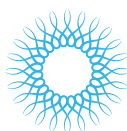


## ENDURING PERFORMANCE BEAUTIFULLY CRAFTED

ORTHODONTIC PRODUCT CATALOGUE

How the best perform

**Hu-Friedy**



## SOLUTIONS OVERVIEW



Since 1908, Hu-Friedy has been putting the highest quality, most innovative dental products in the hands of dental professionals worldwide. And today as one of the world's leading dental instrument companies, we continue our commitment to advancing dental performance by supporting these products with world class service, support, education and peer communities. We're committed to making sure the best perform that way.

**Hu-Friedy. How the best perform.**

### A Worldwide Focus on Quality

Hu-Friedy is based in Chicago and has been privately managed by the Saslow family since 1959. Today we have over 700 talented employees and a sales force spread over 25 countries – including our production facilities in Chicago and Shanghai, China; our distribution centers in Des Plaines, Illinois, and Tuttlingen, Germany; and our additional offices in Japan, Germany, Italy and the Netherlands. Worldwide, our products are sold in more than 95 countries.

Our mandate for excellence is company-wide. Only at Hu-Friedy will you find more than 300

artisans meticulously handcrafting instruments in a modern manufacturing facility. Only here are employees personally responsible for the quality of their work and each other's. We believe that our success is the result of both our company's commitment to excellence and the dedication and pride of our highly skilled instrument craftspeople, management and staff.

### A Legacy of Innovation

Since the Hu-Friedy Manufacturing Company was founded in 1908 by Hugo Friedman, we have proudly collaborated with private practitioners, dental schools and leading educators to develop

new technologies, innovative designs and quality products that are synonymous with value and performance. Because of our reputation for industry leadership, dental experts have been turning to Hu-Friedy with their cutting-edge ideas for over a hundred years.

From our inception, we have been committed to education and developing relationships with students. At the core is our commitment to helping our customers perform at their best and to improve lives through better dentistry. From student to practitioner, Hu-Friedy is proud to be an important part of our customers' professional lives.

How the best perform





## THE PURSUIT OF EXCELLENCE

At Hu-Friedy, the mission is clear: we dedicate ourselves to outstanding craftsmanship through the pursuit of excellence and attention to fine detail. Over a century later, Hugo Friedman's unerring commitment to quality and innovation lives on at Hu-Friedy. As a result, Hu-Friedy instruments are indisputably the most skillfully created precision orthodontic instruments in the world.

Every instrument we create becomes, in essence, a critical extension of each practitioner's skill. To achieve this, we handcraft each instrument individually, assuring instruments of the highest quality, durability and performance available to the profession.

### PRODUCTION OF SUPERIOR PRECISION

The process is demanding and complex—as many as 30 different operations may be needed to produce a single Hu-Friedy Orthodontic instrument.

### IMMUNITY STEEL

Hu-Friedy uses only the highest-quality forged steel with an optimal blend of chromium and carbon. These elements, combined with exclusive Hu-Friedy processing, assure the creation of an outstanding instrument that will be resistant to corrosion given proper use and care.

### ORBIT JOINT

Keeps instrument tips aligned, ensuring proper functionality and frustration-free use.

### LASER ENGRAVING

Each instrument is laser engraved with the applicable wire sizes.

### SATIN FINISH

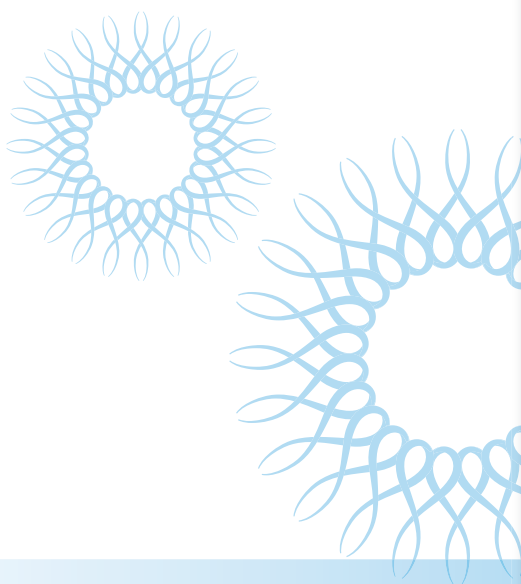
All Hu-Friedy Orthodontic instruments are finished by hand to a satin luster; this non-glare surface keeps your instrument looking beautiful.

### ERGONOMIC DESIGN

The size, shape, handle length and weight are balanced for optimum comfort and confidence.

## TABLE OF CONTENTS

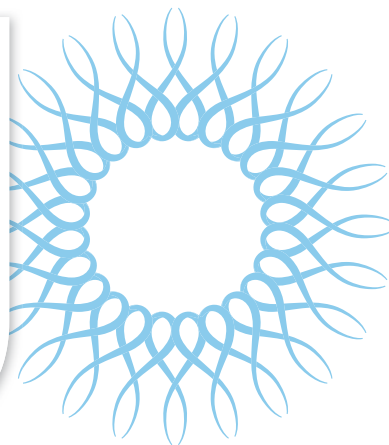
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# CLEAR COLLECTION FOR CLEAR ALIGNERS

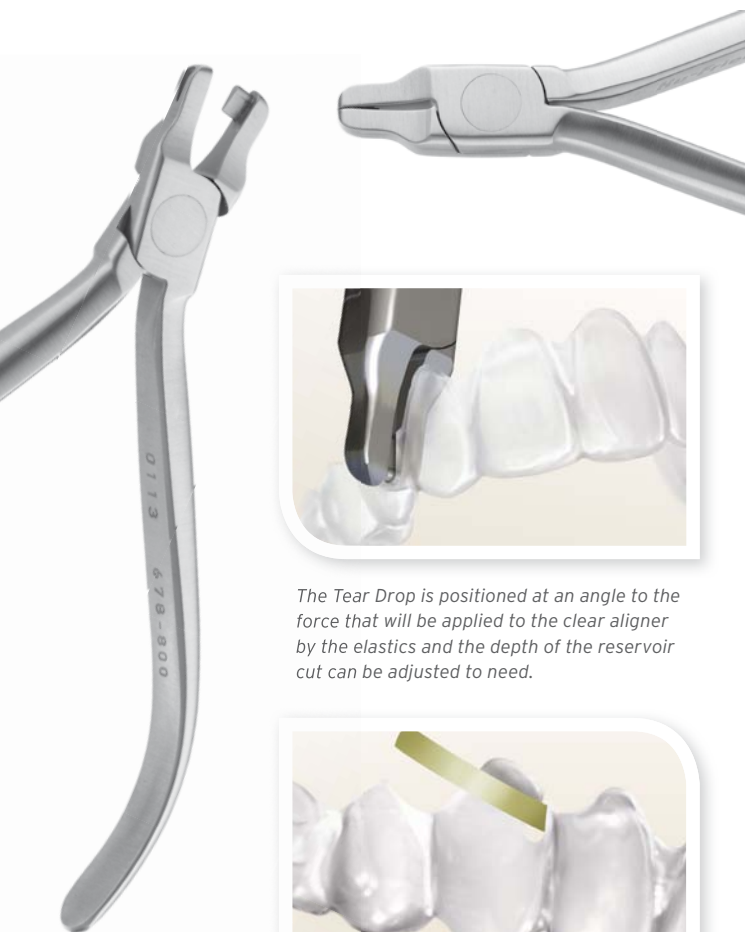
Hu-Friedy's Clear Collection consists of innovative instruments designed to accent, individualize and optimize the biomechanics of the "invisible" aligner experience.



## The Tear Drop

| 678-800

An instrument created to add a notch at the gingival margin of clear aligners anywhere elastic hooks are required within the arch. The Tear Drop provides a reservoir to hold the elastics in place as the aligner is seated. This permits easier manipulation of elastics by the patient.



*The Tear Drop is positioned at an angle to the force that will be applied to the clear aligner by the elastics and the depth of the reservoir cut can be adjusted to need.*



*The Tear Drop elastic hook can be used to hook-up elastics of all types from Class II, Class III, Delta, Class I intraarch, for connection to TADS, and to produce extrusive forces for specific teeth.*

## The Vertical

| 678-801

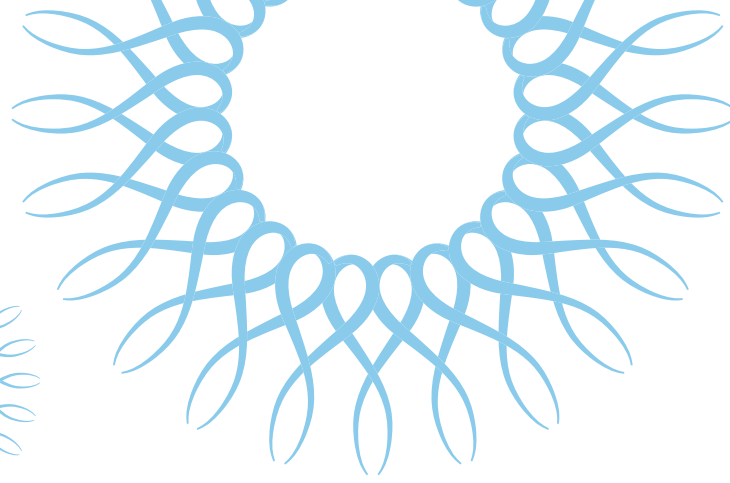
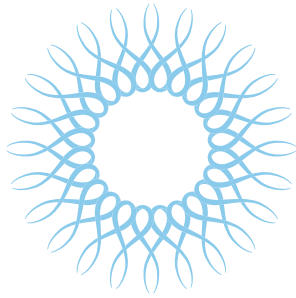
The Vertical emphasizes over-correction of rotations by producing an indentation at the mesial or distal line angles on the facial and/or lingual of a specific tooth. A rotational couple can also be created using vertical indents on facial and lingual surfaces on opposing sides of a tooth. The Vertical can also enhance resolution of in-and-out discrepancies.



*Impress an indentation with The Vertical along the mesial or distal line angle of a tooth to enhance rotational control.*







## The Horizontal

| 678-802

The Horizontal instrument produces an indentation to accent individual root torque. It also serves a second purpose by enhancing retention of either clear aligners or retainers by placing an indent into a tooth's undercut or below a bonded attachment.



*Accent individual root torque by producing an indent at the gingival margin on either the buccal or lingual for any tooth in the arch form.*



*Increase clear aligner or retainer retentiveness by producing a horizontal indent into the undercut of specific teeth or just under an attachment.*

## The Hole Punch

| 678-803

The Hole Punch is used to create half-moon cutouts for relief of clear aligners around bonded buttons used for elastics. No need to attempt to attach buttons to plastic trays. In addition, the Hole Punch can nip away plastic to provide soft tissue clearance to prevent aligner impingement of tissue.



