

POWER

POWER

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ULTRASONIC SCALING INSERT SET-UP

DESCRIPTION	SUGGESTION		
Cassette	IM510x*		
Mirror/Handle	MIR5/3, MH6		
Explorer	EXD2A		
Probe	PCP12/11.5		
Ultrasonic Inserts	30K	25K	
Ultrasonic Inserts	30K UI30SD100		
Ultrasonic Inserts	UI30SD100		
Ultrasonic Inserts Sickle Scalers	UI30SD100	UI25SD100 UI30SD1000	

ULTRASONIC POWER SCALING INSERT SUPPLEMENTARY

DESCRIPTION	SUGGESTION	SUGGESTION		
Cassette	IM30HUx*			
Ultrasonic Inserts	30K	25K		
	UI30SD1000	UI25SD1000		
	UI30SD100	UI30SD100		

PERIODONTAL DEBRIDEMENT SET-UP

DESCRIPTION	SUGGESTION		
Cassette	IM416x*		
Mirror/Handle	MIR4/3, MH6		
Explorers	EXD11/12AF, EXTU17/23		
Probe	PCPUNC15		
Ultrasonic Inserts	30K 25K		
	UI30SD1000	UI25SD1000	
	UI3OSDXTTB	UI25SFXTTB	
	UI30SSXT	UI25SSXT	
Sickle Scalers	SH6/79, S204	SD	
Curettes	SRPG15/169, SG17/189		
Dressing Pliers	DP2		
Sharpening Stones	SS3C, SS299		





SWERV® MAGNETOSTRICTIVE SCALER

The SWERV³ magnetostrictive power scaler combines power and handling in a unique ergonomic design that ensures the comfort of dental professionals and their patients. It integrates finely tuned electronics that improve control and scaling efficiency in all clinical indications, allowing dental professionals to provide optimal care for every patient, every day.



The smooth surface makes disinfection simple and effective.
The color-coded, lighted display is easy to identify and adjust

• The auto-purge function helps remove air from waterlines,

saving the clinician time between patients.

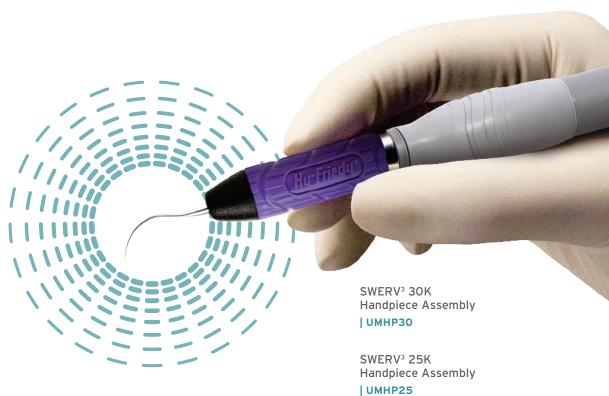
with the touch of a button.

Each SWERV³ unit comes with one Swivel Direct Flow #10 Universal Insert (UI30SD10 or UI25SD10). (Subject to change.)

Experience superior clinician comfort with our ergonomic, lightweight handpiece.

SWERV³ HANDPIECE

- A lightweight, well-balanced design reduces clinician fatigue.
- Large diameter handpiece reduces finger pinching for increased clinical comfort.
- Enables use of a relaxed grasp that eliminates undesired pressure points.
- Lightweight cord reduces drag and minimized strain on clinicians' hands.

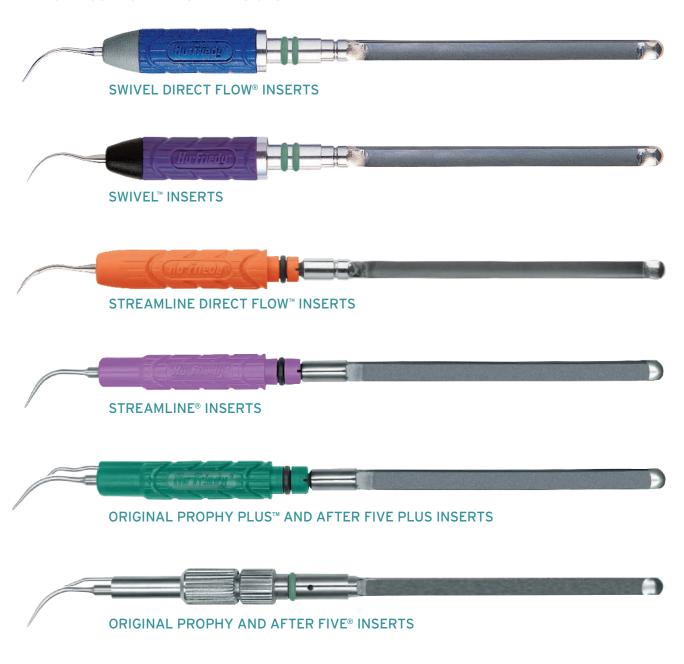


REPLACEMENT PART CODES

SWERV ³ Barrier Sleeves	UMBS
SWERV ³ Foot Control, On-Off	UMFC
SWERV ³ Power Cord US	UMCORD-US
SWERV ³ User Manual	UMMANUAL3
SWERV³ Water Filters, 10-pack	UMWF
SWERV ³ Quick Disconnect	UMWSC
SWERV ³ Water Supply Set	UMWSS



MAGNETOSTRICTIVE INSERT DESIGNS



REPLACEMENT O-RINGS

Swivel Inserts (package of 12 o-rings) | UGRNORING

Non-Swivel Inserts (package of 12 o-rings) | UBLKORING

SWIVEL DIRECT FLOW INSERTS



Swivel inserts with 360° rotation give you the maneuverability and adaptability you want when power scaling. With a slight rolling motion of your fingertips you can eliminate the "start, stop, readjust, start" routine required with traditional inserts.

- Through-tip water delivery-focuses water directly to the tip to reduce excess spray and increase visibility
- Wide diameter silicone grip provides improved ergonomics and clinician comfort
- Color-coded handles allow at-a-glance tip identification



25 kHz Part Code: 30 kHz Part Code:

POWER LEVEL



#10 Universal | UI25SD10 | UI30SD10

LOW-HIGH

- Light to heavy deposits
- Orthodontic cement



#100 Thin | UI25SD100 | UI30SD100

LOW-MEDIUM

- Light to moderate deposits
- Long thin shank allows effective subgingival and interproximal access



LOW-HIGH

- Light to heavy deposits
- Beveled edges for tenacious and heavy deposits, stain
- Triple Bend for increased access around line angles and interproximally



LOW-MEDIUM

- Light to moderate deposits
- Beveled edges for efficient calculus removal
- 24% thinner than #1000 Triple Bend for easier access









SWIVEL DIRECT FLOW AFTER FIVE INSERTS



Swivel Direct Flow After Five Inserts allow improved access to posterior interproximal surfaces, furcations and developmental concavities.

- 360° rotation gives the clinician the maneuverability and adaptability you want when power scaling
- Through-tip water delivery focuses water directly to the tip to reduce excess spray and increase visibility
- Wide diameter silicone grip provides improved ergonomics and clinician comfort
- Color-coded handles allow at-a-glance tip identification. The "left" insert has a green grip, the "right" insert has a red grip and the "straight" insert has a blue grip



25 kHz Part Code: 30 kHz Part Code: | UI25SDSET | UI30SDSET

POWER LEVEL

LOW-MEDIUM

25 kHz Part Code: 30 kHz Part Code:

POWER LEVEL



Left | UI25SDL | UI30SDL

LOW-MEDIUM

Straight UI25SDS | UI30SDS

LOW-MEDIUM

| UI25SDR | UI30SDR

LOW-MEDIUM

Right

Hu-Friedy ultrasonic inserts are for use in magnetostrictive ultrasonic units. The operating frequency of the tip must match the operating frequency of the unit (25 kHz or 30kHz).

SWIVEL INSERTS

Swivel inserts with 360° rotation give you the maneuverability and adaptability you want when power scaling. With a slight rolling motion of your fingertips you can eliminate the "start, stop, readjust, start" routine required with traditional inserts.

