970 air scaler the instrument of choice for dentists and hygienists alike. A titanium body and sleek, sealess design make the S970 really comfortable to hold even during long procedures whilst allowing for excellent visibility of the operating site at all times.



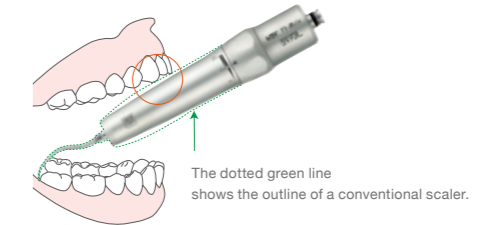
Steady power supply to the tip

S970 air scalers provide stable power output and constant oscillating movement across the entire power range at approximately 6,000Hz. S970 air scalers are extremely gentle and therefore very popular in cases involving perio or high sensitivity.



Excellent visibility

The sleek design of the S970 allows for unrestricted visibility of the treatment area and excellent access to even the most hard to reach areas.



Smooth and easy power control ring

NSK Power Ring offers three different power level settings for diverse clinical needs. While the gentle minimum mode is for delicate procedures, the maximum power mode is good for general scaling.



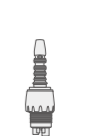


- Titanium Body with Scratch Resistant DURACOAT ● 3 level Power Ring
- Frequency of oscillation : 5,800-6,200 Hz ● Cellular Glass Optics

Applications	Tips	Power Ring Setting		
		1	2	3
Scaling	S1, S2, S3	←→→→		
Perio	S10, S20, S21R, S21L	←→→		
Perio (Maintenance Tip)	S35+V-Tip (V-P10, V-P11R, V-P11L, V-P12)	←→→		
Restorative (For Preparation of crown cores)	S81D, S82D, S83D, S86D, S71D, S72D	←→→		
Restorative (For Minimal Intervention)	S65D, S66D, S67D, S68D	←→→		
V-TIP SYSTEM (Endodontics)	S75+V-Tip (V-U15-V-U35)	←→		

The above power level is standard. Please start use from a low level to correspond to the symptoms.

Coupling Lineup

	NSK	NSK	KaVo®	Sirona®
MODEL	S970L	S970	S970KL	S970SL
ORDER CODE	T1005	T1020	T1013	T1015
Optic / Non-Optic	Optic	Non-Optic	Optic	Optic
COUPLINGS	 NSK Coupling		 KaVo® LED Coupling	 Sirona® LED Coupling

Contents : ● 3 tips (S1, S2 & S3) ● Tip wrench (CR-20) ● Tip cover (L)

 Washable in the thermoisinfecteur  Autoclavable up to 135°C

AS2000 Air Scalers

● Frequency of oscillation : 5,600-5,850 Hz ● 3 tips (S1, S2 & S3) ● Tip Wrench (CR-20) ● Tip cover (L)



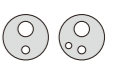
Non-Optic MODEL : AS2000 M4 ORDER CODE : T698

● For Midwest 4 hole ● Weight : 67 g



Non-Optic MODEL : AS2000 B2/3 ORDER CODE : T697

● For Borden 2/3 hole ● Weight : 64 g



Tip Variation

NSK Offers A Wide Choice of Air Scaler Tips For Clinical Applications

There is a wide range of tip line up that can be selected by case and the state of the adhesive material.

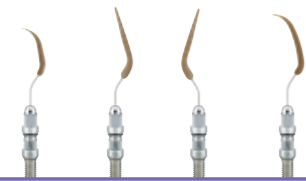
Scaling



Perio



Perio (Maintenance Tip)