*The Hole Punch is positioned at the gingival margin with one-half of the "circle" of the punch over the plastic of the aligner.*



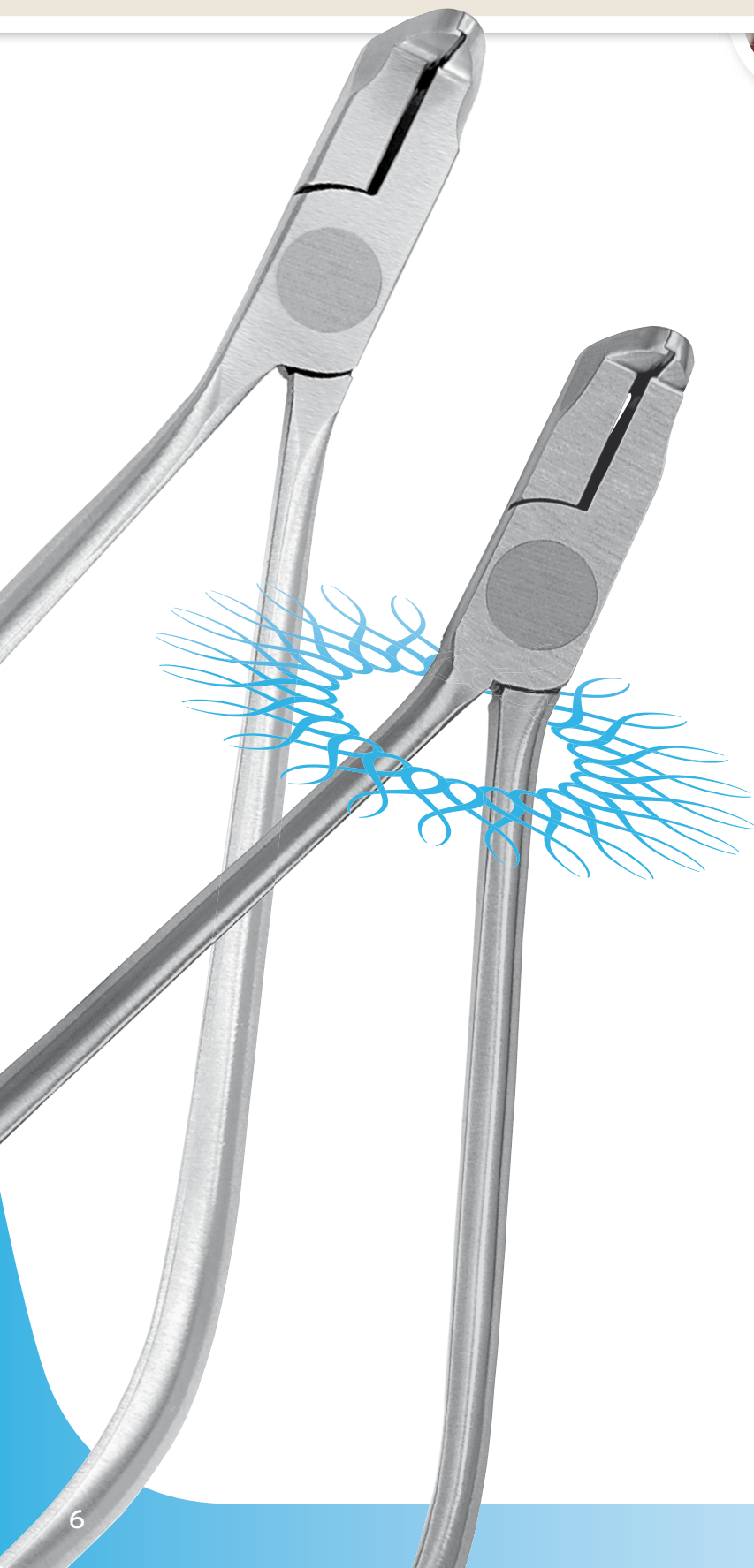
*The half moon cutout can be placed on any tooth where bonded buttons or brackets are added for elastics or other biomechanics.*



## CUTTERS

With our diamond-honed cutting edges and orbit-formed joint, you will experience sharp and accurately-aligned cutting edges for every procedure, every time.

For each individual area of focus, we provide a specifically engineered cutter. To meet these stringent standards, all of our blades are hand-finished to maximize cutting performance for the appropriate wire size.



### Universal Cut & Hold Distal End Cutter

#### | 678-101

When used intra orally it safely holds the cut portion to be discarded. Patient comfort is enhanced by the smooth, tapered tip.

Wire size:  
< = .012" to .021" x .025"  
(.30 mm - .53 mm x .64 mm)

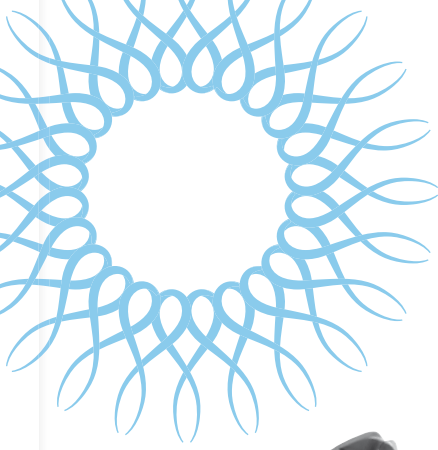
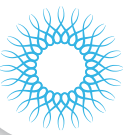


### Universal Cut & Hold Distal End Cutter with Long Handle

#### | 678-101L

Same as 678-101, with long handle.

Wire size:  
< = .012" to .021" x .025"  
(.30 mm - .53 mm x .64 mm)



**Flush Cut Distal End  
Cutter, No Hold**

**| 678-102**

An exceptional universal  
cutter for all types of wires.

Wire size:  
< = .021" x .025"  
(.53 mm x .64 mm)



**Multi-Use Cutter**

**| 678-105**

Designed to cut soft wire  
pins and ligature wires.

Wire size:  
< = .015" (.38 mm)



**Hard Wire Cutter, 15°**

**| 678-103**

15° offset tip enhances  
access in difficult areas.  
Designed to cut hard wires.

Wire size:  
< = .022" x .028"  
(.56 mm x .71 mm)



**Mini Pin & Ligature Cutter**

**| 678-106**

Slim profile is a plus in  
difficult to access areas.  
Designed to cut soft wire  
pins and ligature wires.

Wire size:  
< = .012" (.30 mm)



**Hard Wire Cutter**

**| 678-104**

Designed to cut hard wires.

Wire size:  
< = .022" x .028"  
(.56 mm x .71 mm)

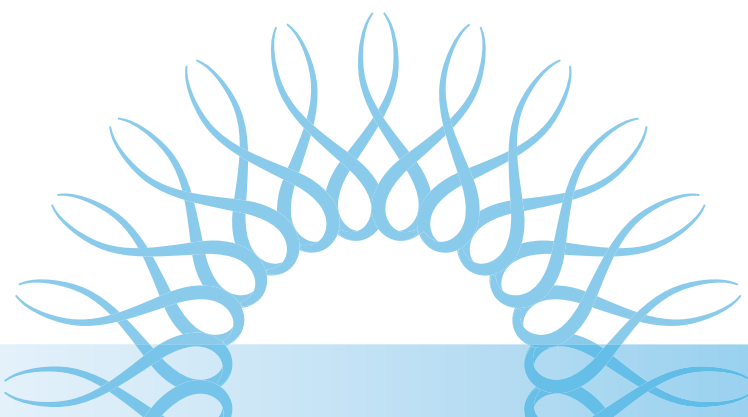


**Micro-Mini Pin  
& Ligature Cutter**

**| 678-107**

Ultra slim profile is a plus in  
the most difficult to access  
areas. Designed to cut soft  
wire pins and ligature wires.

Wire size:  
< = .012" (.30 mm)





## Micro-Mini Pin & Ligature Cutter with Long Handle

| 678-107L

Same as 678-107, with long handle.

Wire size:  $\leq .012''$  (.30 mm)



## Slim Flush Cut & Hold Distal End Cutter

| 678-113

Cuts and holds wire distally flush to the buccal tube while reducing debondings. Designed for all types of wires.

Wire size:  
 $\leq .012''$  to  $.021'' \times .025''$   
(.30 mm - .53 mm  $\times$  .64 mm)



## Micro-Mini Pin & Ligature Cutter, 15°

| 678-109

15° offset tip with ultra slim profile is a plus in the most difficult to access areas. Designed to cut soft wire pins and ligature wires.

Wire size:  $\leq .012''$  (.30 mm)



## Slim Micro Cutter

| 678-500

The slender tip allows for easier access when removing elastics. The face of the cutter has been *scooped out* and reduced by 13% as compared to our original 678-110 to enhance visibility.

Wire size:  $\leq .008''$  to  $.012''$



## Micro Cutter

| 678-110

Ligature cutter with reduced tip dimension. Designed to cut soft wire pins and ligature wires.

Wire size:  $\leq .012''$  (.30 mm)



## Lingual Distal End Cutter

| 678-700

Wire size:  $.012''$  to  $.018''$



## Flush Cut & Hold Distal End Cutter

| 678-111

Cuts and holds wire distally flush to the buccal tube while reducing debondings. Designed for all types of wires.

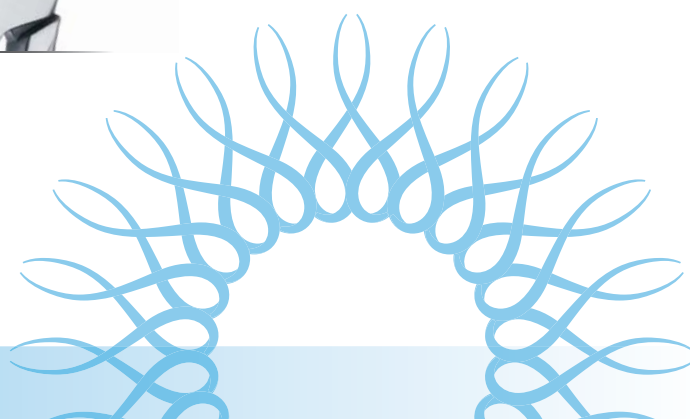
Wire size:  $\leq .020''$  (.51 mm)



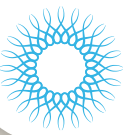
## Lingual Pin & Lig Cutter

| 678-701

Wire size:  $\leq .012''$

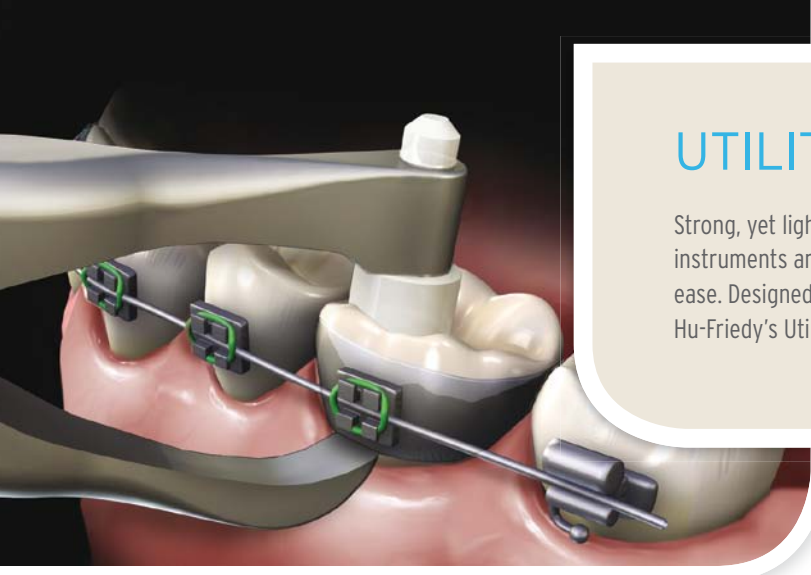






## UTILITY PLIERS

Strong, yet lightweight and perfectly balanced, the dimensions of these instruments are perfectly proportioned, they fit your grasp with unsurpassed ease. Designed to provide superior control with effortless versatility, Hu-Friedy's Utility Pliers assure comfort to both you and your patients.



### Weingart Pliers

| 678-201

Versatile utility pliers with serrations. Tapered 32° angular design is convenient for placement and removal of archwires.



### Slim Weingart Pliers

| 678-202

Slim, tapered 20° tips with serrations offer greater access and versatility.