Swivel Inserts feature:

- Base flow water delivery water flows from the base of the shank allowing thorough irrigation and lavage
- Wide diameter silicone grip for improve ergonomics and comfort
- Color-coded handles for at-a-glance identification



#10 Universal | UI25SS10 | UI30SS10







#1000 Triple Bend | UI25SS1000 | UI30SS1000



Swivel XT | UI25SSXT | UI30SSXT

POWER LEVEL

25 kHz Part Code:

30 kHz Part Code:

LOW-HIGH

- Light to heavy deposits
- · Tenacious deposits
- Orthodontic cement

LOW-MEDIUM

- Light to moderate deposits
- Long, thin shank for effective subgingival and interproximal access

LOW-HIGH

- Light to heavy deposits
- Beveled edges for tenacious deposits, stain
- Triple Bend for increased access around line angles and interproximally

25 kHz: LOW 30 kHz: LOW-MEDIUM

- Long, ultra thin shank tapers to a very thin tip
- Site specific tenacious deposits
- Furcation areas

EXPERIENCE FREEDOM AT YOUR FINGERTIPS!

Discover the maneuverability and adaptability you want in ultrasonic scaling with the exclusive Swivel inserts. With a slight rolling motion of your fingertips, rotate the insert 360° to eliminate the old "start, stop, remove and re-adjust" routine required with traditional inserts. Swivel inserts also reduce the torque from the handpiece cord, increasing overall balance for hassle-free scaling.

With an 18% larger grip,* finger pinching is reduced, resulting in less hand fatigue[†] and enhanced tactile sensitivity. The lightly textured silicone grips provide a secure, comfortable grasp and are color-coded for easy tip identification.



The XT, extra thin, extra tough inserts are thin enough to provide access into hard-to-reach areas, yet strong enough to effectively remove tenacious deposits even when used on low to medium power.

^{*} Compared to Hu-Friedy Streamline Inserts.

[†] Source: Gerwatowski, Ĺ.J., McFall, D.B., Stach, D.:Carpal Tunnel Syndrome; Risk Factors and Preventive Strategies for the Dental Hygienist. Journal of Dental Hygiene, February 1992.

STREAMLINE DIRECT **FLOW INSERTS**

- · A comfortable, wide diameter resin handle reduces finger pinching to ensure clinician comfort
- Through-tip water delivery focuses water directly to the tip to reduce excess spray and increase visibility of the treatment site.
- · Color-coded handles allow at-a-glance tip identification
- The special stainless steel alloy used in the tip ensures that you achieve the highest level of efficient scaling – exactly what you've come to expect from Hu-Friedy







#10 Universal | UI25SF10 | UI30SF10



#100 Thin | UI25SF100 | UI30SF100



#1000 Triple Bend | UI25SF1000 | UI30SF1000



| UI30SFXT



XT Triple Bend

| UI30SFXTTB

POWER LEVEL

LOW-HIGH

- · Light to heavy deposits
- Orthodontic cement

LOW-MEDIUM

- Light to moderate deposits
- · Long, thin shank for effective subgingival and interproximal access

LOW-HIGH

- Light to heavy deposits
- Beveled edges for tenacious deposits, stain
- Triple Bend for increased access around line angles and interproximally

LOW-MEDIUM

- · Long, ultra thin shank tapers to a very thin tip
- · Site specific tenacious deposits
- Furcation areas

LOW-MEDIUM

- · Light to moderate deposits
- · Beveled edges for efficient calculus removal
- 24% thinner than #1000 Triple Bend for easier access

AFTER FIVE STREAMLINE **DIRECT FLOW INSERTS**

Streamline Direct Flow After Five Inserts allow improved access to posterior interproximal surfaces, furcations and developmental concavities.

- Extended thin shank narrows to a probesized tip
- Through-tip water delivery focuses water directly to the tip to reduce excess spray and increase visibility
- Wide diameter resin grip provides improved ergonomics and clinician comfort
- Color-coded handles allow at-a-glance tip identification. The "left" insert has a green grip, the "right" insert has a red grip and the "straight" insert has a blue grip.

25kHz Part Code: 30kHz Part Code:

POWER LEVEL



Left UI25SFL | UI30SFL

LOW-MEDIUM





Straight UI25SFS | UI30SFS

LOW-MEDIUM



Right UI25SFR | UI30SFR

LOW-MEDIUM



Set of Three | UI25SFSET | UI30SFSET

LOW-MEDIUM

STREAMLINE INSERTS

- · Routine scaling is more efficient with our Streamline inserts.
- Base flow water delivery-water flows from the base of the shank allowing thorough irrigation and lavage
- · Lightweight resin handle for increased tactile sensitivity
- Color-coded handles for at-a-glance tip identification



POWER LEVEL



#10 Universal I UI1025K | UI1030K

LOW-HIGH

- · Light to heavy and tenacious deposits
- · Orthodontic cement



#100 Thin **UI25K100S** | UI30K100S

LOW-MEDIUM

- · Light to moderate deposits
- Long, thin shank for effective subgingival and interproximal access



#1000 Triple Bend I UI100025K | UI100030K

LOW-HIGH

- Light to heavy deposits
- · Beveled edges for tenacious deposits, stain
- Triple Bend for increased access around line angles and interproximally



#3 Beavertail I UI325K | UI330K

MEDIUM-HIGH

- · Heavy deposits
- Orthodontic cement
- · Great for heavy anterior lingual deposits

AFTER FIVE PLUS INSERTS

After Five Plus Inserts allow improved access to posterior interproximal surfaces, furcations and developmental concavities.

- · Extended thin shank narrows to a probesized tip
- Fixed, external water tube provides hasslefree water delivery
- · Lightweight resin handle for increased tactile sensitivity
- Color-coded handles allow at-a-glance tip identification. The "left" insert has a green grip, the "right" insert has a red grip and the "straight" insert has a blue grip
- · For light to moderate deposits

25 kHz Part Code: 30 kHz Part Code:

POWER LEVEL



Left UI25KSF10L | UI30KSF10L

LOW-MEDIUM



| UI25KSF10S I UI30KSF10S

LOW-MEDIUM



Right UI25KSF10R UI30KSF10R

LOW-MEDIUM



FIXED WATER DELIVERY,

Set of Three **UI25KSFSET** | UI30KSFSET

LOW-MEDIUM

AFTER FIVE INSERTS

Traditional After Five Inserts allow improved access to posterior interproximal surfaces, furcations and developmental concavities.

- Extended thin shank narrows to a probe-sized tip
- Fixed, external water tube provides hassle-free water delivery
- · Traditional steel handle with ridges to enhance grip and control
- For light to moderate deposits

25 kHz Part Code: 30 kHz Part Code:

POWER LEVEL



Left UI25KSL10L | UI30KSL10L

LOW-MEDIUM



Straight UI25KSL10S UI30KSL10S

LOW-MEDIUM



Right UI25KSL10R | UI30KSL10R

LOW-MEDIUM



Set of Three **UI25KSLSET** | UI30KSLSET

LOW-MEDIUM

ORIGINAL PROPHY INSERTS

ORIGINAL PROPHY INSERTS

The standard diameter Prophy style tip is the original ultrasonic insert design, with a finely beveled external water delivery tube.

- · Light to heavy and tenacious deposits
- · Orthodontic cement



Original Prophy | UI25KP10 | UI30KP10

ORIGINAL PROPHY PLUS INSERTS

The PLUS insert features a fixed water delivery tube in a lightweight resin handle.

- Light to heavy and tenacious deposits
- · Orthodontic cement



Original Prophy PLUS | UI25KP10P UI30KP10P

LOW-HIGH

25 kHz Part Code: 30 kHz Part Code:

POWER LEVEL

LOW-HIGH



REFERENCE SECTION



MAGNETOSTRICTIVE INSERT CLEANING AND CARE

CLEANING

To clean, rinse thoroughly or fully immerse in a mild ultrasonic cleaning solution (pH 7-10.5) like Hu-Friedy's Instrument Management System (IMS®) Enzymax® or Enzymax Earth™ cleaning solutions. When using the IMS Cassette System, the ultrasonic cleaning time has to be at least 16 minutes, unless a longer exposure time is required by the manufacturer of the detergent. Thoroughly rinse the insert with tap water and dry completely prior to sterilization.

CARE AND MAINTENANCE

To increase the o-ring life of Hu-Friedy ultrasonic inserts and to prevent water flow from the tip after release of the foot control, take the following steps before placing the insert into the handpiece: Hold the handpiece upright over the sink, activate the foot control and flush the water line for two minutes. Fill entire handpiece with water. Gently twist the insert into the handpiece until completely seated.

Swivel and Swivel Direct Flow Inserts:

To maintain a smooth swivel, activate the foot switch and rotate insert two to three times.

WARNING: Do not expose resin or silicone handled ultrasonic inserts to solutions containing phenols, gluteraldehydes, iodophors or to dry heat sterilization.

Use steam sterilization (autoclave) only for Swivel and Swivel Direct Flow inserts. Detailed care and maintenance instructions are available upon request or go to Hu-Friedy.com.