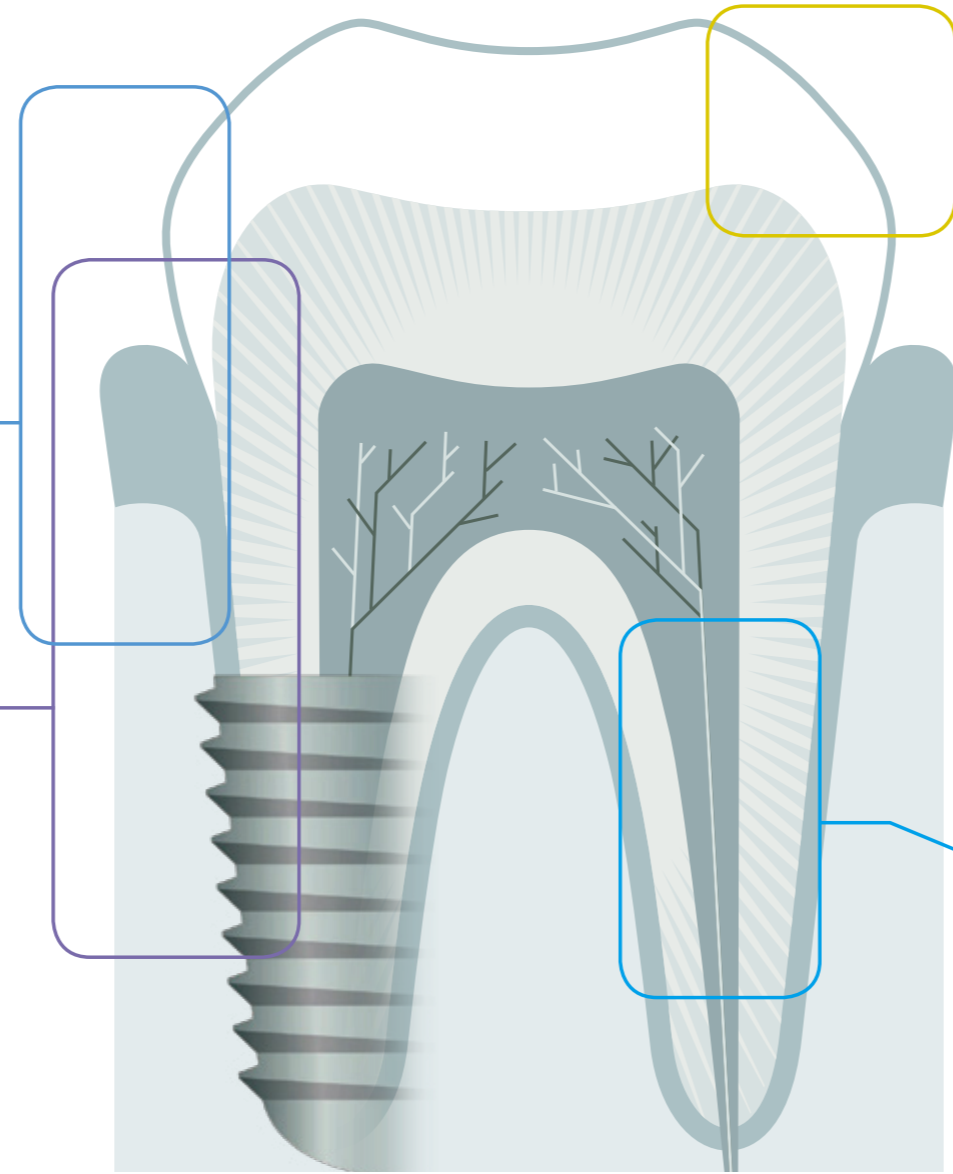
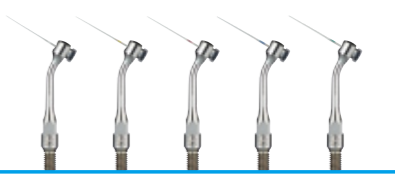
Restorative (For Minimal Intervention)



Restorative (For preparation of crown cores)

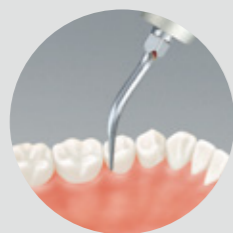


V-TIP System (Endodontics)



Washable in the thermodisinfectator Autoclavable up to 135°C

Scaling



Removal of sub gingival calculus

Perio

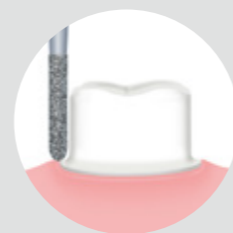


Removal of gingival biofilm

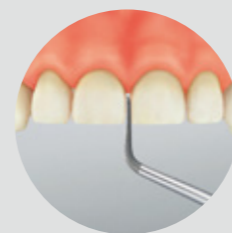


Maintenance of prostheses and implants

Detailing and finishing



Used for the final finish margins



Preparation of interproximal areas

The tips can be used for finishing margins after prepping the area with a conventional dental bur. That enables you to finish minute sharp edges and gingival sulcus without damage, something that cannot be accomplished with rotary instruments alone. The torpedo shaped tip is suitable for the final formation of an adjacent surface margin such as for laminated veneers. Low risk of excessive grinding and dentin exposure enables more conservative formation of the adjacent surfaces.