### Weingart Pliers with Long Handle

| 678-201L

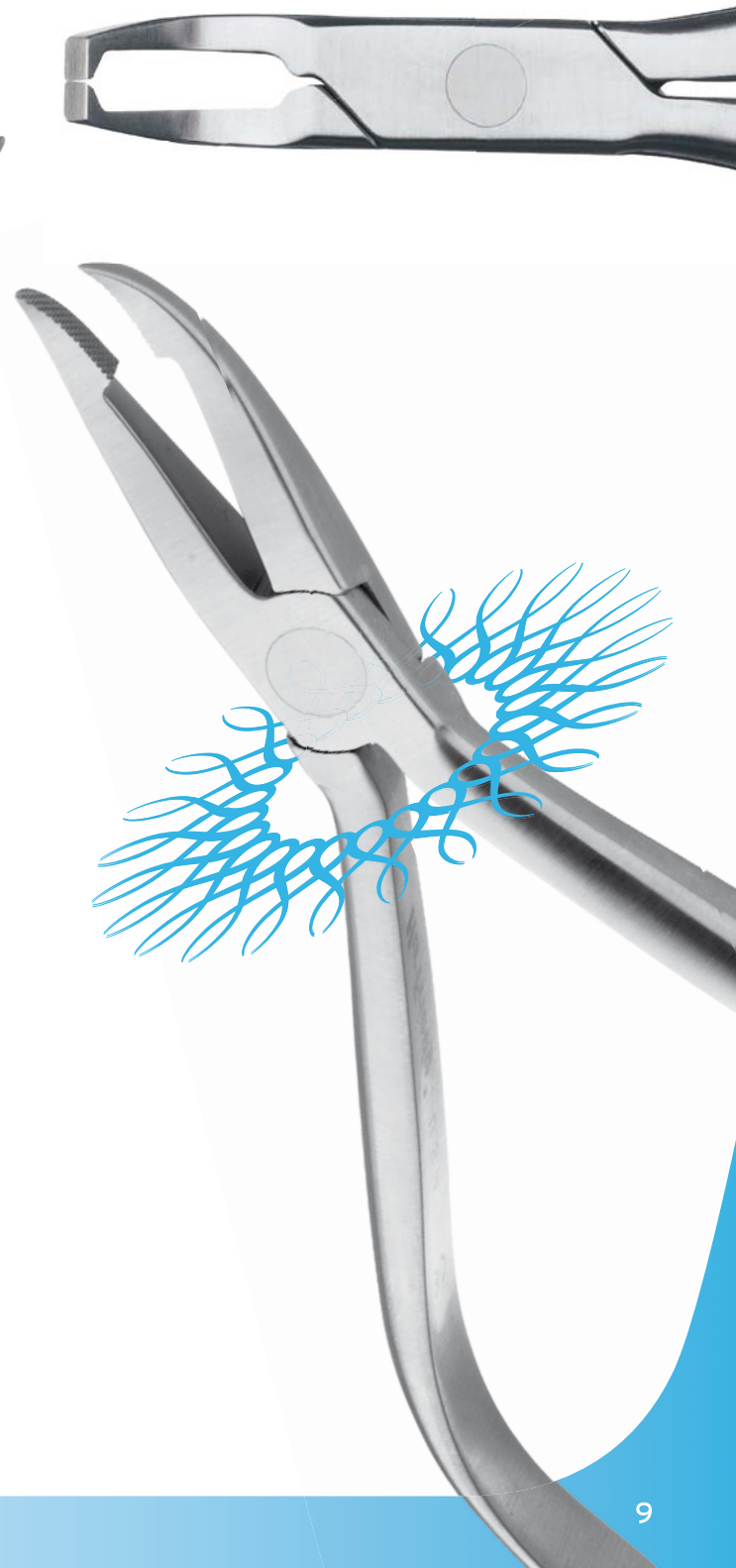
Same as 678-201, with long handle.

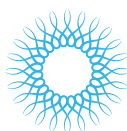


### How Pliers

| 678-203

How utility pliers have serrated tips. Useful for placement and removal of arch wires, pins and other auxiliaries.





## UTILITY PLIERS



**How Pliers, Offset**  
**| 678-204**

Similar to the straight How pliers, except tips are angled at 40° for accessing lingual and other hard to reach areas.



**Band Seating Pliers**  
**| 678-205**

Serrated tips grip brackets to assist in placing bands.



**Adhesive Removing Pliers**  
**| 678-206**

Reversible, replaceable blade is used to remove the bulk of composite material after debonding attachments.



**Posterior Band Removing Pliers, Long**  
**| 678-207**

The alignment of the tip and occlusal pad is well suited for posterior band removal.



**Posterior Band Removing Pliers, Short**  
**| 678-208**

The offset alignment of the tip and occlusal pad is well suited for band removal.



**Force Module Separating Pliers**  
**| 678-210**

Used for placement of elastic separators.



**Coon Style Ligature Tying Pliers**  
**| 678-211**

Most popular pliers for tying stainless ligature wires.

Wire size: < = .015" (.38 mm)



**Tip Back Pliers**  
**| 678-216**

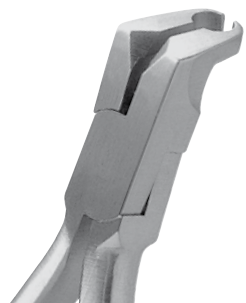
Bends down the distal extension of an arch wire protruding past the buccal tube. Unique contra-angle design allows for easy intraoral access. With long handle.

Wire size: < = .022" x .025"  
(.53 mm x .64 mm)



**Bracket Removing Pliers**  
**| 678-219**

Works well for steel, ceramic and plastic brackets of all types.



**Angulated Bracket Removing Pliers**  
**| 678-220L**

High angle design in long handle is effective for removal of all bracket styles from anterior and posterior teeth.



**Crown & Band Contouring Pliers**  
**| 678-221**

Designed for fitting of stainless steel crowns and bands.



**Slim Crown & Band Contouring Pliers**  
**| 678-221M**

Same as 678-221, with slimmer beak.





**Slim Crown & Band Contouring Pliers**

**| 678-221MC**

Same as 678-221, with slimmer beak.



**Steiner Tying Pliers**

**| 678-222**

Ideal for tying stainless steel ligature wires.

Wire size:  $\leq .015"$  (.38 mm)



**Band Crimping Pliers**

**| 678-225**

Thin tips allow for easy access into molar and bicuspid bands.



**Band Crimping Pliers with Spring**

**| 678-225M**

Thin tips allow for easy access into molar and bicuspid bands. With spring.



**Ultra Slim Weingart Pliers**

**| 678-501**

Wire size:  $\leq .030"$



**Slim Band Removing Pliers**

**| 678-503**

With a 21% thinner and more tapered working end compared to our original 678-207 model, the Slim Band Removing Pliers allow for easy accessibility helping limit patient discomfort.



**Lingual Weingart Pliers**

**| 678-702**

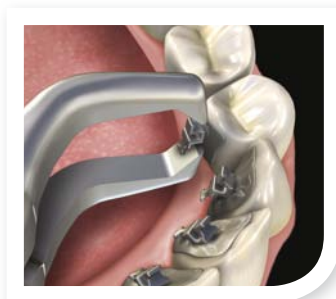
Wire size:  $\leq .030"$



**Lingual Weingart Pliers, 90° Bend**

**| 678-702-90**

Wire size:  $\leq .030"$

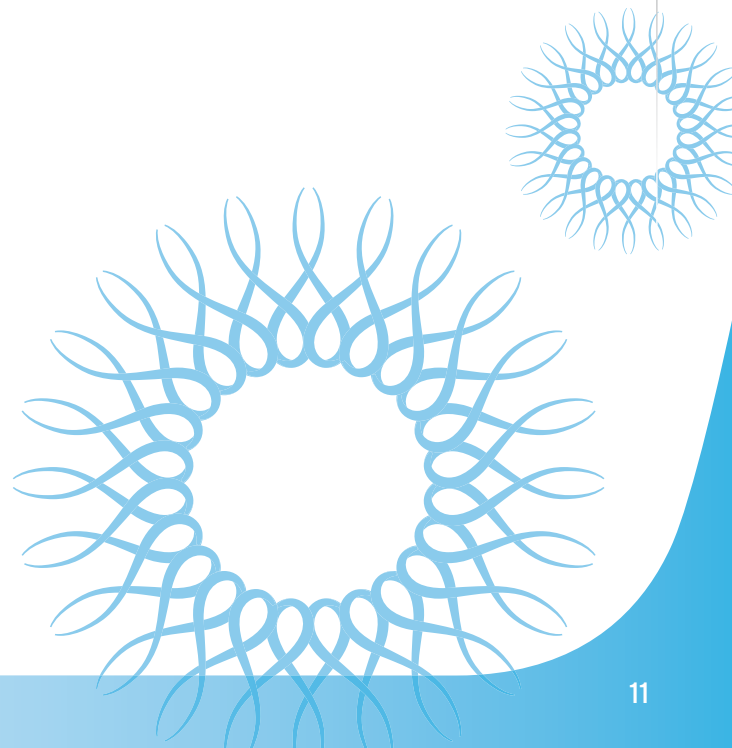


*Lingual view of the Lingual Bracket Removing Pliers debonding the bracket.*



**Lingual Bracket Removing Pliers**

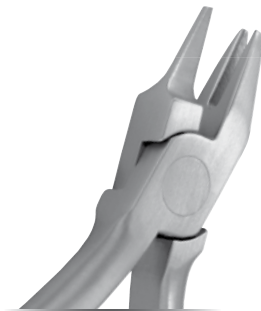
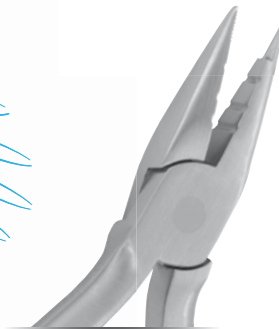
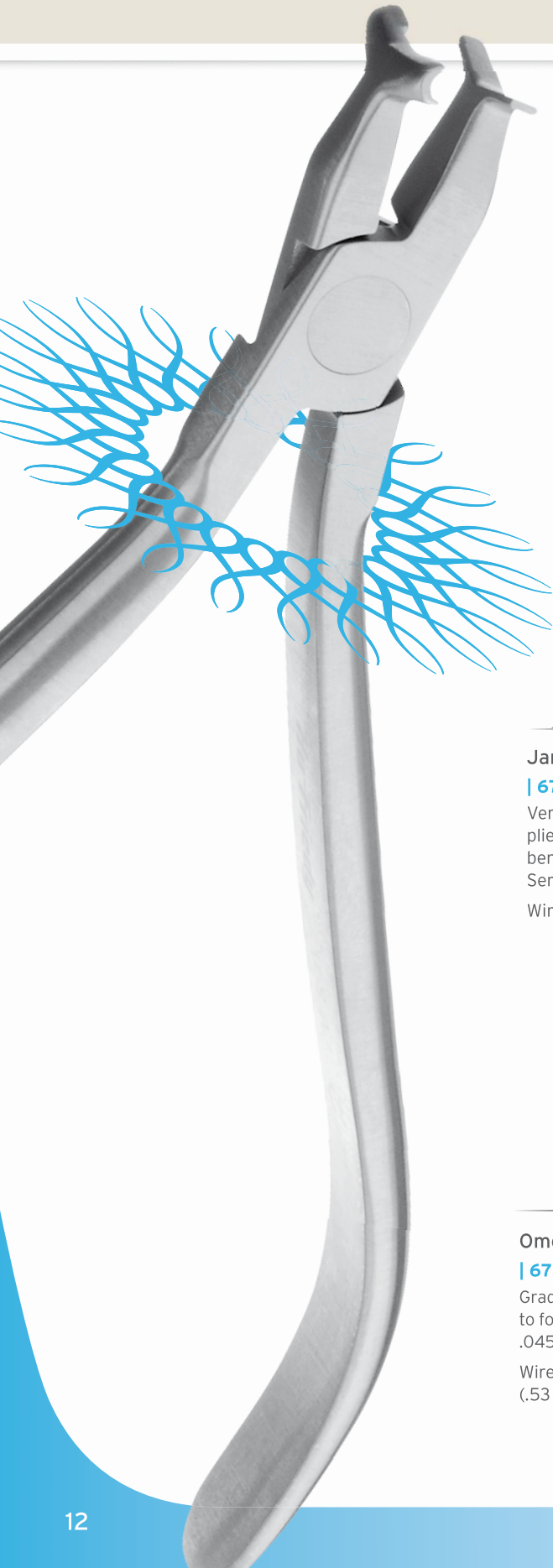
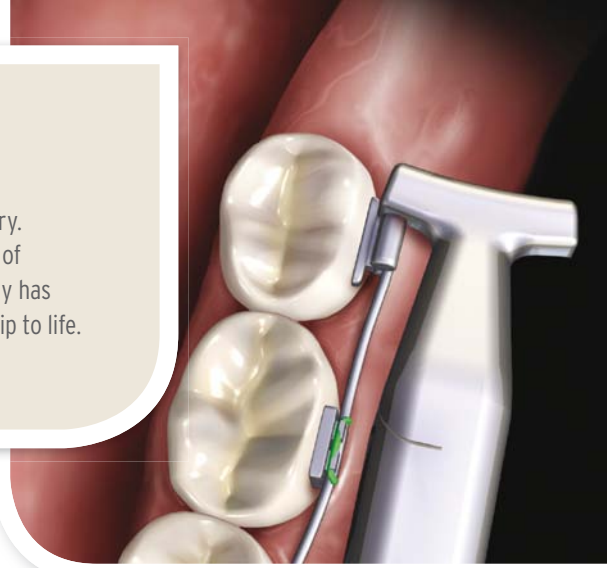
**| 678-703**





## WIRE FORMING PLIERS

These instruments perform as natural extensions of your professional artistry. Our impeccably smooth finished tips allow you to bend the wire without risk of damage. Whether you are shaping stainless steel or nickel titanium, Hu-Friedy has a hand-finished, precision instrument to help bring your brilliant workmanship to life.