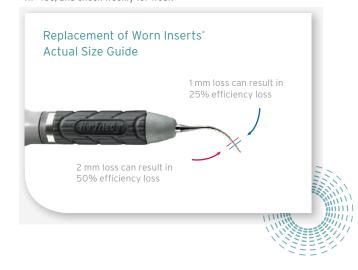
STERILIZATION

Sterilize Hu-Friedy ultrasonic inserts in an instrument cassette (i.e. IMS instrument cassette) or paper pouch in a steam autoclave. Chemical vapor sterilization is unacceptable for Swivel and Swivel Direct Flow inserts. Rapid heat transfer sterilization and cold liquid/chemical sterilants are not recommended and may void warranty. Avoid contact with corrosive chemicals such as chlorides, sulfates and surface disinfectants. Do not expose to solutions containing phenols.

OPTIMUM EFFICIENCY

Scaling efficiency can significantly diminish with worn insert tips. Inferior performance, patient discomfort, and poor water delivery can result from worn, damaged, bent, or altered tips.

For optimal scaling efficiency, we recommend checking inserts monthly for signs of wear. Request Hu-Friedy's insert wear guide, HF-466, and check weekly for wear.



All thin inserts (#100, #XT, XT Triple Bend and After Five inserts) should be used on LOW TO MEDIUM power settings only.

^{*} Lea SC, et al. 2006. The effect of wear on ultrasonic scaler tip displacement amplitude. J Clin Periodontology. (Pages 33:37-42).



POWER DISPERSION







MAGNETOSTRICTIVE INSERT APPLICATION CHART

	%00/*	100 m	% Ooo!*	Swirely.		**************************************	Afro 7 10 11 10 10 10 10 10 10 10 10 10 10 10	100 100 100 100 100 100 100 100 100 100
Light to moderate deposits	•	•	•	•	•		•	•
Generalized heavy deposits Orthodontic cement	•		•			•		•
Light to moderate deposits in periodontal pockets		•		•	•		•	
Site specific tenacious subgingival deposits	•		•	•	•		•	
Furcation areas				•			•	





IMPORTANT NOTE: Hu-Friedy and Dentsply are competitors. This chart is not intended to suggest that the respective Dentsply and Hu-Friedy ultrasonic inserts are equivalent or comparable. Instead, this chart suggests an alternative Hu-Friedy brand ultrasonic insert based on the experience and recommendations of clinicians who have previously used the listed Dentsply inserts. Cavitron and Dentsply are registered trademarks of Dentsply Sirona.

MAGNETOSTRICTIVE CROSS REFERENCE GUIDE

HU-FRIEDY ULTRAS	UNIC INSERTS			DENTSPLY CAVITRON	IV INSERTS
Tip Style	Handle Color	25 kHz	30 kHz	Tip Style	25 kHz
SWIVEL					
10 Universal	lavender	UI25SS10	UI30SS10	TFI #10 Straight	grey
100 Thin	black	UI25SS100	UI30SS100		
1000 Triple Bend	orange	UI25SS1000	UI30SS1000	TFI #1000 Straight Triple	grey
wivel XT	purple	UI25SSXT	UI30SSXT	CTI-10S THINsert	
SWIVEL DIRECT FLOW					
10 Universal	lavender	UI25SD10	UI30SD10	FSI-10	dark blue
100 Thin	black	UI25SD100	UI30SD100	FSI-SLI 10S	green
1000 Triple Bend	orange	UI25SD1000	UI30SD1000	FSI-1000	dark blue
T Triple Bend	purple	UI25SDXTTB	UI30SDXTTB	FSI-SLI-1000	green
fter Five Straight	dark blue	UI25SDS	UI30SDS	FSI-SLI 10S	green
fter Five Right	red	UI25SDR	UI30SDR	FSI-SLI 10R	green
fter Five Left	green	UI25SDL	UI30SDL	FSI-SLI 10L	green
et of 3°	dark blue red green	UI25SDSET	UI30SDSET	FSI-SLI Assorted	green
STREAMLINE DIRECT FLO	ow				
10 Universal	lavender	_	UI30SF10	FSI-10	_
100 Thin	black	-	UI30SF100	FSI-SLI 10S	-
1000 Triple Bend	orange	-	UI30SF1000	FSI-1000	-
T Triple Bend	purple	-	UI30SFXTTB	FSI-SLI-1000	-
fter Five Straight	dark blue	-	UI30SFS	FSI-SLI 10S	-
fter Five Right	red	-	UI30SFR	FSI-SLI 10R	-
fter Five Left	green	-	UI30SFL	FSI-SLI 10L	-
et of 3°	dark blue red green	-	UI30SFSET	FSI-SLI Assorted	-
STREAMLINE					
10 Universal	lavender	UI1025K	UI1030K	TFI #10 Straight	grey
100 Thin	black	UI25K100S	UI30K100S		
1000 Triple Bend	orange	UI100025K	UI100030K	TFI #1000 Straight Triple	grey
3 Beavertail	yellow	UI325K	UI330K	Bend TFI #3 Thin Beavertail	grey
ORIGINAL PROPHY DESI	GNS			CLASSIC "P10"	
10 Universal	metal	UI25KP10	UI30KP10		metal
10 Universal PLUS	green	UI25KP10P	UI30KP10P		
AFTER FIVE - PERIODON	TAL DEBRIDEMENT			SLI SLIMLINE**	
fter Five Straight	metal	UI25KSL10S	UI30KSL10S	SLI-10S	metal
fter Five Right	metal	UI25KSL10R	UI30KSL10R	SLI-10R	metal
fter Five Left	metal	UI25KSL10L	UI30KSL10L	SLI-10L	metal
et of 3°	metal	UI25KSLSET	UI30KSLSET	SLI-10 3 pack	metal

^{*} Set of 3 includes a straight, right and left.

** Dentsply, Cavitron, Slimline, Thru Flow, Classic "P", TFI, SLI, FSI and Focused Spray are trademarks of DENTSPLY Sirona, Inc.





AIRFLOW®
BIOFILM MANAGEMENT

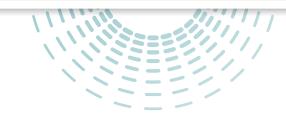


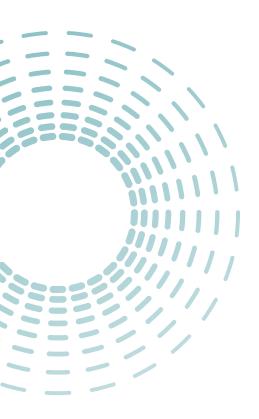
When Hu-Friedy partnered with Switzerland's Electro Medical Systems (EMS), Hu-Friedy became the only dental manufacturer who could offer clinicians the full range of products and equipment for superior oral health – including cleaning and biofilm management.

Complementing our diagnostic, hand scaling and magnetostrictive product lines, Hu-Friedy EMS Piezon and AIRFLOW Therapy technologies will enhance your treatment plans by delivering a comprehensive biofilm removal treatment. EMS units are designed specifically to deliver a comprehensive biofilm treatment.



PIEZON® SCALING





WHY IS BIOFILM SUCH A CONCERN?

When micro-organisms colonize areas on teeth and form biofilm, they create a protective layer that is difficult to treat. As the biofilm accumulates and expands, it leads to caries, periodontal and peri-implant infections, which can increase the risk of systemic diseases, such as cardiovascular and respiratory disease, arthritis or diabetes.

The traditional method for treating biofilm can be challenging. Patients find it uncomfortable and invasive, leading to fewer return visits. Clinicians find it time consuming and inefficient.

GUIDED BIOFILM THERAPY® (GBT) IS THE NEW, BETTER APPROACH

GBT is an innovative treatment protocol for biofilm. Systematic and predictable, GBT is based on clinically proven technologies and developed in cooperation with highly respected and experienced periodontists and dental hygienists.

This treatment protocol is based on individual patient diagnosis and risk assessment, leading to optimal results. Minimally invasive and safe for a variety of surfaces, GBT helps clinicians work more efficiently – saving 8 to 12 minutes per patient.

GBT is adaptable to patients of all ages and part of a comprehensive preventive concept that focuses on preserving patients' oral health and helping them feel comfortable throughout treatment.



THE EIGHT-STEP PROTOCOL

Make appointments more efficient and comprehensive with the simple steps of the Guided Biofilm Therapy protocol. Patients feel more engaged during their treatment because of the individualized care while clinicians are able to work smarter.

01 ASSESS

FORMULATE AN INDIVIDUALIZED TREATMENT APPROACH

Start by rinsing with an antimicrobial mouth rinse. Review medical history, then probe and screen for evidence of health vs. disease and modifiable risk factors.