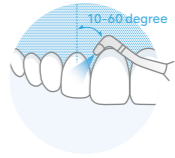



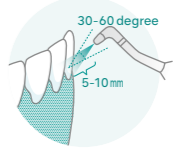
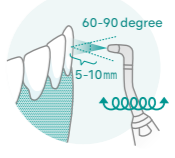



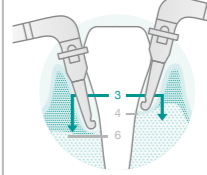

See Tip guide for details.



Powder Therapy

For long lasting, beautiful and healthy teeth

NSK powder therapy enables non-contact cleaning even in locations where deposits can't be removed as direct contact equipment tips, such as scalers, cannot reach them. Wide-ranging usability above and below the gumline, together with extensive powder discharge minimises clean-up of biofilm or plaque spillages. Considerably reduces chair time whilst increasing effectiveness. Comfortable for the operator and for the patient. The first step to a new experience in dental hygiene from NSK.

Solution	For	At	By	With
<p>Prophy-Mate neo</p>  <p>Removal of discoloration Removal of biofilm</p>	Natural tooth	 <p>Supragingival</p>	 <p>10-60 degree</p>	 <p>FLASH pearl</p>
<p>Varios Combi Pro</p>  <p>Removal of plaque Removal of biofilm</p>	Natural tooth	 <p>Supragingival (Gingival margin)</p>	 <p>30-60 degree 5-10mm</p>  <p>60-90 degree 5-10mm</p>	 <p>Perio-Mate Powder</p>
<p>Perio-Mate</p> 	Prosthetic tooth	 <p>Subgingival</p>	 <p>3 4 6</p>	 <p>Perio-Mate Powder</p>

Varios Combi Pro

Varios Series

TI-Max S970

Prophy-Mate neo

Perio-Mate

Contra-angles

Prophy-Mate neo Air Powered Tooth Polishing System

Prophy-Mate neo, the best polishing tool for beautiful white teeth

Supragingival powder polishing is highly effective when used in combination with "FLASH pearl." NSK's unique twin nozzle achieves powerful powder discharge. The long and slim handpiece in conjunction with the small nozzle tip dramatically improves accessibility around all tooth surface. Cleaning can be performed quickly even in interproximal areas teeth and in usually difficult to reach areas. The ergonomically designed grip is comfortable to hold and allows for flexible operation.



Improved Polishing Power

With NSK original twin nozzles, greater polishing power is realized. With powerful jet, cleaning time is greatly shortened thus reduces treatment time.



Easy Detachable Nozzles with 60° and 80°

Selectable 60° and 80° nozzles maximize the cleaning ability. 60° nozzle works especially well for molar area and occluding surface and 80° nozzle for anterior tooth.



Smooth, Easy 360° Swivel

Twin joints rotate smoothly 360 degrees for easy operability, responding flexibly to minute fingertip movements with effortless adjustment of the nozzle angle.










Simple One-touch Connection

The Prophy-Mate neo is designed for a one-touch attachment to NSK couplings and other major coupling brands. The handpiece also can be attached to the powder case with one-touch operation.



Coupling Lineup

	NSK	KaVo®	Sirona®	W&H®	Bien-Air®	M4	B2
MODEL	PMNG-PTL-P	PMNG-KV-P	PMNG-SR-P	PMNG-WH-P	PMNG-BA-P	PMNG-M4-P	PMNG-B2-P
ORDER CODE	Y135029	Y135030	Y135031	Y135032	Y135033	Y135034	Y135035
COUPLINGS	 NSK Coupling	 KaVo® Coupling	 Sirona® Coupling	 W&H® Roto Quick	 Bien-Air® Unifix®	 Connect direct to the handpiece tubing MIDWEST	 Connect direct to the handpiece tubing BORDEN

Contents :

● Handpiece with 60° nozzle head ● Powder case ● Replacement nozzle head 80° ● 5 pcs. x 15 g sachets of FLASH pearl cleaning powder ● Maintenance kit

*No light during use (when using optic coupling).