### Jarabak Pliers

| 678-301

Versatile light wire bending pliers. Grooves assist with precise bending and closing of loops. Serrated surface grips wires.

Wire size:  $\leq .020"$  (.51 mm)

### Three Jaw Pliers

| 678-302

Useful for contouring and bending wire.

Wire size:  $\leq .030"$  (.76 mm)

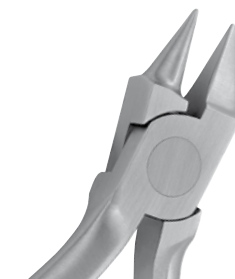


### Omega Loop Forming Pliers

| 678-303

Graduated cone is designed to form precise omega loops: .045", .060" and .075"

Wire size:  $\leq .022" \times .025"$   
(.53 mm x .64 mm)

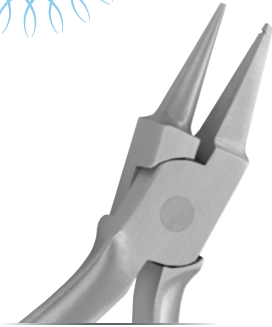
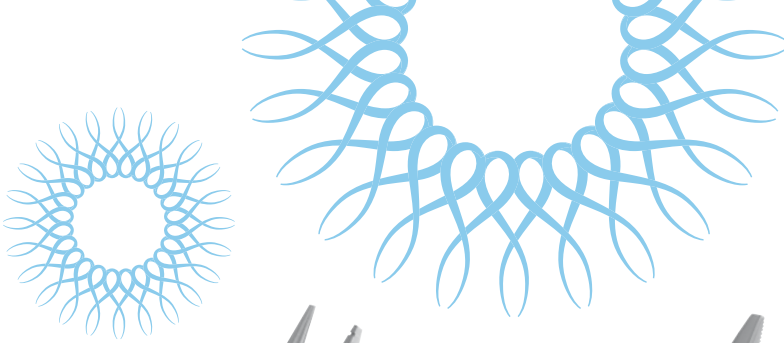


### Bird Beak Pliers

| 678-304

Versatile loop forming pliers for round wires.

Wire size:  $\leq .030"$  (.76 mm)

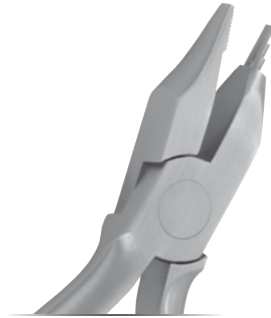


#### Light Wire Bird Beak Pliers with Groove

| 678-305

A longer cone than a standard bird beak is useful for forming precise loops in light wire. The groove allows for locating and duplicating loops.

Wire size:  $\leq .020"$  (.51 mm)

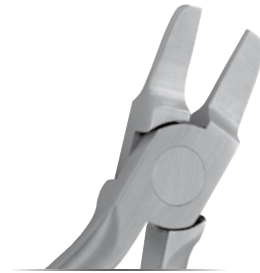


#### Tweed Loop Forming Pliers

| 678-306

Loop forming pliers with .045", .060" and .075" diameters for creating bull and helical loops in wires.

Wire size:  $\leq .022" \times .025"$   
(.53 mm  $\times$  .64 mm)



#### Arch Bending Pliers

| 678-307

Designed for placing first, second and third order bends, .050" blade width.

Wire size:  $\leq .022" \times .025"$   
(.53 mm  $\times$  .64 mm)



#### Tweed Pliers, Slim

| 678-307S

Designed for placing first, second and third order bends, .025" blade width.

Wire size:  $\leq .022" \times .025"$   
(.53 mm  $\times$  .64 mm)



#### Rectangular Arch Bending Pliers

| 678-308

Designed for placing first, second and third order bends, .070" blade width.

Wire size:  $\leq .022" \times .025"$   
(.53 mm  $\times$  .64 mm)



#### Lingual Arch Forming Pliers

| 678-309

Designed to create double back and triple back bends in .030" and .036" lingual arch wires.

Wire size:  $\leq .036"$  (.91 mm)



#### Hollow Chop Contouring Pliers

| 678-310

Perfect for subtle contouring of arch wires.

Wire size:  $\leq .030"$  (.76 mm)



#### O'Brien Pliers

| 678-311

For precise forming of small helical loops and intraoral tip back bends.

Wire size:  $\leq .020"$  (.51 mm)

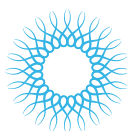


#### Mini Three Jaw Pliers

| 678-312

Tips are rounded for ease of contouring light wire.

Wire size:  $\leq .030"$  (.76 mm)



## WIRE FORMING PLIERS



### General Contouring Pliers

| 678-315

Tapered, serrated pliers for ease of contouring arch wires.

Wire size:  $\leq .021'' \times .025''$   
(.53 mm x .64 mm)



### Marcotte Looping Pliers

| 678-316

For precise forming of helical loops and T loops. No right angles. Prevents stress fracture of wires.

Wire size:  $\leq .022'' \times .025''$   
(.53 mm x .64 mm)



### Hollow Chop Pliers

| 678-317

Same as 678-310, with reduced radius.

Wire size:  $\leq .030''$  (.76 mm)



### Light Wire Bird Beak Pliers

| 678-318

A longer cone than a standard bird beak is useful for forming precise loops in light wire.

Wire size:  $\leq .020''$  (.51 mm)



### Nance Loop Forming Pliers

| 678-319

For precise forming of loops in four lengths: 3, 4, 5 and 6 mm. Groove at base aids in closing loops.

Wire size:  $\leq .022''$  (.53 mm)



### Adams Pliers

| 678-320

Excellent precise right angle bends and appliance application.

Wire size:  $\leq .040''$  (1.01 mm)



### V-Stop Pliers

| 678-321

Places V bend in arch wires, including nickel titanium, to prevent arch wire from traveling.

Wire size:  $\leq .022'' \times .025''$   
(.53 mm x .64 mm)



### NiTi Three Jaw Pliers

| 678-322

Designed for forming and contouring of all arch wire, especially for NiTi.

Wire size:  $\leq .020''$  (.51 mm)

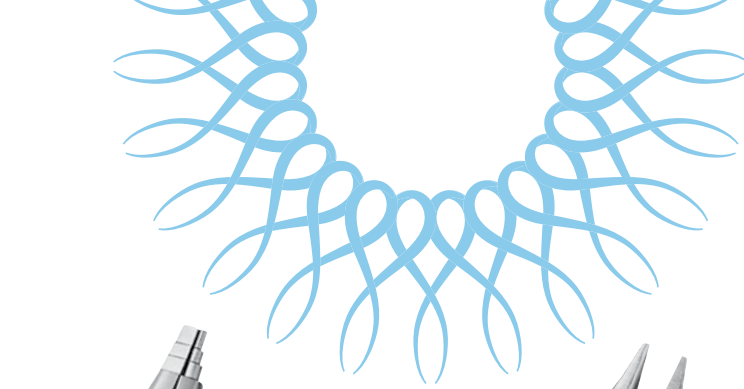


### Optical Pliers

| 678-323

Excellent for forming helical closing loops and arch adjustments.

Wire size:  $\leq .022'' \times .025''$   
(.53 mm x .64 mm)



#### Old Style Loop Pliers

| 678-324

Provides optimum accuracy and precision in forming and closing loops with one cylindrical three-step beak and one triangular beak.

Wire size:  $\leq .022'' \times .025''$   
(.53 mm x .64 mm)



#### Bird Beak Pliers with Cutter

| 678-325

Smooth bending surfaces for a range of loop sizes while providing a sharp blade for cutting.

Wire size:  $\leq .022'' \times .025''$   
(.53 mm x .64 mm)



#### Long Tapered Bird Beak Pliers

| 678-326

Bends a variety of smooth loops.

Wire size:  $\leq .022'' \times .025''$   
(.53 mm x .64 mm)



#### Hammerhead® NiTi Tie-Back Pliers

| 678-327

Multi-use NiTi bender, no heat.

Wire size:  $\leq .025''$  (.63 mm)



#### Torquing Pliers with .016" / .018" key

| 678-328-20

Torquing Pliers with  
.018" / .022" key

| 678-328-21



#### Slim Hammerhead NiTi Pliers

| 678-502

For NiTi wire only, no heat.

Wire size:  $\leq .025''$



*Occlusal view of the Lingual Hammerhead NiTi Pliers bending NiTi wire distal to the buccal tube.*