02 DISCLOSE

MAKE BIOFILM VISIBLE

Using a disclosing solution, show your patient their biofilm. The color will guide the biofilm removal. Once it's removed. calculus is easier to detect.

08 RECARE **HEALTHY PATIENT**

= HAPPY PATIENT

Ask your patient how he or she enjoyed the treatment. Then, schedule recall frequency according to risk assessment.

07 CHECK

MAKE YOUR PATIENT SMILE

remaining biofilm and ensure calculus is fully removed. Accurately diagnose caries and protect with fluoride.

Do a final check for

06 PIEZO CERAMIC & HAND INSTRUMENTATION

REMOVE REMAINING CALCULUS

Use the minimally invasive Hu-Friedy EMS PS instrument on natural teeth and the Hu-Friedy EMS PI instrument around implants and restorations. Finish with hand instrumentation.

05 PERIOFLOW®

REMOVE BIOFILM IN >4MM POCKETS*

Use PLUS Powder on teeth and implants, including interproximally, with the PERIOFLOW nozzle.

03 MOTIVATE

RAISE AWARENESS & TEACH

Emphasize prevention, modifiable risk factors and daily disease control. Instruct patients on strategies to preserve oral health.

O4 AIRFLOW®

REMOVE BIOFILM & STAINS ON NATURAL TEETH, RESTORATIONS & IMPLANTS

Use 14 micron PLUS Powder to remove biofilm supra- and subgingivally up to 4mm. If needed, remove heavy stains on enamel first using Classic Powder.





ABOUT AIRFLOW TECHNOLOGY

AIRFLOW Therapy is completely different than other air polishing systems. This advanced technology offers benefits to both the clinician and patient that are difficult to replicate with other procedures. AIRFLOW Therapy, along with AIRFLOW PERIO or PLUS Powder, is safe for tissue, enamel, root surfaces, porcelain composite restorations, and even implants and implant abutments.

AIRFLOW TECHNOLOGY

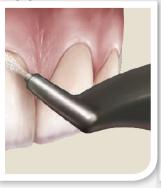
- Effective for standard supragingival air polishing and stain removal, as well as supragingival and shallow subgingival biofilm removal (with Perio or Plus powder)
- Reliable, fast and efficient for the practice
- Stress-free and comfortable for the patient

AIRFLOW PERIO TECHNOLOGY

- Effective disruption of biofilm in periodontal pockets leading to a sustained reduction in bacteria, helping prevent periodontitis or peri-implantitis
- Uniform turbulence of air-powder mixture and water due to patented PERIOFLOW® nozzle prevents soft-tissue emphysema

BREAKING DOWN THE TECHNOLOGY

Supragingival + Shallow Subgingival



Site-Specific Subgingival



STANDARD AIRFLOW NOZZLE

With Classic powders (sodium bicarbonate)

· Supragingival air polishing and stain removal

With Perio or Plus powder

- Delicate supragingival surfaces (ortho, restorations)
- Shallow subgingival biofilm removal (up to 4mm)

PERIOFLOW NOZZLE

- · Perio or Plus powders ONLY
- Thin, tapered plastic nozzle attachment allows the powder/air/water mixture to be disseminated into a pocket*
- · Adaptable around implant and restoration structures that are often difficult to reach and clean

*Approved for use in pockets up to 5mm; 10mm in Canada

SCIENTIFIC EVIDENCE



The white surfaces are parts of the biofilm located in a thick layer on the root surface.



periodontal pocket.

AFTER

Photos by Prof. Dr. A. Mombelli, University of Geneva, Switzerland



AIRFLOW MASTER® UNIT

The world's first subgingival prophylaxis unit, the AIRFLOW Master allows the clinician to complete both stain and biofilm removal procedures with one device without interrupting the treatment to switch out the powder and powder chamber.

- · Automatic illumination of activated powder chamber for identification
- Easy handling, cleaning, and refilling of the powder chambers
- Smooth touch panel surface for simple cleaning and disinfection
- Sleek user interface offers easy adjustment of power and water delivery
- Ergonomic handpieces for working comfort and precision for the clinician

AIRFLOW MASTER ACCESSORIES





AIRFLOW MASTER PIEZON UNIT



Piezon and AIRFLOW technologies come together to deliver comprehensive prophylaxis treatment to your patients with the AIRFLOW Master Piezon unit. Use the Perio powder chamber and AIRFLOW handpiece for complete biofilm removal, switching to the PERIOFLOW handpiece for direct insertion into the pocket; or to the Classic powder chamber for heavier stain removal. Then, switch to Piezon technology to remove hard deposits.

- Smooth touch panel surface for simple cleaning and disinfection
- · Easy handling, cleaning, and refilling of the powder chambers
- Sleek user interface offers easy adjustment of power and water delivery
- Ergonomic handpieces for working comfort and precision for the clinician
- Intelligent feedback control technology senses when higher power is needed to remove deposit and adjusts accordingly

AIRFLOW MASTER PIEZON ACCESSORIES

Original Piezon LED handpiece	EN-060#HF/A
Light guide set	FV-065
AIRFLOW handpiece hose	EM-105#HF/A
AIRFLOW handpiece	EL-308#HF/A
Piezon hose	EM-111#HF/A
PERIOFLOW® handpiece	EL-354#HF/A
Piezon maintenance set	EQ-115
Bottle 350 ml	EG-064/HF
Bottle 500 ml	EG-082/HF
AIRFLOW Powder Chamber	EL-368#HF/A
PERIOFLOW® Powder Chamber	EL-474#HF/A
Multifunctional foot switch (flat)	EK-169#HF/A
PERIOFLOW® nozzles	DT-113HF
PERIOFLOW® nozzles (bulk)	DT-113HF/HF
Water filter set	EQ-125HR



AIRFLOW S1 UNIT

By using a jet formed by air, powder and water, the AIRFLOW S1 removes dental plaque, soft deposits and surface stains from pits, grooves, interproximal spaces and smooth surfaces of the teeth.

- Free-flow technology to prevent clogging of powder, air and water line
- Three integrated self-cleaning filters for proper maintenance of the unit
- Incredibly light handpiece tubing allows for easier maneuvering of the handpiece while in use



Includes:

1 AIRFLOW handpiece, maintenance accessories





AIRFLOW S2 COMBINATION UNIT

The AIRFLOW S2 combines AIRFLOW and Piezon technologies in one device for the professional removal of soft deposits and stains.

- Free-flow technology to prevent clogging of powder, air and water line
- · Controlled Piezon oscillation pattern for greater efficiency and patient comfort
- Ultrasonic cavitation and acoustic streaming for enhanced treatment efficiency
- · Three integrated self-cleaning filters for proper maintenance of the unit

• Incredibly light handpiece tubing allows for easier maneuvering of the handpiece while in use

AIRFLOW S2 AND AIRFLOW S1 ACCESSORIES

Piezon handpiece hose	EM-060#HF/A
Foot switch, round	EH-004#HF/A
AIRFLOW handpiece hose	EM-094#HF/A
Water filter cartridge	EQ-029HF
Water filter wrench	DT-015HF
Powder chamber cap	EQ-019A/HF
Seal for powder chamber cap	BE-009HF
AIRFLOW handpiece	EL-308#HF/A
Piezon handpiece (S2 only)	EN-046#HF/A

Includes:

1 Piezon (non-LED) handpiece, 3 tips (A, P, PS), 1 AIRFLOW handpiece, maintenance accessories



AIRFLOW S2 | FT-178#HF/A/001



AIRFLOW HANDY 3.0 **PORTABLE UNITS**

The AIRFLOW handy 3.0 portable air polishing units enable dental practitioners to efficiently, safely and comfortably perform air polishing treatments in any operatory. Simply connect the AIRFLOW handy 3.0 device to your dental unit for a simple, convenient air polishing experience.

