



# SYMMETRY PIEZO TIPS:

## E-SERIES TIPS, S-SERIES TIPS

Hu-Friedy Symmetry tips are compatible with: E-Series tips are compatible with all EMS generators. S-Series tips are compatible with Symmetry IQ®, Satelec/Acteon and NSK piezo generators.

### SCALING TIPS



**S10 Universal**  
**UES10**  
**USS10**

Standard diameter tip used to remove heavy supragingival deposits.

**POWER LEVEL** MED—HIGH



**P Universal**  
**USP**  
**UEP**

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

**POWER LEVEL** MED—HIGH



**P10 Universal**  
E-Series: not available  
**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** MED



**100 Universal**  
**UE100**  
**US100**

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

**POWER LEVEL** MED—HIGH

### 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** MED



**Right**  
**USAFR**

**POWER LEVEL** MED



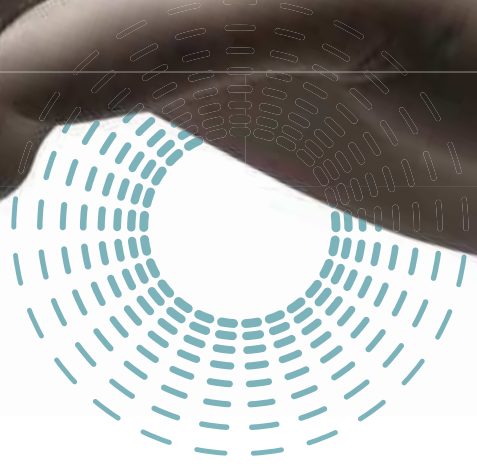
**Left**  
**USAFL**

**POWER LEVEL** MED





# SYMMETRY PIEZO TIPS



## PERIO



### Universal Perio

E-Series: not available

#### USU

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

**POWER LEVEL** MED



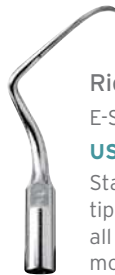
### Left Perio

E-Series: not available

#### US4L

Standard diameter contra-angle tip used to remove calculus on all surfaces of premolars and molars, especially difficult to reach interproximal surfaces.

**POWER LEVEL** LOW



### Right Perio

E-Series: not available

#### US4R

Standard diameter contra-angle tip used to remove calculus on all surfaces of premolars and molars, especially difficult to reach interproximal surfaces.

LOW



### 3 Perio

#### UEP3

#### USP3

Thin-bladed curette-like tip used to remove heavy deposits and necrotic cementum on anteriors and premolars.

LOW

## DIAMOND-COATED



### Left Diamond

#### UE2LD

#### US2LD

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

**POWER LEVEL** LOW



### Right Diamond

#### UE2RD

#### US2RD

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

LOW



### Straight Diamond

#### UE1D

#### 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

\*Satelec and NSK are trademarks of Acteon, Inc., and Nakanishi Inc. respectively.



# SYMMETRY HANDPIECE AND ACCESSORIES

## 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 sterilisation to prevent loss of or damage to the tip.



Scaling Wrench/  
Tip Carrier



Scaling Wrench/  
Tip Carrier



Perio Wrench/  
Tip Carrier

### POWER LEVEL

MEDIUM—HIGH

LOW—MEDIUM

LOW

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

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

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

## CASSETTES

### Cassette Color Coding

#### Choose the color.

Just add the color coding number to the last part of the partcode (replace " \_" with the number)

- 0 = Red
- 1 = Grey
- 2 = White
- 3 = Orange
- 4 = Purple
- 5 = Yellow
- 6 = Lavender
- 7 = Black
- 8 = Blue
- 9 = Green
- 11 = Ocean Blue



Ultrasonic Insert/  
Handpiece Cassette Small  
**IMN30HU\_**

Holds 2 Ultrasonic Inserts or 1 handpiece. Symmetry handpiece not included.