 The handpiece can be washed in the thermoisinfectant

 Autoclavable up to 135°C

FLASH pearl

Cleaning Powder

Outstanding Cleaning Results with Gentle Powder

Not salty! The powder has less impact due to the delicate flavour and provides patients with gentle tooth surface cleaning. The secret behind intense cleaning and a smooth finish? Calcium-based spherical particles. Fine powder with an average particle size of 54 μm move as if rolling across the surface of the tooth, limiting damage to the tooth surface and rapidly removing plaque and staining. The "FLASH pearl" treatment is effective in a short space of time which encourages patients to schedule regular cleaning appointments.



Sparkling results every time

FLASH pearl, a cleaning powder for Prophy-Mate neo and Varios Combi Pro, is a spherical particulate powder designed to roll smoothly over tooth surfaces and penetrate all corners for rapid cleaning. The spherical shape of the powder granules lessens the likelihood of damage to teeth and soft tissue while removing stains and plaque quickly and safely.

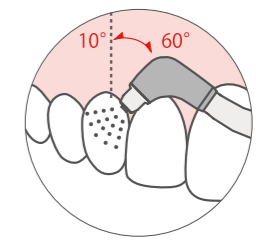
☆ Adverse reactions to this product are rare.



Fast cleaning in tight spaces

The nozzle is held close to the tooth surface at an angle close to horizontal (10° to 60°) and maneuvered in an intricate motion as if the powder is moving across the tooth surface. The wide discharge angle and free range of discharge motion allow for smooth operation and contribute to improved treatment efficiency.

☆ Please do not apply directly to the gumline.



Zero salinity, gentle ingredients with low impact on patients

As the powder is composed of 94% calcium carbonate, it is not unpleasant for your patients and absent in any salt-like taste. There's no need to worry about patients on restricted salt diets.

Clogging is also minimized

The fine powder particles don't dissolve easily in water so clogging is reduced. Maintenance of equipment is easy as there is less powder build-up inside instruments.

FLASH pearl Cleaning Powder



MODEL : FLASH pearl (Bottle)
ORDER CODE : Y900698

- 4 bottles packed in a box
- Comes with a measuring cup for your convenience
- Each bottle contains 300 g

Perio-Mate Biofilm Eraser

Extensive range of applications ranging from supragingival to subgingival use

By removing the Perio-Mate nozzle tip, the subgingival area up to 3 mm from the gum line that requires the most frequent maintenance can be treated. In addition, there is a powder flow rate adjustment function to match operational site conditions, to enable a wide range of possible treatments from fast precise removal of biofilm to gentle and efficient biofilm removal around implants and in the delicate periodontal pocket.



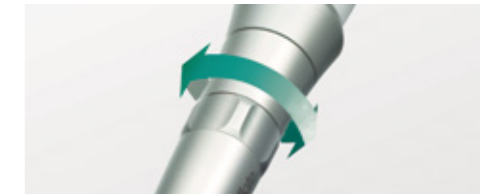
Powder Pro Care, Above And Below The Gums

Efficient professional care that's kind to teeth. It is easy to install powder therapy alongside existing facilities.

- The "handy type" can be connected to the chair unit during use in one action.
- The nozzle tip is designed for safety and operability.
- The powder flow channel is short and direct with low risk of blockage.
- Fast and effective biofilm removal.

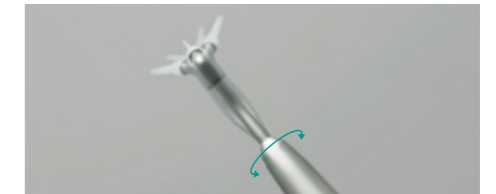
Powder flow volume adjustment

The Perio-Mate's convenient Powder Control Ring makes fine-tuning powder flow simple and intuitive with quick fingertip adjustments. In addition to easily controlling and stopping the flow of powder in this way, you can cleanse the treatment area from biofilm uninterruptedly.



Smooth 360-degree rotation for safe and accurate operation

The handpiece can easily be rotated using the fingertips even while performing complex operations. The nozzle tip allows easy access to difficult to reach areas, and does not adversely affect neighbouring teeth and contours.



Slim nozzle facilitates operation in the narrow confines of the oral cavity

The long, narrow nozzle shape is designed to allow easy access to areas that require inserting the handpiece at an angle, such as between molars.









Product maintenance

The user can easily disassemble the nozzle, handpiece and powder case. Powder clogging is unlikely when handled and maintained correctly but is easy to manage by following the maintenance guidelines and the relevant accessories included with the product. All the parts of the handpiece (other than the nozzle tip) can be repeatedly cleaned ultrasonically or sterilized in an autoclave.