#### Lingual Hammerhead NiTi Pliers

| 678-704

Wire size:  $\leq .025''$



#### Lingual Hammerhead NiTi Pliers with Serrations

| 678-704SER

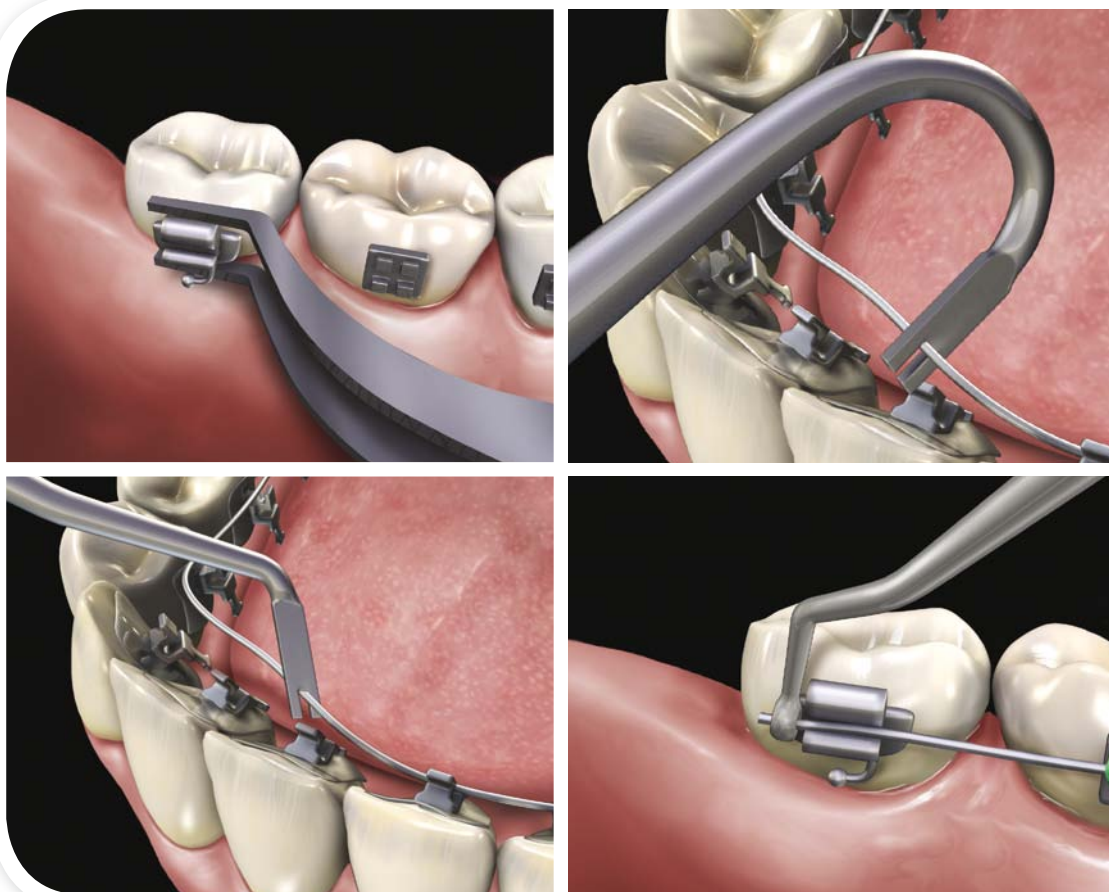
Wire size:  $\leq .025''$





## HAND INSTRUMENTS

All of our Orthodontic hand instruments are available in a variety of ergonomic handle sizes to accommodate your personal preference. Finely tuned to achieve accurate weight, balance and tip alignment, Hu-Friedy produces only the highest caliber tips and handles, in the manner of precision and excellence you demand.



Tweezers

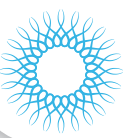
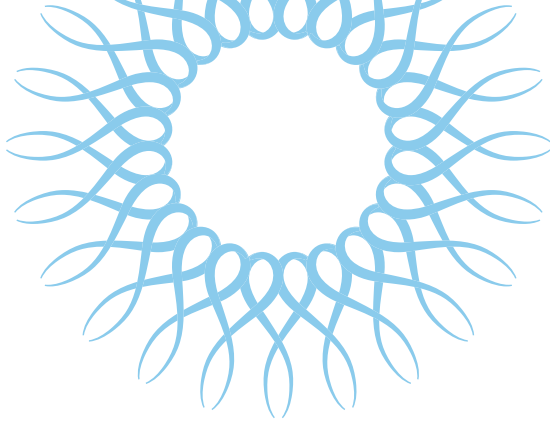
Directors

Pluggers

Scalers

Band Pushers





Direct Bond  
Bracket  
Holder  
| 678-212



Slim Direct  
Bond  
Bracket  
Holder  
| 678-212M



Slim Direct  
Bond  
Bracket  
Tweezers  
| 678-504



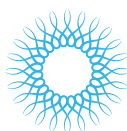
Slim Buccal  
Tube  
Bonder  
Tweezers  
| 678-505



Distal Cinch  
Back Hand  
Instrument  
| 678-506  
Wire size:  
< = .021" x .025"



Lingual  
Ligature  
Director  
| 678-706  
Wire size:  
< = .021" x .025"



## HAND INSTRUMENTS



Lingual  
Ligature  
Director,  
U Shape

| 678-707

Wire size:  
< .021" x .025"



Scaler/  
Band  
Pusher

| 678-904



Ligature  
Director  
Scaler

| 678-905



Dull Scaler/  
Band  
Pusher

| 678-906



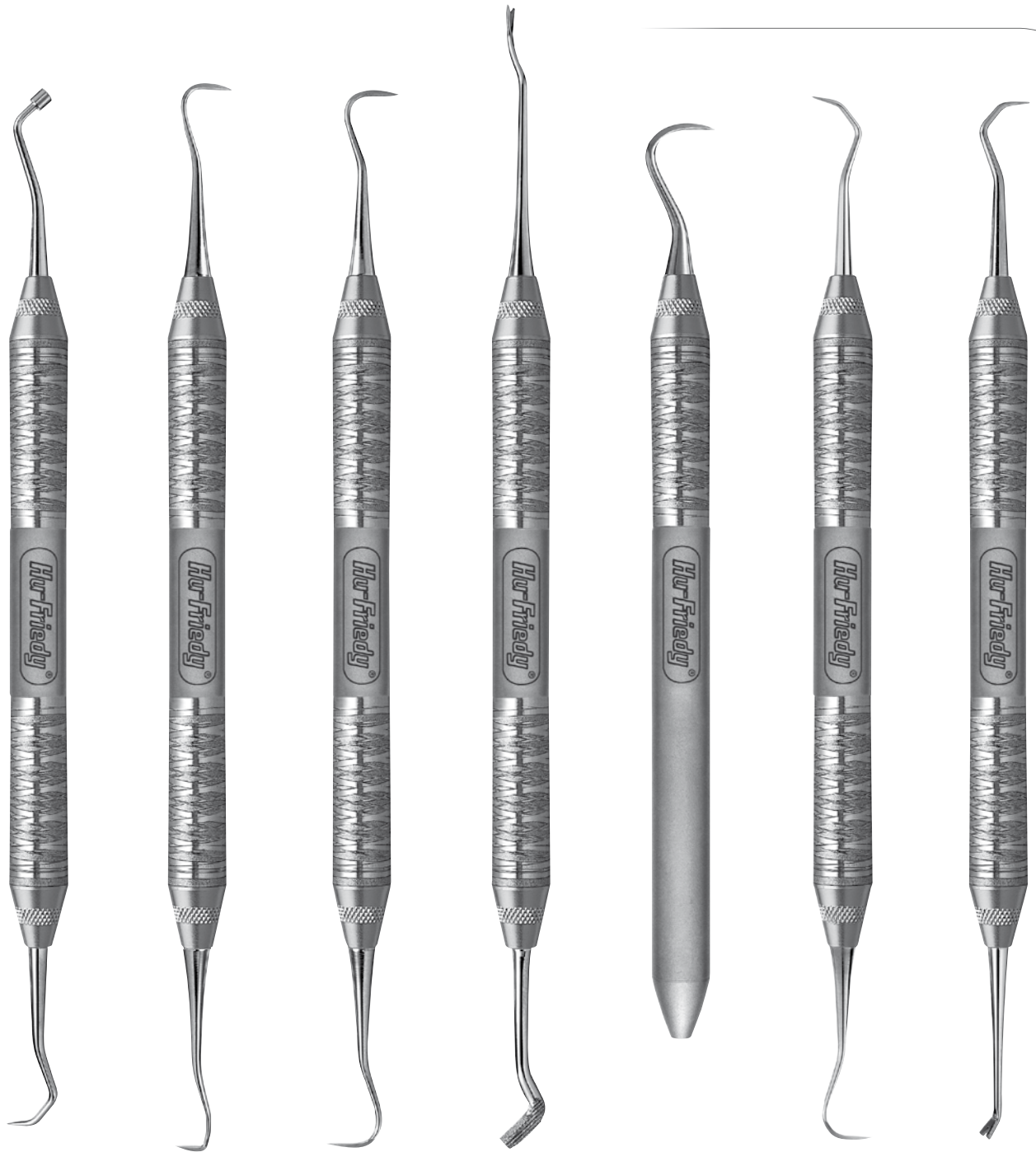
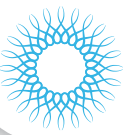
Small  
Plugger/  
Picker

| 678-907



Ligature  
Director/Band  
Pusher

| 678-908



Large  
Plugger/  
Picker  
| 678-909

Dull  
Scaler  
| 678-910

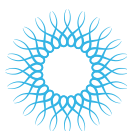
Dull  
Scaler  
| 678-911

Ligature  
Director/  
Band Pusher  
| 678-912

Dull  
Scaler  
| 678-913

Scaler/  
Picker  
| 678-914

Picker/  
Ligature  
Director  
| 678-916



**Band Pusher**  
**| BP300**  
Aids in placement and burnishing of band.



**Band Pusher with Short Tip**  
**| BP300S**  
Same as BP300 except the working end is shorter.



**Band Pusher/Scaler**  
**| BPS1**  
Versatile instrument for band placement and cleanup of band cement.



**Band Pusher/Scaler**  
**| BPS2**  
Same as BPS1 except the working end of the band pusher is shorter.



**Fillion Explorer/Ligature Director**  
**| FE/LD**  
Ideal for placing and removing elastic ligatures with lingual brackets.

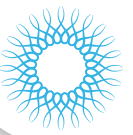


**Ligature Director**  
**| LD1**



**Ligature Director**  
**| LDG2**





Ligature Director/  
Plugger  
| LDP



Ligature Director  
Tucker  
| LDT



Plugger/  
Ligature  
Picker  
| PLPK



Lingual  
Ligature  
Director,  
".018  
| SNLD1



Lingual  
Ligature  
Director,  
".025  
| SNLD2



Lingual  
Torquing  
Key  
| TK018  
Designed for  
proper wire  
placement  
and improved  
torque  
expression in  
an .018" slot  
lingual system.



Straight  
.020"  
Applicator  
| TK020S

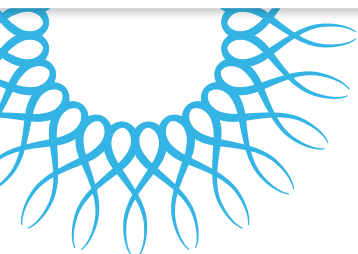


Single End  
Ligature  
Director  
| WBI-M/R



## MATHIEUS, SCISSORS & HEMOSTATS

Created with the same meticulous attention to detail as our pliers, Hu-Friedy hinged instruments are also forged from Immunity Steel, making them resistant to rust and corrosion.



Crown & Gold  
Scissors Curved  
| SCGC

Crown & Gold  
Scissors Pedro  
| SCGCP

Crown & Gold  
Scissors Straight  
| SCGS

Wire-Cutting  
Scissors  
| WCS  
Serrated blade;  
notch for soft  
wire-cutting.



Halsted-Mosquito  
Hemostat  
| H4

Ortho Mathieu,  
Narrow Tip Pliers  
| 678-330  
Slimmer tip makes  
this ideal for gripping  
and placing elastic  
auxiliaries.

Ortho Mathieu,  
Wide Tip Pliers  
| 678-331  
With wider,  
stronger tips.

Ortho Mathieu,  
Perma Sharp®  
Pliers  
| 678-332  
Thin tips made with  
Carbide inserts.