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



Ultrasonic Insert/  
Handpiece Cassette Large  
**IMN60H\_**

Holds up to 3 high-speed handpieces or 5 ultrasonic inserts. Symmetry handpiece not included.

Dimensions: 3" x 8" x 1.25"  
(76 mm x 203 mm x 32 mm).



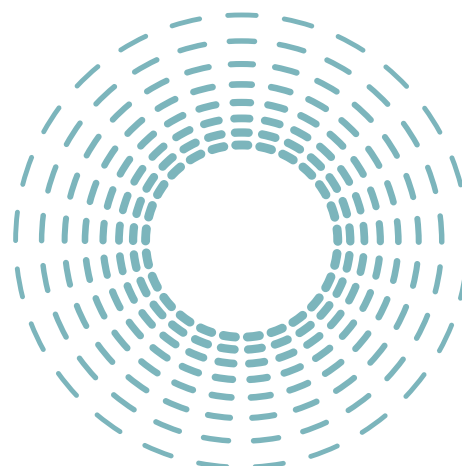
Wrench Cassette (Blue)  
**IMIQ38**

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).

## REPLACEMENT PART

Black Replacement Wrench	<b>USRTW</b>
Handpiece Lux	<b>UPHPL</b>
Handpiece Sheath	<b>UPHPLS</b>





# PIEZO REFERENCE SECTION

## 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

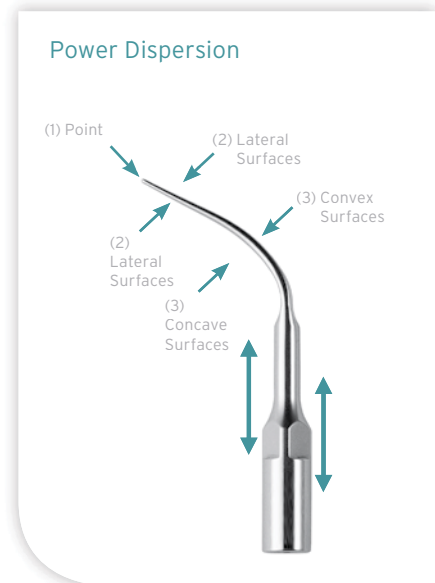
- Most of the energy is dispersed at the point of tip (1).
- The lateral surfaces of the tip (2) are moving in a linear pattern, similar to the stroke of a bladed hand instrument.
- Adaptation of this lateral surface provides the most efficient deposit removal.
- Adapt the terminal 2-3 mm of tip for 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 0° – parallel to tooth surface.
- To minimise the risk of root damage, never adapt tip at a 90° angle.
- 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 pulverised, 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.



# PIEZO TIP CLEANING AND CARE

## CLEANING & STERILISATION

- Piezo tips remain in the Wrench during the complete cleaning, disinfection and sterilisation reprocessing cycle.
- Clean using ultrasonic cleaner or thermodisinfectant.
- Steam sterilise 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 sterilisation cycle.
- Clean, disinfect, inspect and steam sterilise before each use following the respective equipment manufacturer's users instructions.
- Do not expose to phenols, iodophors or dry heat sterilisation.
- Detailed care and maintenance instructions are available upon request or go to Hu-Friedy.eu.

## TIP INSTALLATION

1. Your Hu-Friedy Piezo tip comes with its own Wrench.
2. Attach tip to handpiece using the Wrench by aligning the threaded end of the tip to the handpiece.
3. Rotate the 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 Wrench without a tip previously inserted into the tip carrier, take the following step: place the 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 Wrench for safety and convenience.

## TIP REMOVAL

1. Hold the handpiece vertically. Insert the tip through the hole in the bottom of the 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.