All handy devices were designed with the clinician in mind! Each features:

- Lightweight construction allowing for optimal clinician comfort
- Slim handpiece for easy to grip and rotation
- Well-balanced design for easy handling



DISCOVER THE HANDY DEVICE THAT'S RIGHT FOR YOU AND YOUR PRACTICE

AIRFLOW HANDY 3.0

AIRFLOW HANDY 3.0 PREMIUM



AIRFLOW HANDY 3.0 PERIO



- Designed/intended for heavy stain removal with Classic (Sodium Bicarbonate) powders
- Can be used with Perio (Glycine) powder for supragingival and shallow subgingival biofilm removal
- · Two-in-one functionality with two handpiece attachments!
- · "PLUS" handpiece is used for supragingival and shallow subgingival biofilm removal (including on ortho, restorative and perio work)
- "PERIO" handpiece with PERIOFLOW nozzle for direct insertion into the pocket
- Both applications use Perio (Glycine) powder
- · Recommended for all offices

- · Designed for biofilm removal in periodontal pockets (up to 5 mm) with Perio (Glycine) powder
- · Flexible PERIOFLOW nozzle can be directly inserted in the pocket to flush out biofilm
- · Recommended for many perio maintenance patients





AIRFLOW handy 3.0 Midwest*	FT-220#HF/A/001
AIRFLOW handy 3.0 Kavo	FT-220#HF/A/002
AIRFLOW handy 3.0 W&H	FT-220#HF/A/003
AIRFLOW handy 3.0 NSK	FT-220#HF/A/004
AIRFLOW handy 3.0 Bien Air	FT-220#HF/A/005
AIRFLOW handy 3.0 Sirona	FT-220#HF/A/006
AIRFLOW handy 3.0 PERIO Midwest*	FT-221#HF/A/001
AIRFLOW handy 3.0 PERIO Kavo	FT-221#HF/A/002
AIRFLOW handy 3.0 PERIO W&H	FT-221#HF/A/003
AIRFLOW handy 3.0 PERIO NSK	FT-221#HF/A/004
AIRFLOW handy 3.0 PERIO Bien Air	FT-221#HF/A/012
AIRFLOW handy 3.0 PERIO Sirona	FT-221#HF/A/005
AIRFLOW handy 3.0 Premium Midwest*	FT-225#HF/A/001
AIRFLOW handy 3.0 Premium Kavo	FT-225#HF/A/002



AIRFLOW 3.0 HANDY ACCESSORIES

handy 3.0 Handpiece	EL-540#HF/A
handy 3.0 Perio Handpiece	EL-542#HF/A
handy 3.0 Plus Handpiece	EL-545#HF/A
Maintenance set	FV-087HF
Thermodisinfection adapter	FV-088HF
Easy Clean	FV-083#HF/A
Easy Fill	FV-074HF

Additional handpieces are recommended so they can be autoclaved after every patient.





AIRFLOW POWDER

Powders are as integral to AIRFLOW treatments as the device itself, and the innovative AIRFLOW powders enable new clinical applications while being safe and comfortable for the patient. Powder particle composition, size and density all contribute to its impact and intended use, and powder must be selected based on the AIRFLOW unit or powder chamber being used.



AIRFLOW PLUS POWDER GRAIN SIZE: 14 µm

Erythritol is the newest innovation in dental powders with a micron size of only 14. This ultrafine powder is a sugar alcohol that is already used in dentistry and the food industry. It is safe to use subgingivally and on/around delicate surfaces such as implants and restorations, but the harder material is twice as efficient as glycine at removing stain.

Use Perio powder with: PERIOFLOW powder chambers (AIRFLOW Master and Master Piezon), AIRFLOW handy 3.0 Perio and PLUS handpieces

Perio Powder (four 120g bottles)



PARTICLE Size



USAGE Area*





LIGHT-MODERATE Stain Removal

AIRFLOW PERIO POWDER GRAIN SIZE: 25 µm

AIRFLOW Perio powder's extra-fine, low density grains remove biofilm and bacteria supragingivally and subgingivally. Made from glycine rather than sodium bicarbonate, PERIO powder is gentle on the tooth surface, making AIRFLOW treatment easier on the patient, as well as safe for delicate surfaces such as implants, restorations, ortho brackets and materials, etc.

Use Perio powder with: PERIOFLOW powder chambers (AIRFLOW Master and Master Piezon), AIRFLOW handy 3.0 Perio and PLUS handpieces

Perio Powder (four 120g bottles)



PARTICLE Size



USAGE Area*





LIGHT-MODERATE Stain Removal



AIRFLOW CLASSIC POWDER GRAIN SIZE: 65 µm

The AIRFLOW Classic powder is effective for dental cleanings and plaque removal. Made from sodium bicarbonate, the most commonly used material for air polishing, AIRFLOW Classic powders provide an alkaline effect to protect against tooth decay, and an osmotic effect to support the treatment of gingivitis.



Classic Cherry Powder (four 300g bottles)



Classic Neutral Powder (four 300g bottles) | DV-1009



Classic Mint Powder (four 300g bottles)



Classic Lemon Powder (four 300g bottles)





PARTICLE Size



USAGE Area



HEAVY Stain Removal

WHICH POWDER IS RIGHT FOR EACH PROCEDURE?

	CLASSIC	PERIO	PLUS
Heavy Stain	•		
Light-Moderate Stain	•	•	•
Subgingival Biofilm		•	•
Implants		•	•
Ortho		•	•
Surface Prep		•	•
Sealant Replacement		•	•
Dentures		•	•
Perio Maintenance		•	•
Cavitated Areas		•	•
Restorative Materials		•	•





AIRFLOW HANDPIECE AND NOZZLES

AIRFLOW HANDPIECE

Based on free-flow technology, the AIRFLOW handpiece features a 120° angle and is intended for supragingival use. The AIRFLOW handpiece can also be used on the subgingival border area.



PERIOFLOW® HANDPIECE

Especially developed for subgingival applications, the PERIOFLOW® handpiece together with the PERIOFLOW® nozzle can be used in periodontal pockets up to 5 mm*. The PERIOFLOW® handpiece was innovatively designed to deliver the ultrafine AIRFLOW PERIO Powder.





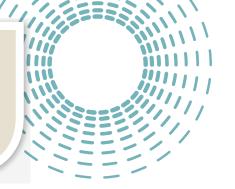
SUBGINGIVAL PERIOFLOW NOZZLE

The patented single-use nozzle integrates three horizontal outlets to optimize the gentle turbulence of the air-powder mixture in the subgingival region. Another vertical outlet delivers water to the deepest reaches of the periodontal pockets to rinse the treatment area. Order with: AIRFLOW Prophylaxis Master, AIRFLOW One, AIRFLOW Master, AIRFLOW Master Piezon, Handy Premium, and Handy Perio devices PERIOFLOW Nozzle refill box (40ct) | DT-113HF PERIOFLOW Nozzle refill pack (four boxes of 40) | DT-113HF/HF PERIOFLOW nozzle remover | DT-095HF PERIOFLOW Nozzles with Millimeter Markings (40ct) - Coming soon! | DT-476HF



AIRFLOW REFERENCE GUIDE

With a full portfolio of AIRFLOW products to choose from, which units and powders are right for your practice? Use these comparison charts to determine what features you want in an AIRFLOW device and what procedures you want to use it for.



AIRFLOW UNIT COMPARISON

	Handy 3.0	Handy 3.0 PERIO	Handy 3.0 PREMIUM	AIRFLOW S1	AIRFLOW S2	AIRFLOW MASTER	AIRFLOW MASTER PIEZON	AIRFLOW PROPHYLAXIS MASTER	AIRFLOW ONE
Supragingival	•		•	•	•	•	•	•	•
Shallow Subgingival	•	•	•			•	•	•	•
Subgingival		•	•			•	•	•	•
w/Piezon Ultrasonic					•		•		•
Heavy Stain	•			•	•	•	•	•	•
Advanced Technology						•	•	•	•
Classic Powders	•			•	•	•	•	•	•
Perio Powder	•	•	•			•	•	•	•

AIRFLOW POWDER COMPARISON

	Classic	Perio	Plus
Stain	•		
Light Stain	•	•	•
Subgingival Biofilm		•	•
Implants		•	•
Ortho		•	•
Surface Prep		•	•
Sealant Placement		•	•
Dentures		•	•
Perio Maintenance		•	•
Cavitated Areas		•	•
Restorative Materials		•	•



HU-FRIEDY SATISFACTION GUARANTEE

Hu-Friedy is committed to YOU, our valued customer. If for any reason you are unhappy with your Hu-Friedy power equipment, inserts or tips within the first 30 days of purchase, simply return it with the invoice for a product exchange or full refund – no questions asked. No other company offers such a comprehensive guarantee.