Lingual Mathieu  
Pliers  
| 678-705







## ORTHO ACCESSORIES AND REFERENCE

### Replacement Parts

Replacement blade for 678-206  
Quantity: 1 | [678-001](#)

Replacement blade for 678-303  
Quantity: 1 | [678-002](#)

Silicone Insert for 678-111  
Quantity: 3 | [678-011](#)

Silicone Insert for 678-113  
Quantity: 3 | [678-013](#)

1/4" Replacement pads for 678-207, 678-208  
Quantity: 6 | [678-014](#)

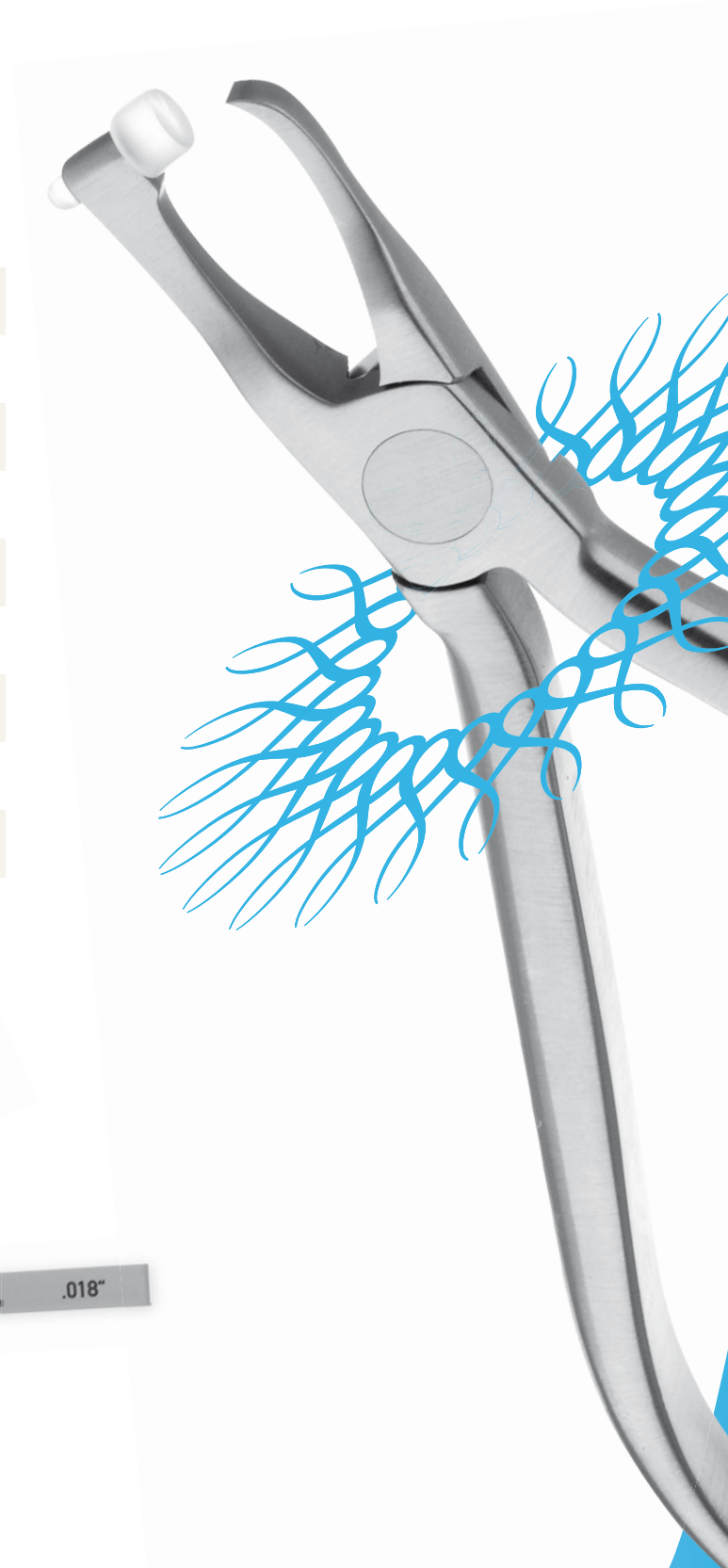
1/4" Replacement pad for 678-206  
Quantity: 6 | [678-014A](#)

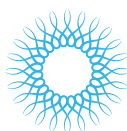
1/8" Replacement set screw for 678-303  
Quantity: 1 | [678-018](#)

Torquing Key .016" / .018"  
Quantity: 1 | [678-020](#)

Torquing Key .018" / .022"  
Quantity: 1 | [678-021](#)

3/16" Replacement pad for 678-207, 678-208  
Quantity: 6 | [678-036](#)





## HINGED INSTRUMENTS

All hinged instruments – forceps, rongeurs, scissors, pliers, hemostats, orthodontic pliers, etc.–should be kept lubricated. Regular use of proper lubricants, like Hu-Friedy Penetrating Oil (IPS) and Instrument Lubricant Spray (ILS), will prevent rust, corrosion and stiff joints and will ensure smooth operation. (Household lubricants and handpiece lubricants are NOT recommended.) All hinged instruments should be cleaned and sterilized in the open position.

## INSTRUMENT CLEANING

All instruments need to be cleaned before they are sterilised. They should be washed with a non-corrosive, low sudsing neutral detergent. Instrument cleaning can be accomplished by ultrasonic cleaning, which is the method of choice to prevent hand injuries caused by hand scrubbing.

## INSTRUMENT STERILIZATION

Sterilization is a process that kills microorganisms. There are three common methods of heat sterilization used in the dental office that can be verified by spore testing (steam autoclave, dry heat, and chemical vapor). Sterilize hinged instruments in the open position. For a comparison of heat sterilization methods, visit our website at Hu-Friedy.eu.

## SHARPENING

Sharpen cutters regularly. How often depends on such factors as the frequency of use, types of applications the cutter is being used in, etc. Routinely inspect cutters to determine if sharpening is required. Sharp instruments cut more efficiently and regular sharpening will enhance the life of your cutter.

## DO'S & DON'TS OF PROCESSING INSTRUMENTS

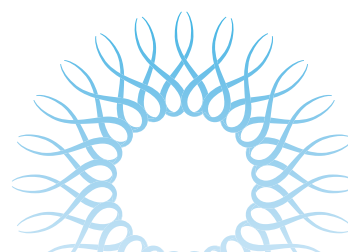
For best results, Hu-Friedy recommends the use of ultrasonics for instrument cleaning and steam autoclaves for sterilization. Never use tartar remover on instruments. For light stains, we recommend Shine reNEW Instrument Wipes. Never spray surface disinfectant near instruments. Use only approved lubricant (Never use WD-40 or Handpiece lube).

## STAINLESS STEEL INSTRUMENTS

While stainless steel has superior corrosion resistance, it will discolor and corrode when exposed to higher than recommended chemical concentrations or certain chemicals.

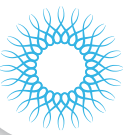
Stainless steel should not be exposed to the following chemicals: Sodium Hypochlorite (household bleach), Tartaric Acid (stain and tartar remover), Aluminum Chloride, Barium Chloride, Bichloride of Mercury, Calcium Chloride, Carbolic Acid, Chlorinated Lime, Citric Acid, Dakin's Solution, Ferrous Chloride, Lysol, Mercuric Chloride, Mercury Salts, Phenol, Potassium Permanganate, Potassium Thiocyanate or Stannous Chloride.

The following chemicals should NEVER be used with stainless steel: Aqua Regia, Ferric Chloride, Sulfuric Acid, Hydrochloric Acid or Iodine.

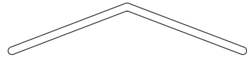


## TROUBLESHOOTING

PROBLEM	CAUSE	PREVENTION
SPOTTING	<ul style="list-style-type: none"><li>• Insufficient rinsing after ultrasonic cleaning</li><li>• Insufficient drying after ultrasonic cleaning</li><li>• Not changing ultrasonic solution</li><li>• Sterilizer has not been cleaned</li></ul>	<ul style="list-style-type: none"><li>• Rinse thoroughly under steady stream of water for 30 seconds</li><li>• Rinse with hot water</li><li>• Optional: Dip cassettes in alcohol after rinsing</li><li>• Solution should be changed at least once a day</li><li>• Sterilizers should be cleaned weekly</li><li>• Use only distilled water for reservoir</li></ul>
RUST	<ul style="list-style-type: none"><li>• Corrosion from carbon steel instruments spreads to stainless steel instruments solution as suggested by sterilizer manufacturer</li></ul>	<ul style="list-style-type: none"><li>• Separate stainless and carbon instruments</li><li>• For carbon steel instruments: Dip in pre-sterilised rust-inhibiting solution as suggested by sterilizer manufacturer</li></ul>
PITTING	<ul style="list-style-type: none"><li>• Chemical attack on instruments</li></ul>	<ul style="list-style-type: none"><li>• Rinse and dry instruments thoroughly</li><li>• Use approved cleaning, sterilization solutions only</li><li>• Never use household bleach or stain and tartar remover</li></ul>



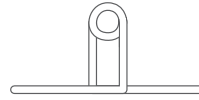
## WIRE BENDS



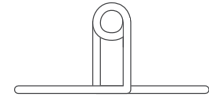
**| 678-302**  
Three Jaw Pliers



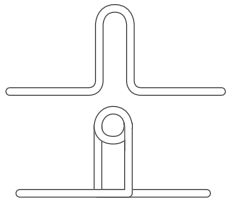
**| 678-303**  
Omega Loop Forming Pliers



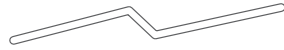
**| 678-304**  
Bird Beak Pliers



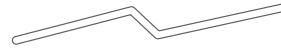
**| 678-305**  
**| 678-318**  
Light Wire Bird Beak Pliers  
with and without Groove



**| 678-306**  
Tweed Loop Forming Pliers



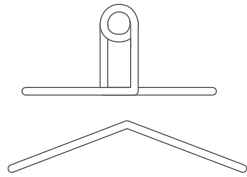
**| 678-307**  
Arch Bending Pliers



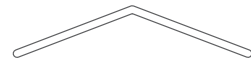
**| 678-308**  
Rectangular Arch Bending Pliers



**| 678-309**  
Lingual Arch Forming Pliers

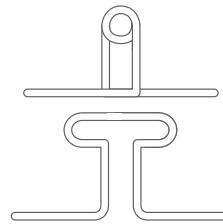


**| 678-311**  
O'Brien Pliers

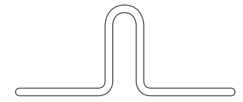


**| 678-312**  
Mini Three  
Jaw Pliers

**| 678-322**  
NiTi Bender,  
3-Prong



**| 678-316**  
Marcotte Pliers



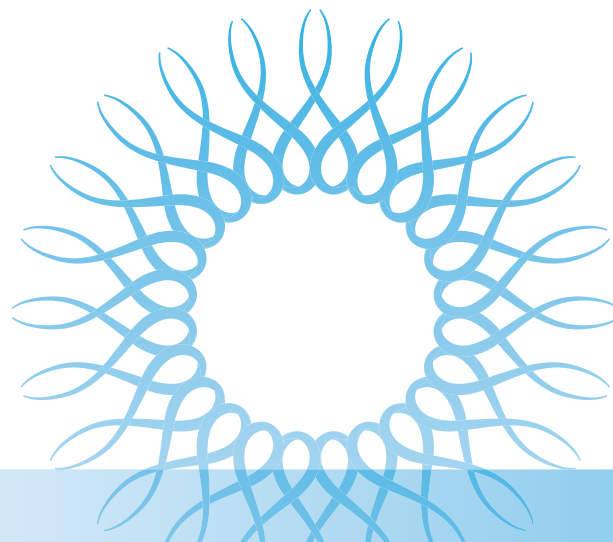
**| 678-319**  
Nance Loop Forming Pliers



**| 678-320**  
Adams Pliers



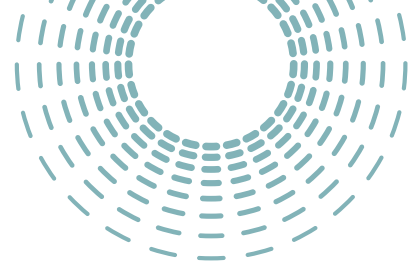
**| 678-321**  
V-Stop Pliers





# ULTRASONIC ADHESIVE REMOVAL

Hu-Friedy offers a variety of ultrasonic products for the removal of adhesive. Now you can effectively remove adhesive faster and safer than ever before.



## MAGNETOSTRICTIVE



**#1000 Triple Bend**  
 | **UI25SD1000**  
 | **UI30SD1000**

25 kHz Part Code:  
 30 kHz Part Code:



**#3 Beavertail**  
 | **UI325K**  
 | **UI330K**



**#10 Universal**  
 | **UI25SD10**  
 | **UI30SD10**

### POWER LEVEL

LOW—HIGH

MEDIUM—HIGH

MEDIUM—HIGH

- Light to heavy deposits
- Beveled edges for tenacious and heavy deposits
- Orthodontic cement

- Heavy deposits
- Orthodontic cement

- Light to heavy deposits
- Orthodontic cement

## PIEZOELECTRIC



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

S-Series  
 E-Series

MEDIUM—HIGH

Standard diameter tip used to remove heavy supragingival deposits.