Coupling Lineup

	NSK	KaVo®	Sirona®	W&H®	M4	B2
MODEL	PER-PTL-P	PER-KV-P	PER-SR-P	PER-WH-P	PER-M4-P	PER-B2-P
ORDER CODE	Y1002654	Y1002655	Y1002656	Y1002657	Y1002659	Y1002660
COUPLINGS	 NSK Coupling	 KaVo® Coupling	 Sirona® Coupling	 W&H® Roto Quick	 Connect direct to the handpiece tubing MIDWEST	 Connect direct to the handpiece tubing BORDEN

Contents : ● Handpiece ● Powder case ● Nozzle tip (40 pcs) ● Maintenance kit ● Perio-Mate Powder 160 g x1

*No light during use (when using optic coupling).

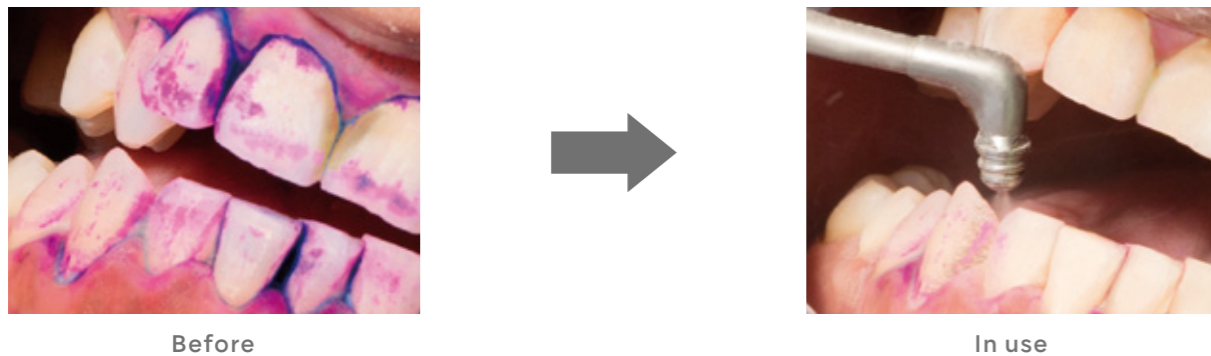
 The handpiece can be washed in the thermodisinfectant  Autoclavable up to 135°C



Supragingival

Removal of plaque biofilm from the gingival margin
(up to approximately 3 mm inside the pocket) *Detach nozzle tip

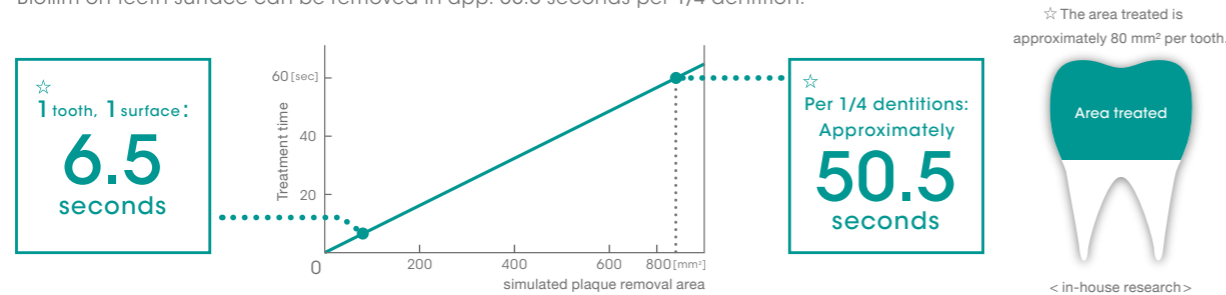
Removal of plaque biofilm at interdental and gingival margin



- Easier to remove biofilm plaque and minor stain around supragingival and gingival margin.
- Enable to remove plaque and biofilm from crowded dentition, interdental and pit and fissure, where hardly accessed with lubber cups.
- Removal of minor stain attached extensively.
- Cleaning around dental implants and prosthetic restorations.
- Less of burden to teeth and gums due to non-contact method.
- Less of burden to prosthetic restorations.

Fast and effective removal capability

Biofilm on teeth surface can be removed in app. 50.5 seconds per 1/4 dentition.