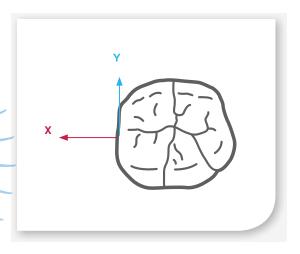
ABOUT PIEZON TECHNOLOGY

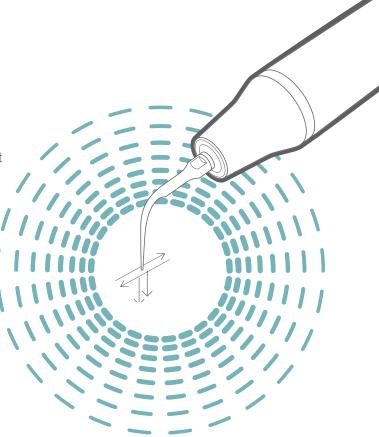
Piezoelectric ultrasonic scaling, the dominant technology around the world, is renowned for the gentle yet efficient treatment that it delivers. Discover how Piezon Technology combines the comfort of piezoelectric scaling with advanced features to elevate your performance and your patients' experience at the same time.

PIEZON TECHNOLOGY

Piezon Technology delivers controlled oscillating action aligned with the tooth structure.

- · Gentle treatment with minimum abrasion of the tooth
- Easy to use due to intelligent feedback control
- Efficient, comfortable delivery of 32,000 movements per second
- Maximum retention of the oral gingival epithelium and more comfortable treatment due to optimized linear instrument movement





SCIENTIFIC EVIDENCE*



Tooth surface treated with instrument X looks rough after use.



Tooth surface treated with a Piezon scaler and Hu-Friedy EMS piezo tip is smooth after use.

^{*} P. Schmage, Y. Schultz, U. Platzer, S. Maisch, I. Nergiz (2007). Substance Loss and Root Surface Structure Effected by 10 Deep Scaling Instruments, University of Hamburg, N°2959 EuroPerio.



PIEZON POWER SCALING UNITS

The Piezon power scaling generators combine the precision of piezoelectric technology, uniform power output and ergonomics in easy to use devices that will optimize treatment efficiency and comfort for both patients and clinicians.

PIEZON MASTER 700 UNIT

The latest, most sophisticated Piezon technology in the **Piezon Master 700 Unit communicates between the handpiece, tip and module 200x per second**. This enhanced communication actually signals the module to reduce the power to the lowest effective level when it detects soft deposits. When the module detects harder deposits, it will increase the power to the highest level set by the clinician.

- Touch 'n go panel with hygienic user interface leads to easy treatment setup
- Piezon LED handpiece with circular light emission for increased vision of the treatment site
- Two liquid bottles are easily interchanged, allowing for enhanced patient treatment based on procedure
- Intuitive and automatic cleaning mode is convenient for the clinician
- Capacity for two handpieces to accommodate two different tips for faster results and double efficiency with each patient (second handpiece sold separately)
- Flexible and durable handpiece cord offers direct irrigation control right from the base of the cord

Piezon Master 700 Unit | FT-194#HF/A/001

Includes:

3 tips (A, P, PS), 2 water bottles, 1 handpiece, maintenance accessories







Intelligent Piezon Master 700 technology is now available as a built-in module for your A-Dec 300 and 500 delivery systems.

61-inch cord Piezon 707 BIK LED - A-DEC

| FS-435HF

81-inch cord Piezon 707 BIK LED - A-DEC 541

| FS-466HF

Potentiometer Set - A-DEC

| EK-412

Includes:

3 tips (A, P, PS), 1 water bottle, 1 handpiece, maintenance accessories



PIEZON 250 & PIEZON 150 UNITS

The Piezon 250 and Piezon 150 combine power, precision, design, and function in a small package. The LED handpiece ensures enhanced visibility while the fingertip control delivers 35 individual power increments for the exact power you want, when you want it.

- Large, ergonomic interface allows the clinician to easily select or change the desired power setting during use.
- Illuminated handpiece remains lit for 20 seconds after the foot control is released for continued visibility of the treatment site and easier diagnosis.
- Instantaneous tip amplitude adjustment offers smooth treatment and patient comfort.
- Exceptionally low noise level during operation provides a more peaceful patient experience.
- Two water delivery options: stand-alone unit with medicament bottle (Piezon 250) or connect to the office water system (Piezon 150).

Piezon 250 FT-224#HF/A/001

Includes:

3 tips (A, P, PS), 1 water bottle, 1 handpiece, maintenance accessories



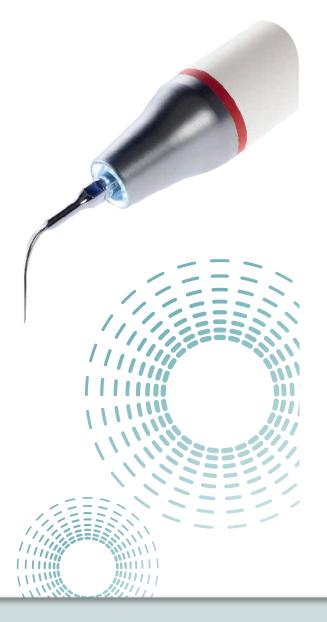


PIEZON ACCESSORIES

ORIGINAL PIEZON LED HANDPIECE

- Fiber-optic illumination reduces eye strain and enhances visibility of the treatment area.
- Large diameter, ergonomic design for relaxed hand grasp, more accuracy and control, fewer pressure points and improved tactile sense.
- Lightweight for reduced muscle strain and hand fatigue, enhancing clinician comfort.

Original Piezon LED handpiece (150, 250, 700, AFMP)	EN-060#HF/A
Piezon handpiece (S2 only)	EN-046#HF/A
Light guide set (150, 250, 700, AFMP)	FV-065
Bottle 350 ml (250, 700, AFMP)	EG-064/HF
Bottle 500 ml (250, 700, AFMP)	EG-082/HF
Maintenance set (700)	EQ-123HF
Multifunctional foot switch (flat) (700, AFMP)	EK-169#HF/A
Foot switch (250, 150)	EK-128#HF/A
Piezon handpiece hose (250, 150)	EM-140#HF/A
Power supply and US outlet adapter (150, 250)	EK-1001
Extra long handpiece Piezon handpiece cord (150, 250)	EM-144#HF/A/001
Piezon Master 700 handpiece cord	EM-110#HF/A/001
Maintenance set (150)	FV-084HF
Maintenance set (250)	FV-085HF



COMBITORQUE® WRENCH

Each Hu-Friedy EMS piezo tip comes in a Combitorque® wrench for easy sterilization and storage. Combitorque® wrenches aid in connecting the tip to the handpiece, and reduce the risk of instrument loss and injury.



| FV-060HF



HU-FRIEDY EMS PIEZO TIPS

Hu-Friedy EMS piezo tips are made from premium-quality, biocompatible surgical steel. The highly precise manufacturing processes offer both the reproducible oscillating action that makes Piezon technology comfortable for your patients and the highly polished instrument surface which enhances durability.

SCALING AND PERIO TIPS



Instrument A
| DS-001HF/HF
For removing
supragingival deposits
in all quadrants



Instrument PS | DS-016HF/HF For removing calculus in deep periodontal pockets in all quadrants.



Instrument PL4
| DS-033HF/HF
Left-curved instrument
with small ball (> 0.6 mm

Left-curved instrument with small ball (> 0.6 mm diameter) on instrument tip for the periodontal debridement of furcations and concavities



Instrument P
| DS-011HF/HF
For removing supra - and subgingival calculus in all quadrants



Instrument PL1

DS-030HF/HF
Left-curved instrument for periodontal debridement
- especially suitable for difficult-to-reach interproximal surfaces



| DS-034HF/HF Same as PL4 instrument with right curve



Instrument C | DS-002HF/HF For removing deposits and stain - especially suitable for removing bonding residue, (e.g. in



orthodontics)

Instrument PL2 | DS-031HF/HF Same as PL1 instrument with a right curve



Instrument B
| DS-003HF/HF
For cleaning lingual surfaces with heavy stain and calculus



Instrument PL3
| DS-032HF/HF
Instrument for cleaning and disinfecting periodontal pockets - especially suitable for follow-up and recall visits





During endo treatment, the instrument finish facilitates smooth clean-outs of even the smallest root canals.

ENDODONTIC TIPS



Instrument RT1 | DS-066HF/HF

Diamond-tipped instrument for locating canals and removing calcifications in the coronal third of the root canal system



Instrument RT2 | DS-067HF/HF

Diamond-tipped instrument for removing ledges. Creates straight canal for easy viewing of broken instruments



Instrument D | DS-005HF/HF

For loosening crowns, bridges and pins placed previously with phosphate cement



Instrument H | DS-004HF/HF

For the lateral thermal condensation of guttapercha



Flat Wrench

To change instruments for all three file holders



180° File Holder

For use with RT3, Berutti and RE2 instruments



120° File Holder

For the flexibility to use different endo files, specially suited for anterior and premolar areas.



90° File Holder

For the flexibility to use different endo files, specially suited for the molar area



Instrument RT3

Very long and fine instrument for the removal of broken instrument tips.