## ULTRASONIC INSERT CASSETTE

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



Red	<b>IM30HU0</b>
Gray	<b>IM30HU1</b>
White	<b>IM30HU2</b>
Orange	<b>IM30HU3</b>
Yellow	<b>IM30HU5</b>
Purple	<b>IM30HU6</b>
Blue	<b>IM30HU8</b>
Green	<b>IM30HU9</b>

Holds 2 Ultrasonic Inserts or 1 handpiece.

## GUARDIAN WRENCH / TIP CARRIER

Hu-Friedy's Symmetry Piezo Tips come with the Guardian Tip Carrier—an innovative torque-limiting wrench/tip carrier designed for remarkable safe and easy connection to the handpiece.



NEW  
GENERATION  
IMS  
CASSETTES!

## HU-FRIEDY'S INSTRUMENT MANAGEMENT SYSTEM

Hu-Friedy's Instrument Management System (IMS) is the most comprehensive, reliable and complete instrument processing and infection control system on the market today. IMS combines sterilization, storage and organization of instruments in one integrated system. For optimal staff and patient safety, an efficient practice and a longer life for your instruments. It is fast, flexible, easy and efficient.

### Ergonomic latch with positive locking mechanism:

safe and easy-to-use; allows for one-handed opening and visual indication if cassette is locked/unlocked.

### Revolutionary new hole pattern design:

with 1/3 more open area allows for improved cleaning and sterilisation.  
**Designed for optimal use in thermidisinfector.**

### 3 new colors:

added for the silicone rail color-coding system.

### High quality, electropolished stainless steel:

provides a protective sheet against corrosion and a professional appearance.

### Innovative silicone rail system features:

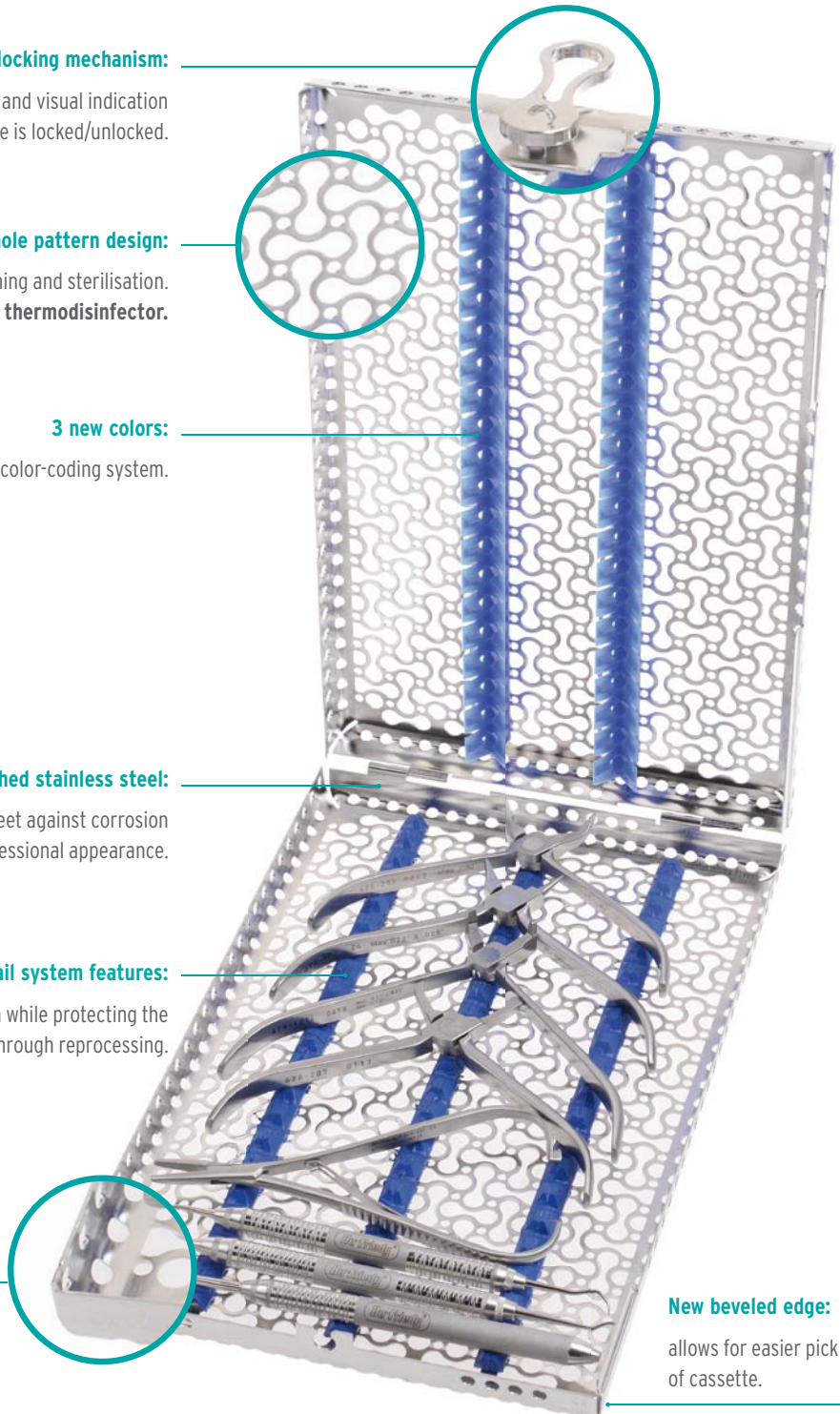
reduced instrument contact for more flow through while protecting the instruments through reprocessing.

### Smooth Round Corners and Slotted Edges:

increase drainage and reduce drying time.

### New beveled edge:

allows for easier pick up of cassette.







# INSTRUMENT MANAGEMENT PROCESS

## PROFESSIONAL HYGIENE APPLIED IN PRACTICE.

This established and well thought-out system, which gives you considerable benefits, is a must for every modern practice. It is the ideal solution for arranging your instruments in an organized manner, cleaning and disinfecting simply and safely, storing without problems and sterilizing.



### 1. CHAIRSIDE

In the presence of the patient the seals are removed from the cassettes and attention is given to explain the function of the Process Indicator Label (class 1 or class 5 according to ISO 11140-1). This label demonstrates, by means of a colour change, that the sterilization process of the IMS Cassette has been completed.



### 2. PRE-CLEANING

Immediately after each procedure, use an enzymatic gel that dissolves proteins, tissue and debris while keeping your instruments moist. This pre-cleaning step will facilitate the cleaning procedure and will help extend that life of your instruments.



### 3. CLEANING

Cleaning and disinfection takes place in either a washer-disinfector or ultrasonic bath, whichever is used, by following the manufacturer's operating instructions.

After cleaning and disinfection the instruments are visually inspected, and if required, the inspection and results are documented.

Hu-Friedy ortho pliers and instruments can be cleaned and disinfected in the thermo-disinfector.



**Should this take place with instruments and ortho pliers of other manufacturers, it must be assured that these instruments are also approved for cleaning in a thermo-disinfector. Instruments which are not approved may corrode and transfer corrosion on to Hu-Friedy instruments (transferred rust).**

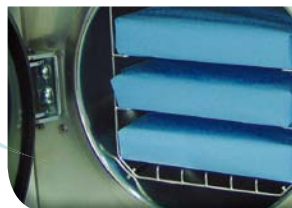


### 6. STORAGE

Before storing, the IMS cassettes are inspected following the steam sterilizer manufacturer's instructions as well as by a visual check (intact seal, undamaged wrap, Process Label colour change).

After inspecting, and documenting if required, the IMS cassettes can be stored, in accordance with recommended storage conditions, for the next use. The colour change on the Process Label ensures that sterilised IMS cassettes cannot be mixed with unsterile cassettes.

The Hu-Friedy Instrument Management System provides you with a certain and traceable hygiene cycle.



### 5. STERILIZATION

The IMS cassettes are packaged and steam sterilised. Hu-Friedy offers various packaging systems: IMS Sterilization wrap, Bagettes, or sterilization containers. All 3 types of packaging allow storage, following recommended storage conditions, until the next procedure.

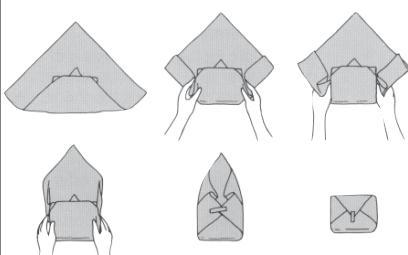
All 3 types of packaging allow for labelling to identify the content. Cassettes can be wrapped for sterilization and can then be stored sterile.



### 4. LUBRICATION

Hinged instruments have to be lubricated with a lubricant suitable for steam sterilization, like Hu-Friedy Instrument Lubricant Spray (ILS). Light corrosion on the surface can be removed with Hu-Friedy Penetrating Oil (IPS) or Shine reNEW Instrument Wipes (IMS-1455) when applicable. After treating an instrument with Shine reNEW or IPS, the instrument must be cleaned and sterilised once more. Instruments and cassettes must be completely dry prior to wrapping for sterilization.

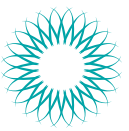
## Wrapping Technique



### Method #2 Hospital style

We recommend the following technique which is generally used in hospitals.





## NEW GENERATION IMS ORTHODONTIC DIN CASSETTES

Use IMS cassettes to hold instruments and accessories in place throughout the entire Instrument Management Cycle. Once a chair side procedure is finished, contaminated instruments never need to be touched again.



**Ortho DIN Cassette**  
(290 x 184 x 34 mm)

**New Color Coding**  
*Available only for the New Cassette.*

Red		<b>IMEDINORT0</b>
Grey		<b>IMEDINORT1</b>
White		<b>IMEDINORT2</b>
Orange		<b>IMEDINORT3</b>
Purple (new)		<b>IMEDINORT4</b>
Yellow		<b>IMEDINORT5</b>
Lavender		<b>IMEDINORT6</b>
Black (new)		<b>IMEDINORT7</b>
Blue		<b>IMEDINORT8</b>
Green		<b>IMEDINORT9</b>
Ocean Blue (new)		<b>IMEDINORT11</b>

## ACTUAL LINE UP THIN AND DOUBLE DECKER CASSETTES:



**Small Thin Orthodontic Cassette**

Holds up to 4 pliers and 3 hand instruments  
(178 mm x 203 mm x 19 mm)

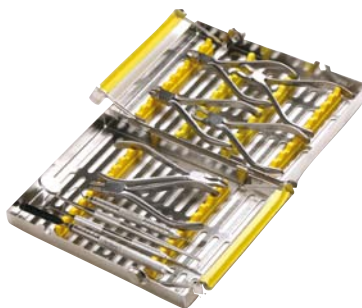
Color coding available only for these cassettes

Blue | **IMORTHSM8**



**| 1000**  
Two Clips for Scissors, Needle Holders etc.

**| 3000**  
One Clip for Ortho Pliers



**Double-Decker Large Orthodontic Cassette**

Holds up to 6 pliers, a Mathieu needle holder and 3 hand instruments.  
(152 mm x 203 mm x 38 mm)

Colour coding available only for these cassettes

Red		<b>IM5200-OR</b>
Gray		<b>IM5201-OR</b>
White		<b>IM5202-OR</b>
Orange		<b>IM5203-OR</b>
Yellow		<b>IM5205-OR</b>
Purple		<b>IM5206-OR</b>
Blue		<b>IM5208-OR</b>
Green		<b>IM5209-OR</b>

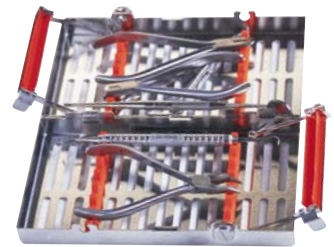


**Large Orthodontic Cassette**

Holds up to 6 pliers, a Mathieu needle holder and 3 hand instruments.  
(152 mm x 246 mm x 38 mm)

Colour coding available only for these cassettes

Red		<b>IM9200-OR</b>
Orange		<b>IM9203-OR</b>
Yellow		<b>IM9205-OR</b>
Purple		<b>IM9206-OR</b>
Blue		<b>IM9208-OR</b>
Green		<b>IM9209-OR</b>



**Two-Tier Small Orthodontic Cassette**

Holds up to 4 pliers, a Mathieu needle holder and 2 hand instruments.  
(114 mm x 203 mm x 38 mm)

Colour coding available only for these cassettes

Red		<b>IM9140-OR</b>
White		<b>IM9142-OR</b>
Orange		<b>IM9143-OR</b>
Yellow		<b>IM9145-OR</b>
Purple		<b>IM9146-OR</b>
Blue		<b>IM9148-OR</b>
Green		<b>IM9149-OR</b>



## ENZYMEX ULTRASONIC DETERGENT

Specifically formulated for efficient ultrasonic cleaning or pre-soaking of cassettes and instruments. Contains Steelgard agents to protect instruments from harmful minerals naturally found in water that contribute to buildup, spotting and corrosion. Can also be used as an evacuation system cleaner.