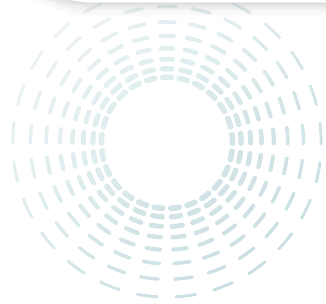
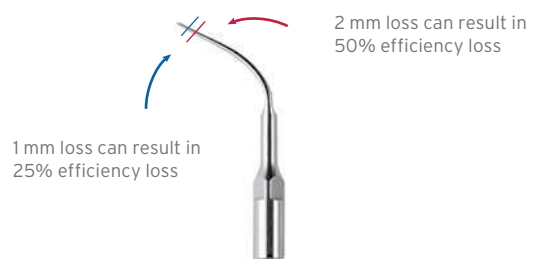
## OPTIMUM EFFICIENCY

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

	S10	U	100	P10	P3	4R, 4L	ID	ZRD, 2LD	P	AFS, AFL, AFR
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								●		●

### Replacement of Worn Tips Actual Size Guide





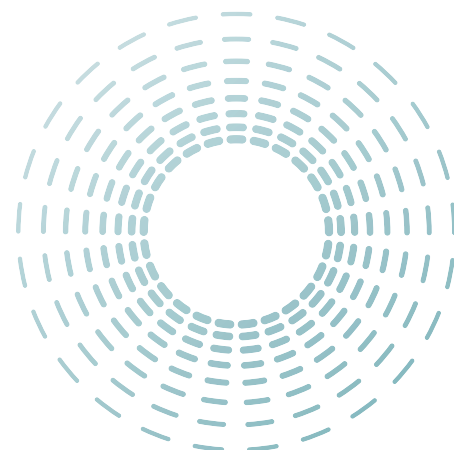
# PIEZO TIP CLEANING AND CARE

## E-SERIES & S-SERIES POWER SETTINGS CROSS REFERENCE

HU-FRIEDY TIP	APPLICATION				POWER P5	POWER SETTING			
	HU-FRIEDY	SATELEC	NSK	POWER P5		SATELEC P5	SATELEC SP NEUTRON	NSK VARIOS	EMS MINI-PIEZON
USS10	SCALING	SCALING	SCALING	MED	7-9	8-10	Min-3		
UES10	SCALING			MED				1-6	
USP10	SCALING	SCALING	SCALING	MED	7-8	8-10	Min-3		
USP	SCALING			MED				1-6	
UEP	SCALING			MED				1-6	
US100	SCALING	SCALING	SCALING	MED	4-6	6-8	Min-1		
UE100	PERIO			LOW				1-3	
UE100M	PERIO			LOW				1-3	
USU	PERIO	SCALING	PERIO	LOW	7-8	1-6	Min-4		
USP3	PERIO	PERIO	PERIO	LOW	1-3	1-4	Min-4		
UEP3	PERIO			LOW				1-3	
US4R	PERIO	PERIO	PERIO	LOW	1-3	1-4	Min-4		
US4L	PERIO	PERIO	PERIO	LOW	1-3	1-4	Min-4		
US1D	PERIO	PERIO	PERIO	LOW	1-3	1-4	Min-4		
UE1D	PERIO			LOW				1-3	
US2RD	PERIO	PERIO	PERIO	LOW	1-3	1-4	Min-4		
UE2RD	PERIO			LOW				1-3	
US2LD	PERIO	PERIO	PERIO	LOW	1-3	1-4	Min-4		
UE2LD	PERIO			LOW				1-3	

## HU-FRIEDY E-SERIES & S-SERIES ITEM CODE CROSS REFERENCE

HU-FRIEDY	USS10	UES10	US100	UE100	UE100M	USP10	USP	UEP	USU	USP3	UEP3	US4R	US4L	US1D	UE1D	US2RD	UE2RD	US2LD	UE2LD
SATELEC*	S1		10Z			10P	1S		PFU	H3		H4R	H4L	H1		H2R		H2L	
NSK VARIOS*	G1		G6			G4			P20	P10						PD3		PD2	
EMS*		A		PS	PL3			P											



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