Use with 180° file holder

(5 pack)



Instrument ESI

Non-cutting NiTi instrument for the effective cleaning and irrigation of the root canal system

(6 files)

Starter Kit | FS-279#HF/A/001

Refill

| DT-069HF



Endo K-Type Files

| DT-011

The root canal system (Use files in 90° or 120° file holders) K-Files for cleaning and disinfecting



Endo File Set: ISO 15/20/25/30/35 mm 6 pieces each

6 endo files	ISO 15	White	DT-006
6 endo files	ISO 20	Yellow	DT-007
6 endo files	ISO 25	Red	DT-008
6 endo files	ISO 30	Blue	DT-009
6 endo files	ISO 35	Green	DT-010

INSTRUMENT PI FOR IMPLANTS



- Easily debrides implant and restoration surfaces
- Comfortable for the patient thanks to smooth, plastic surface coating and gentle tip motion
- Instrument coating made of a high-tech Polyether Ether Ketone (PEEK) fiber that safely cleans implant abutment surfaces and restorations
- Stainless steel core to protect the instrument from breakage
- Fully autoclavable



Starter Kit | FS-295#HF/A/001

4 PI instruments, 1 file holder (120°) and 1 flat wrench

Refill

| DT-065HF

4 PI instruments

DIAMOND TIPPED INSTRUMENTS

Diamond-tipped instruments for smoothing restoration overhangs

HPL3

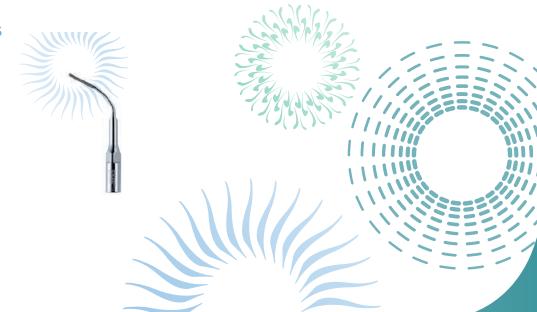
| DS-075HF/HF

70µm grain

DPL3

DS-065HF/HF

15µm grain





HU-FRIEDY S-SERIES TIPS

Symmetry S-Series tips are compatible with Symmetry IQ, Satelec/Acteon and NSK piezo generators*.



SCALING TIPS



S10 Universal

Standard diameter tip used to remove heavy supragingival

POWER LEVEL MEDIUM—HIGH



P Universal

USP

Standard diameter tip used to remove moderate to heavy deposits located supragingivally and in shallow pockets.

MEDIUM-HIGH



P10 Universal

USP10

Standard diameter tip used to remove light deposits and plaque. Tip features smooth edges for safe removal of soft and hard deposits.

POWER LEVEL MEDIUM



100 Universal

Probe-sized tip used to remove light deposits in shallow to moderate pockets and for periodontal maintenance.

LOW-MEDIUM

AFTER FIVE

These probe sized tips are designed to enhance access into periodontal pockets and improve adaptation in interproximal areas, allowing the clinician to more thoroughly debride difficult to reach areas to achieve better clinical results.



S10 Universal **USAFS**

POWER LEVEL MEDIUM

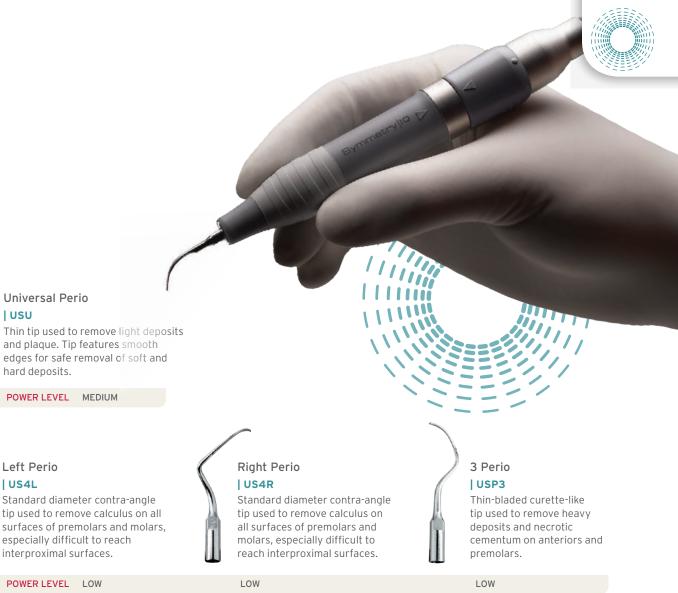


MEDIUM



MEDIUM

^{*}Satelec and NSK are trademarks of Acteon, Inc., and Nakanishi Inc. respectively.



DIAMOND-COATED



PERIO

USU

hard deposits.

Left Perio

US4L

Left Diamond US2LD

Thin, contra-angle diamondcoated finishing instrument used for removal of residual debris and designed to enhance access to deep periodontal pockets and furcations.

POWER LEVEL LOW



Right Diamond

US2RD

Thin, contra-angle diamondcoated finishing instrument used for removal of residual debris and designed to enhance access to deep periodontal pockets and furcations.



Straight Diamond

US1D

Thin, straight diamond-coated finishing instrument used for removal of residual debris and designed to enhance access to deep periodontal pockets primarily in anterior areas.

LOW LOW

GUARDIAN WRENCH/TIP CARRIER

Symmetry Piezo Tips come in the Guardian Wrench Tip Carrier for safe and easy connection to the handpiece.

Wrenches also hold the tip during cleaning and sterilization to prevent loss of or damage to the tip.



Scaling Wrench/ Tip Carrier

MEDIUM-HIGH

Use primarily on medium to high power (in orange mode or scaling mode if applicable).



Scaling Wrench/ Tip Carrier

LOW-MEDIUM

Use primarily on low to medium power (in blue mode or scaling mode if applicable).



Perio Wrench/ Tip Carrier

LOW

Use primarily on low power (in green mode or perio mode if applicable).

WHAT TYPE OF STERILIZATION UNIT DOES YOUR OFFICE USE?

POWER LEVEL

If using a Statim 2000 unit, you will need to order a special shorter Hu-Friedy Guardian Wrenches separately to ensure compatibility with your sterilizer.

Green, S-Series, Short Wrench* | USRTWSG

Blue, S-Series, Short Wrench* | USRTWSB

Green, E-Series, Short Wrench* | UERTWSG

Blue, E-Series, Short Wrench* | UERTWSB

REPLACEMENT PART

Black Replacement Wrench

| USRTW

SYMMETRY IQ CASSETTES

HANDPIECE CASSETTI DOUBLE SHOWN



Handpiece Cassette Single | IM30IQ8

Symmetry handpiece not included.

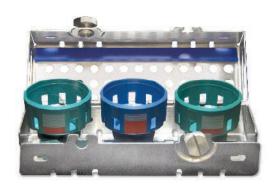
Dimensions: 1.5" x 8" x 1.25"
(38 mm x 203 mm x 32 mm)

Handpiece Cassette Double | IM60IQ8

Symmetry handpiece not included.

Dimensions: 3" x 8" x 1.25"

(76 mm x 203 mm x 32 mm)



Wrench Cassette (Blue)

IMIQ38

Accommodates three Symmetry Piezo Tips in Guardian Wrenches.

Exterior Dimensions: 5.63" x 1.95" x 1.77" (143 mm x 49.5 mm x 45 mm)





PIEZO REFERENCE GUIDE

CHARACTERISTICS OF TIP MOVEMENT

The smooth linear movement generated by piezoelectric systems creates a stroke pattern that is similar to hand instrumentation. Adapting the lateral surface of the piezo tip against the tooth surface (similar to a hand instrument) will increase clinical efficiency.

ESSENTIALS OF POWER DISPERSION

- Most of the energy is dispersed at the point of tip (1).
- The lateral surfaces of the tip (2) are moving in a linear pattern, similar to the stroke of a bladed hand instrument.
- · Adaptation of this lateral surface provides the most efficient deposit removal.
- · Adapt the terminal 2-3 mm of tip for optimal performance.
- When concave front or convex back surfaces (3) are adapted to the tooth surface, the instrument will chatter against the surface rather than effectively remove deposit.

PIEZO TIP ADAPTATION

- · Adapt the lateral surface to the tooth for optimal performance.
- Maintain tip angulation near zero degrees parallel to tooth surface.
- To minimize the risk of root damage, never adapt tip at a $90\,^\circ$ angle.
- \bullet $\,$ Use little or no lateral pressure and let the tip do the work for you.
- When concave front or convex back surfaces are adapted to the tooth surface, the instrument will chatter against the surface rather than effectively instrument.