### Enzymex Liquid

A fast-acting, concentrated, liquid formula. Available in easy to pump quart, gallon and liquid unit dose configurations.

Box of 40 Liquid Packets Makes 40 Gallons/151 liters	<a href="#">IMS-1222</a>
Quart Bottle Makes 32 Gallons/121 liters	<a href="#">IMS-1224</a>
Quart Pump	<a href="#">IMS-1224P</a>
Gallon Bottle Makes 128 Gallons/485 liters	<a href="#">IMS-1226</a>
Gallon Pump	<a href="#">IMS-1226P</a>



### Enzymex Spray Gel

Dual enzyme gel with corrosion inhibitor acts as a ready-to-use instrument pre-cleaner. Maintains moisture to help prevent debris from drying on instruments before cleaning and helps dissolve blood, tissue, and other debris. Can also be used as a linen spot remover.

709 ml up to 450 Sprays	<a href="#">IMS-1229</a>
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### Enzymex Powder

1.76 lb/800 g Powder Makes 50 Gallons/189 liters	<a href="#">IMS-1230</a>
6 containers of 1.76 lb/800 g Powder Makes 300 Gallons/1,134 liters	<a href="#">IMS-1230C</a>



### Enzymex Pax Single Use Packets

32 Dissolvable Single-Use Powder Packets Makes 32 Gallons/121 liters	<a href="#">IMS-1232</a>
96 Dissolvable Single-Use Powder Packets Makes 96 Gallons/363 liters. Just one packet per 3.8L of warm water.	<a href="#">IMS-1233</a>



## ENZYMAX EARTH DETERGENT

Enzymax Earth offers the same superior cleaning attributes as Enzymax, plus an increased awareness of our environment. Hu-Friedy's line of green detergents, Enzymax Earth, presents less bioaccumulation potential and contains enzyme stabilizer that are safer for the environment.

**NEW Earth-Friendly Option** - The dual enzyme formula breaks down blood, protein and starches to help ensure clean instruments and reduce the need for hand scrubbing - thus saving time and money for your practice.

### Enzymax Earth

ECO FRIENDLY

Gallon Bottle  
Makes 128 Gallons/485 Liters

| IMS-1336

Enzymax Earth Pax  
32 Dissolvable Single-Use Powder Packets  
Makes 32 Gallons/121 Liters

| IMS-1332

Enzymax Earth Pax  
96 Dissolvable Single-Use Powder Packets  
Makes 96 Gallons/363 Liters

| IMS-1333



## INSTRUMENT LUBRICANTS

The instrument lubricants come in a convenient non-aerosol pump bottle.

Penetrating Oil 236 ml  
It does not remove rust. To be used after cleaning.

| IPS

Instrument Lubricant Spray  
236 ml  
Keeps hinged instruments moving freely.  
To be used after cleaning.

| ILS

Instrument Lubricant Spray (ILS) and  
Penetrating Oil (IPS) do not contain silicone.



## IMS SHINE reNEW INSTRUMENT WIPES

A quick and simple solution to restoring dental instruments and metals.

Shine reNEW Instrument Wipes effectively remove stain and rust, restoring the luster to stainless steel, brass, copper and anodized aluminum.

- Eliminates the need for abrasive scrubs
- Restore luster to instruments and metals
- Keep hinged instruments moving freely by dissolving built-up residue
- For use on stainless steel, brass, copper and anodized aluminum

IMS Shine reNEW  
Instrument Wipes  
| IMS-1455

20 wipe canister





# IMS STERILIZATION PRODUCTS

## IMS AUTOCLAVE WRAP

IMS Cassette Wrap is engineered to withstand the harsh conditions of sterilization. Our unique compilation of textiles is designed to be strong and soft for easy wrapping and durability.



### Autoclave Wrap

Autoclave Wrap is memory free and offers the best combination of softness and added strength.

600 x 600 mm | **IMS-1210M**  
For DIN and SIGNASTAT Cassettes (500 Sheets)

600 x 600 mm | **IMS-1210MH**  
For DIN and SIGNASTAT Cassettes (100 Sheets)

375 x 375 mm | **IMS-1211M**  
For 1/4 DIN Cassettes (1000 Sheets)

375 x 375 mm | **IMS-1211MH**  
For 1/4 DIN Cassettes (100 Sheets)

500 x 500 mm | **IMS-1212M**  
For 1/2 DIN Cassettes (500 Sheets)

500 x 500 mm | **IMS-1212MH**  
For 1/2 DIN Cassettes (100 Sheets)

## AUTOCLAVE MONITOR TAPE

This strong 19 mm tape can be written on and visually differentiates processed from non-processed cassettes. Pre-printed tape is available with specific procedural set-ups, color-coded or blank. 55m per roll.



Lead & Latex Free (Blank)

- Safe for the environment
- Safe for your staff and patients
- Easy to use and read results
- No special hazardous disposal required
- For steam autoclaves

| **IMS-1460**

Ortho

| **IMS-1243**

Blank

| **IMS-1250**

## BAGETTE SELF-SEALING STERILIZATION POUCHES

Bagette Self-Sealing Sterilization Pouches are constructed with durable materials and thick seals. The unique design optimizes the cassette fit, reducing bulky storage while simplifying packaging time. Built-in external and internal quality control indicators relay accurate time and temperature verification, allowing you peace of mind. Suitable for DIN cassettes.



89 mm x 254 mm  
200 pouches - Loose instrument pouch.  
Fits 3-6 hand instruments

| **IMS-1236**

181 mm x 351 mm  
100 pouches - For Exam 5-instrument cassettes

| **IMS-1237**

225 mm x 364 mm  
100 pouches - For Small 8-10 instrument cassettes

| **IMS-1238**

295 mm x 440 mm  
100 pouches - For Large 16-20 instrument cassettes

| **IMS-1239**





STEAM STERILIZATION INTEGRATORS

Steam Sterilization Integrator is a Class 5 sterilization monitor designed to react to all critical variables in the sterilization cycle: time, temperature and presence of steam. The integrators Moving Front Indicator Technology ("ACCEPT" or "REJECT") gives a better indication of acceptance, no interpretation of color change needed Lead and Latex free.



Steam Sterilization Integrators (Class 5)  
| **IMS-1241**  
100 strips/pack

IMS STEAM STERILIZATION INDICATORS

Indicator strip verifies that steam sterilization parameters of time and temperature have been met. Use one in each cassette or pouch and retain for office records.



IMS Steam Sterilization Indicators  
| **IMS-1240**  
250 per box

LILAC UTILITY GLOVES

Lilac gloves are for use in the sterilization area and during disinfection processes in the operatory.

- Flocklined nitrile, lilac utility gloves do not contain latex and stand out to professionals as the color of dental hygiene
- Resist chemicals better than latex gloves
- Puncture resistant for improved protection against sharps injuries
- Molded texture improves tactile feel and grip
- Can be autoclaved up to 250°F/121°C up to five times

Three pack of flocklined nitrile utility gloves for use when cleaning and processing instruments.



Small (Size 7)	<b>40-060</b>
Medium (Size 8)	<b>40-062</b>
Large (Size 9)	<b>40-064</b>
Extra Large (Size 10)	<b>40-066</b>



7	8	9	10
Small	Medium	Large	X-Large

**USE THIS CHART TO DETERMINE YOUR APPROPRIATE GLOVE SIZE**  
Place hand as indicated to select correct size in order to avoid hand fatigue.



# IMS CLEANING&CARE: SURFACE DISINFECTANTS

## SPORECLEAR® MEDICAL DEVICE DISINFECTANTS

This one-step formula cleans and disinfects critical workspaces within 1 minute of contact. It offers a fast, simple and effective answer to creating a safe work environment protecting dental staff and their patients from harmful pathogens. Sporeclear is non-alcohol based, free of aldehydes, chlorine, phenols, peroxide and nonylphenol ethoxylates, (NPEs), making them compatible with all washable surfaces and eco-friendly. At Hu-Friedy, we create innovative solutions to help dental professionals perform at their best.



### Liquid Spray

750 ml bottle  
with trigger spray

| [MSCD356750](#)

### Concentrate Formula

1 l bottle  
(1 l concentrate makes 12,5 l  
of Solution)

| [MSCW35C01](#)



### Medical Device Disinfectant Wipes

160 wipe canister

| [MSCD354160](#)

160 wipe refill pack

| [MSCD354161](#)

## FAST SOLUTIONS FOR EFFECTIVE DISINFECTION WITHIN 1 MINUTE

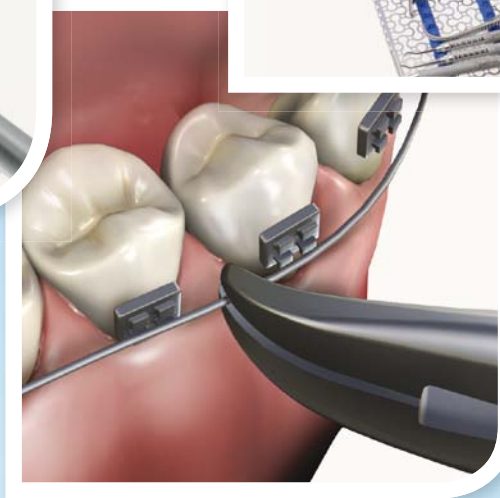
### SPORICIDAL • TUBERCULOCIDAL • BACTERICIDAL • VIRUCIDAL • FUNGICIDAL

- Unique patented formulation eliminates spores, viruses, bacteria and fungi (including C. Difficile, Hepatitis B/C, HIV, H1N1, MRSA, TB and NDM-1) within 1 minute
- Non-abrasive, non-corrosive and non-volatile making it safe to use on all surfaces
- Pleasant scent

Meets EU requirements including: EN1276; EN1650; EN14348; EN13704; EN14476; EN13727; EN1656; EN13624; EN1657; EN14204

Sporeclear is a registered trademark of Altos Medical, LLC.





For more information about  
Hu-Friedy's Total Solutions visit  
**HU-FRIEDY.EU**

#### PERIODONTAL



#### RESTORATIVE



#### ORTHODONTIC



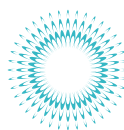
#### INSTRUMENT MANAGEMENT



#### ENDODONTIC



#### SURGICAL



#### ULTRASONIC SCALING



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Customer Care Department: Hu-Friedy Mfg. B.V. | P.O. Box 29025 | NL-3001 GA Rotterdam | Netherlands  
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