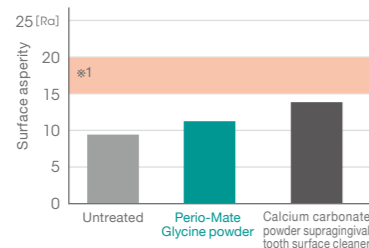


Observation of the treated area at 200-fold with a confocal laser microscope*

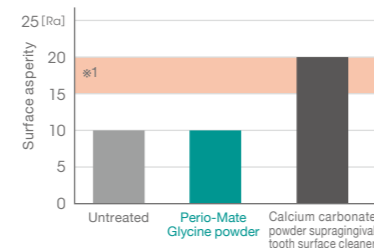
Surface of prosthetic restorations can be treated without damages.

*CLSM Lasertec

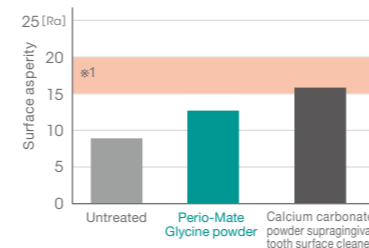
Hybrid hard resin



Gold and silver palladium alloy

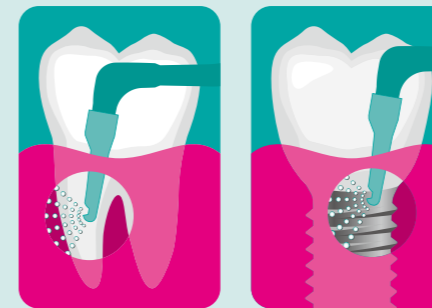


Titanium alloy



Source: Oral Health Engineering, School of Oral Health Care Sciences, Tokyo Medical and Dental University

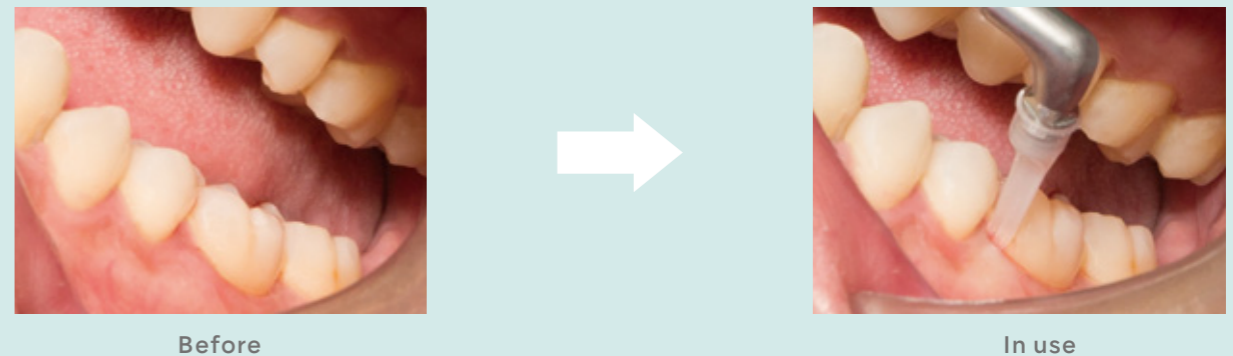
*1 Average surface asperity of regular diamond point