SENSORY OBSERVATIONS

- · Smooth vibration enhances tactile sense for instrumentation.
- · The smooth motion of the tip is an excellent option for patients with root sensitivity.
- · Piezo tip vibration is very smooth and quiet when adapted correctly on a lateral surface.
- Deposits are pulverized, resulting in a slurry of debris that is visible in the water at the back of the mouth.
- Calculus is generally not removed in big chunks as commonly seen during magnetostrictive instrumentation.





Lateral surface of tip in use



To achieve the greatest efficiency and patient comfort, it is best to adapt the lateral sides of your piezoelectric instrument to the surface of the tooth.



REFERENCE SECTION

PIEZO TIP CLEANING AND CARE

CLEANING & STERILIZATION

- Piezo tips remain in the Combitorque Wrench during the complete cleaning, disinfection and sterilization reprocessing cycle.
- · Clean using ultrasonic cleaner or thermodisinfector.
- Steam sterilize for at least 4 minutes at 270°F/132°C or 30 minutes at 250°F/121°C. Do not heat above 275°F/135°C.
- · Recommend at least 30 minute dry time after sterilization cycle.
- Clean, disinfect, inspect and steam sterilize before each use following the respective equipment manufacturer's users instructions.
- Do not expose to phenols, iodophors or dry heat sterilization.
- Detailed care and maintenance instructions are available upon request or go to Hu-Friedy.com.

TIP INSTALLATION

- 1. Your Hu-Friedy EMS Piezo tip comes with its own combitorque wrench.
- 2. Attach tip to handpiece using the Combitorque Wrench by aligning the threaded end of the tip to the handpiece.
- Rotate the Combitorque wrench clockwise. Once the instrument is screwed all the way in, give an extra quarter of a turn to obtain the required torque. Incomplete tightening may cause the tip to become loose or lack vibration.
- 4. When using the Combitorque Wrench without a tip previously inserted into the tip carrier, take the following step: place the Combitorque® Wrench over the tip by slipping tip through the small hole in the bottom, closed end of the tool. This will position the tip within the Combitorque® Wrench for safety and convenience.

TIP REMOVAL

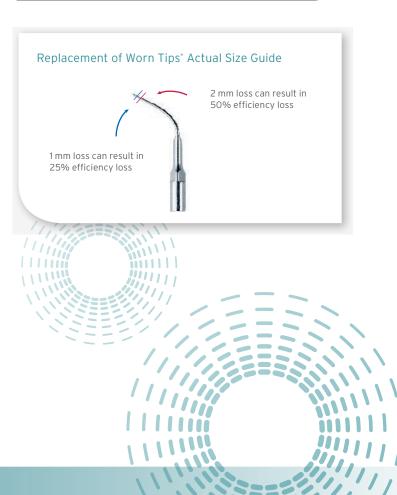
- Hold the handpiece vertically. Insert the tip through the hole in the bottom of the Combitorque® Wrench.
- 2. Depress wrench slightly while rotating to fully secure tip to wrench.
- 3. Turn the wrench counter-clockwise to loosen and remove tip from handpiece.
- 4. Once removed from handpiece, do not remove the tip from the wrench carrier.

OPTIMUM EFFICIENCY

Scaling efficiency can significantly diminish with worn tips. Inferior performance and poor water delivery can result from worn, damaged, bent, or altered tips. For optimal scaling efficiency, we recommend checking tips regularly for signs of wear.

APPLICATION CHART

	2/2	>	%	0/2	Ś,	84°	× Q	Sep.		N. S. A. K.	AF. AF.
Light to moderate supragingival deposits	•	•	•		•				•		
Heavy supragingival deposits	•			•					•		
Light to moderate deposits in shallow pockets		•	•		•		•		•	•	
Light to moderate deposits in deep periodontal pockets					•		•	•		•	
Moderate to heavy deposits in deep periodontal pockets						•					
Furcation areas								•		•	



^{*} Lea SC, et al. 2006. The effect of wear on ultrasonic scaler tip displacement amplitude. J Clin Periodontology. (Pages 33:37-42).





S-SERIES POWER SETTINGS CROSS REFERENCE

HU-FRIEDY	APPLICATION				POWER SETTING	G		
TIP	HU-FRIEDY	SATELEC	NSK	POWER	HU-FRIEDY SYMMETRY	SATELEC P5	SATELEC SP NEUTRON	NSK VARIOS
USS10		SCALING	SCALING	MED	• 2-8 • 1-4	7-9	8-10	Min-3
USP10		SCALING	SCALING	MED	• 1-4	7-8	8-10	Min-3
USP		SCALING	SCALING	MED	2-10 1-4	7-9	8-10	Min-3
US100		SCALING	SCALING	MED	• 4-10 • 1-3	4-6	6-8	Min-1
USU		SCALING	SCALING	MED	• 4-10 • 1-3	7-8	1-6	Min-4
USAFS		SCALING	SCALING	MED	• 1-5	7-8	8-10	Min-3
USAFL		SCALING	SCALING	MED	• 1-5	7-8	8-10	Min-3
USAFR		SCALING	SCALING	MED	• 1-5	7-8	8-10	Min-3
USP3		PERIO	PERIO	LOW	• 4-10	1-3	1-4	Min-4
US4R		PERIO	PERIO	LOW	6 -10			
US4L		PERIO	PERIO	LOW	• 1-6			
US1D		PERIO	PERIO	LOW	● 7-10 ● 1-6			
US2RD		PERIO	PERIO	LOW	• 1-5	1-3	1-4	Min-4
US2LD		PERIO	PERIO	LOW	• 1-5	1-3	1-4	Min-4

HU-FRIEDY S-SERIES ITEM CODE CROSS REFERENCE

HU-FRIEDY	USS10	US100	USP10	USP	USU	USP3	US4R	US4L	US1D	US2RD	US2LD	USAFS	USAFL	USAFR
NSK VARIOS	G1	G6	G4	G5	P20	P10				PD3	PD2	P20	P21L	P21R
SATELEC	S1	10Z	10P	1S	PFU	НЗ	H4R	H4L	H1	H2R	H2L			



HU-FRIEDY EMS APPLICATION CHART

PERIO/SCALING											
	А	В	С	Р	PS	PI	PL1	PL2	PL3	PL4	PL5
Supragingival deposits	•	•	•	•	•						
Shallow pockets				•	•						
Light to moderate deposits in deep periodontal pockets				•	•		•	•			
Moderate to heavy deposits in deep periodontal pockets				•			•	•			
Furcation areas							•	•		•	•
Implant surfaces and restorations						•					
Periodontal debridement					•		•	•			
Cleaning and irrigation of periodontal pockets					•		•	•	•		
Ortho cement		•	•								

ENDODONTIC							
	ESI	K-type files	RT1	RT2	RT3	Н	D
Preparation of root canal system	•						
Cleaning and irrigation of root canal system	•	•					
Removal of calcifications			•				
Removal of ledges				•			
Access to broken files in the root canal				•	•		
Thermal condensation of gutta-percha						•	
Removal of crowns and bridges							•
Retrograde Preparation of Isthmus							



POWER AND WATER SETTING CHART

HU-FRIEDY EMS TIP	POWER SETTING	WATER FLOW RATE	MODE	FILE HOLDER (if applicable)
A	MED-HIGH	MED-HIGH	STANDARD	
Р	LOW-HIGH	MED-HIGH	STANDARD	
PS	LOW-MED	MED-HIGH	STANDARD	
В	LOW-HIGH	MED-HIGH	STANDARD	
С	LOW-HIGH	MED-HIGH	STANDARD	
PL1	LOW-MED	MED-HIGH	STANDARD	
PL2	LOW-MED	MED-HIGH	STANDARD	
PL3	LOW-MED	MED-HIGH	STANDARD	
PL4	LOW-MED	MED-HIGH	STANDARD	
PL5	LOW-MED	MED-HIGH	STANDARD	
RT1	LOW-MED	LOW-HIGH	ENDO	
RT2	LOW	LOW-HIGH	ENDO	
D	LOW-MED	NONE	ENDO	
Н	LOW-MED	NONE	ENDO	
RT3	LOW	MED-HIGH	ENDO	90°, 120°, 180°
ESI	LOW	MED-HIGH	ENDO	90°, 120°
PI	LOW-MED	MED-HIGH	STANDARD	120°
K-type files	LOW	MED-HIGH	ENDO	90°, 120°
HPL3	LOW-MED	MED-HIGH	STANDARD	
DPL3	LOW-MED	MED-HIGH	STANDARD	