Subgingival

Erasing biofilm in periodontal pocket from 3 - 6 mm below the gingival margin

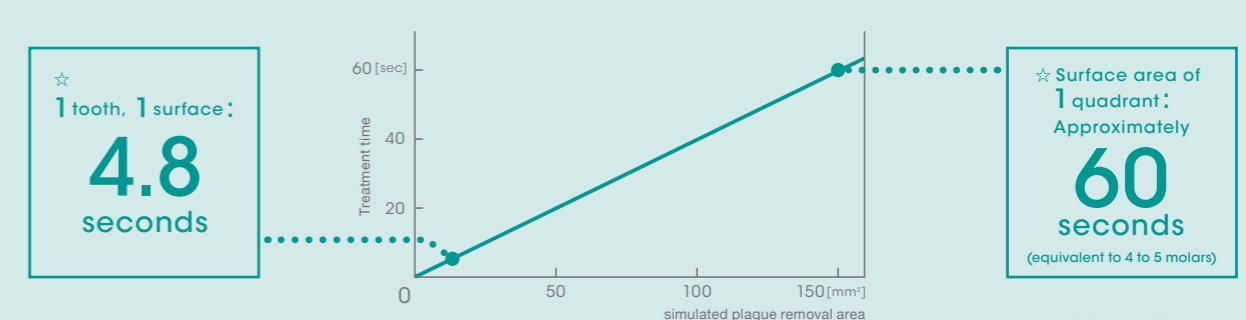
Removal of biofilm in dental pocket



- Biofilm in the periodontal pocket can be removed in approximately 60 seconds per quadrant.
- Deposits can be removed without direct contact with almost none of the extensive biofilm and plaque adhesion remaining and the results are effective. It is possible to clean areas the tip cannot reach with the powder injection effect.
- Optimized the flow of powder based on fluid analysis.
- Compared to other maintenance equipment, less biofilm and plaque remains with wide powder dispersal, even in areas that cannot be seen.
- Smooth powder injection ensures gentle treatment in the periodontal pocket.
- Flexible plastic nozzle tip design ensures accessibility and is gentle to the pocket.

Fast and effective removal capability

Biofilm in the periodontal pocket can be removed in approximately 60 seconds per quadrant.



1. Used for SPT (supportive periodontal therapy) for pockets around 6mm that result from periodontal disease. *2
2. Spraying each tooth for 20 seconds (5 seconds per surface) is best to eradicate subgingival biofilm inside delicate periodontal pockets. *2
3. Reciprocal motion of the nozzle tip and fine circular movements are vital to remove biofilm effectively.

< in-house research >

☆ The area treated is approximately 35 mm² per tooth.

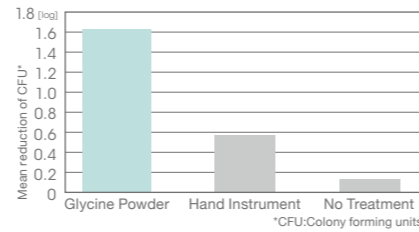
*2.Flemmig TF, Hetzel M, Topoll H, Gerss J, Haeberlein I, Petersilka G., Subgingival debridement efficacy of glycine powder air polishing., J Periodontol. 2007 Jun;78(6):1002-10., Petersilka GJ, Steinmann D, Häberlein I, Heinecke A, Flemmig TF., Subgingival plaque removal in buccal and lingual sites using a novel low abrasive air-polishing powder., J Clin Periodontol. 2003 Apr;30(4):328-33.

Performance & Technology

Reduction of bacteria

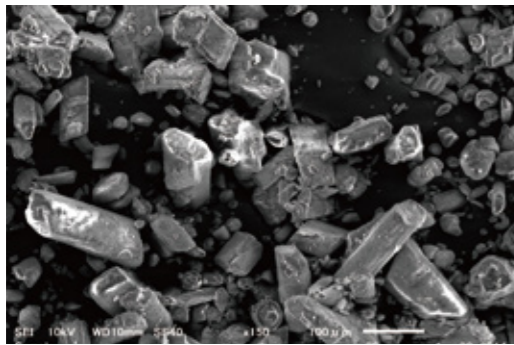
The air-polish process with Perio-Mate Powder (glycine-based) results in significantly better bacterial reduction than manual plaque removal.

Petersilka GJ, Tunkel J, Barakos K, Heinecke A, Häberlein I, Flemmig TF. Subgingival plaque removal at interdental sites using a low-abrasive air polishing powder. J Periodontol. 2003 Mar;74(3):307-11.



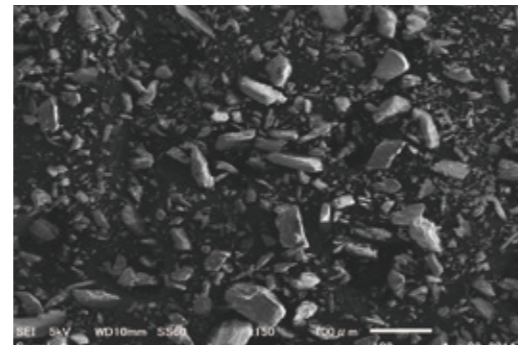
Powder particle comparisons

The fine Perio-Mate Powder is ideal for periodontal pocket treatment.



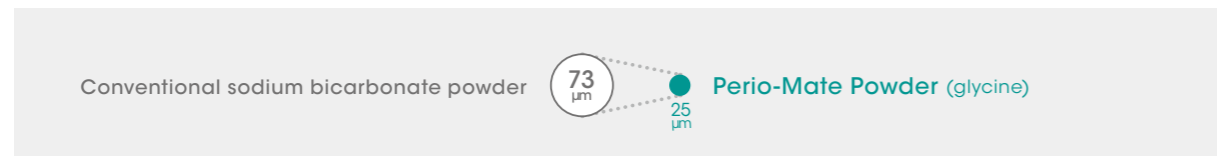
Conventional sodium bicarbonate powder

Average particle diameter: 73 µm
Scanning electron microscope image magnification of 150x



Perio-Mate Powder (glycine)

Average particle diameter: 25 µm
Scanning electron microscope image magnification of 150x



Perio-Mate Powder



- Subgingival airpolishing powder.
- Principal ingredient is glycine, an amino acid present in proteins.
- Highly water soluble to prevent subgingival retention.
- Lower Mohs hardness than dentin. *Glycine ranks 2 on the Mohs hardness scale, while dentin is 2 to 2.5.
- Average powder particle diameter is 25 µm.

MODEL : Perio-Mate Powder
ORDER CODE : Y900938
Contents : Two bottles (160 g each)

NSK's innovative nozzle tip

NSK's new nozzle tip design incorporates semitransparent materials that promote greater visibility during procedures. Hygienic single use tips mean enhanced usability and safety.



Flexible plastic nozzle tip design ensures accessibility and is gentle to the pocket

The slim nozzle tip possesses just the right degree of flexibility to pass smoothly over tooth surfaces, and can be easily inserted into tight pockets and the root surfaces of adjacent teeth without causing the patient discomfort.



Optimized using powder flow analysis

Turbine development technology uses accumulated fluid analysis which allows 'spraying' that takes into account the powder flow in the pocket. It is not mono-directional, rather the flow is even and all-directional, minimising soft-tissue damage and subgingival plaque and biofilm can be removed efficiently. With respect to potential damage, powder (air) and water are separately discharged onto periodontal tissue.



Perio-Mate Nozzle Tip

- Disposable
- Sterile
- Individually packaged

MODEL : Perio-Mate Nozzle Tip
ORDER CODE : Y1002741
Contents : 40 nozzles



Contra-angles

Optic
Non-Optic
 Prophylaxis Handpiece



Screw cup polishing

Ti-Max X



Gear Ratio 16:1 Reduction

Optic MODEL : X57L ORDER CODE : C609

Non-Optic MODEL : X57 ORDER CODE : C619

- Max speed : 2,500 min⁻¹
- Titanium body & DURACOAT
- Screw-in cups and brushes ● 360° rotation



FXseries



Gear Ratio 4:1 Reduction

Non-Optic MODEL : FX57m ORDER CODE : C1054001

- Max speed : 5,000 min⁻¹
- Stainless steel body
- Screw-in cups and brushes ● 360° rotation



EX Series



Heads

Non-Optic MODEL : AR-Y (S) ORDER CODE : C187

- Max speed : 5,000 min⁻¹
- For screw-in cups and brushes ● 360° rotation

Non-Optic MODEL : AR-Y (K) ORDER CODE : C188

- Max speed : 5,000 min⁻¹
- For snap-on cups ● 360° rotation

Shanks 1:1 Direct Drive

Non-Optic MODEL : ECM ORDER CODE : C100007

Shanks 10:1 Reduction

Non-Optic MODEL : ER10M ORDER CODE : C635002

EVA tip polishing

Ti-Max X



Gear Ratio 4:1 Reduction

Optic MODEL : X55L ORDER CODE : C608

Non-Optic MODEL : X55 ORDER CODE : C618

- Max speed : 10,000 min⁻¹
- Titanium body & DURACOAT
- Profin / EVA tips ● Vertical reciprocating (stroke length 1.4 mm)
- Single spray



EX Series



Head

Non-Optic MODEL : EVA-Y ORDER CODE : C235

- Max speed : 10,000 min⁻¹
- Eva tips / Vertical reciprocating (stroke length 1.4 mm)

Shanks 10:1 Reduction

Non-Optic MODEL : ER10M ORDER CODE : C635002

Washable in thermoisinfecteur

Autoclavable up to 135°C

Professional Care

Selecting the right equipment is the first step in professional care

Professional care involves a variety of treatments such as the prevention and improvement of periodontal disease, subgingival scaling and the removal of pathogenic bacteria, the removal of biofilm and prevention of dental caries through prevention of plaque re-adhesion and the removal of stains and nicotine tar to restore the teeth to their original brilliance. In order to provide total professional care, it is important to select quality equipment to provide a suitable treatment and operational efficiency to suit each patient's oral care requirements.

