

The Brands You Trust





Coltene/Whaledent, Inc.

- The North American Headquarters for COLTENE Holding, AG.
 Located just south of Cleveland.
- 235 Ascot Parkway, Cuyahoga Falls, OH 44223





Treatment Categories

A broad line of products covering many categories:

- Infection Control / Hygiene
- Restorative Products
- Prosthetics
- Rotary Instruments
- Endodontics



INFECTION CONTROL / HYGIENE



BioSonic[®] Ultrasonic Cleaning System







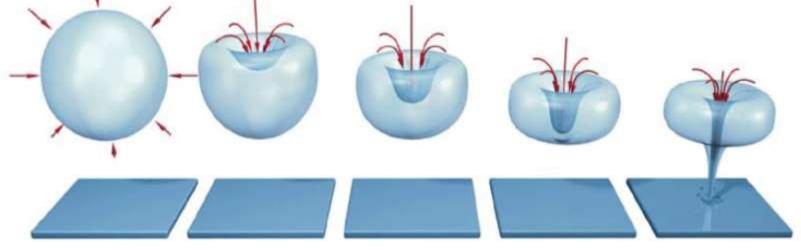


UC300



Ultrasonic Benefits

- Ultrasonics can achieve very high levels of cleanliness
- Capable of removing small particles (smaller than 0.000005 meters)
- Eliminates the dangerous practice of handscrubbing instruments





An essential part of your Infection Control System



BioSonic[®] Ultrasonic Cleaning System



Key Features and Benefits

- The quietest ultrasonic cleaners on the market
- Two year warranty
- Loaner for life of the unit
- Transducers in UC125 and UC50 adjust to load size for maximum cleaning strength
- UC300 accommodates cassettes
- Recessed model available with UC300





BioSonic[®]

Solution Concentrates in MeterDose® bottles







The Mark of a Professional







BioSonic Suvi Premier is the ultimate multi-purpose tool for ultrasonic treatments such as scaling and endodontics, implant maintenance, and restorative.

With its wide power range and a variety of tips, the Scaler is remarkably adjustable.

Designed to meet the needs of demanding professionals and patient comfort.

Four useful Scaling functions: •Standard Ultrasonic Scaling

•Dry Scaling

Diagnostic LED light

Irrigation mode

Key Features:

- Ergonomic handpiece with LED light
- Water regulation in the hand piece
- Autoclavable handpiece and hygiene sleeves
- One Touch Cleaning Function
- Tap water connection or bottle connection available

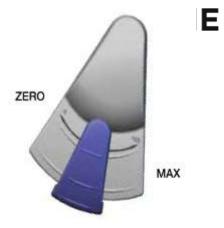


Autoclavable Handpiece & Interchangeable and Autoclavable Silicone Grips



The most powerful LED on the market provides excellent visibility

Water Control on Handpiece





- Turns the LED light on and off for diagnostic
- Controls the power within the chosen mode

Leave your hands free for patient treatment





BioSonic[®] Suvi[®] Elite adds an Air Polisher to the features of the Suvi[®] Premier to create one versatile tool for a wide range of ultrasonic and polishing treatments.

The LED light in the handpiece provides superb visibility in diagnostics and viewing discoloring and stains.

Its focused powder spray, adjustable power range and the ergonomic hand piece create perfect conditions for achieving the best polishing effect.



The world's first ever polisher with a light!



Unique Features

Easy-to-use touch panel: allows operator to focus on the essential

Functions are easily selected between

Scaling Polishing Cleaning

Quick-connect containers

Easily changeable transparent medicament, water and powder containers are attached to the body of the device.

Upright positioning of containers avoids leakage and filling levels of liquid and powder are always clearly visible.



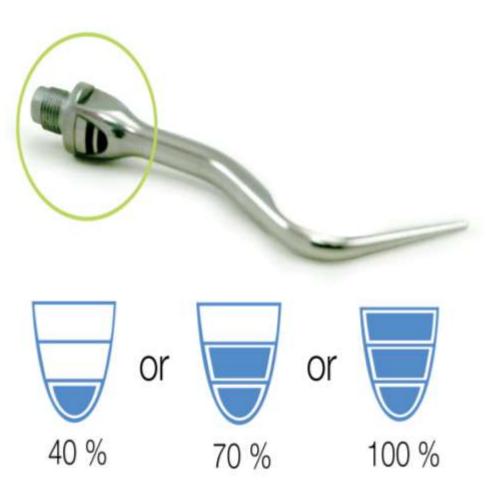






DuraGradeMAX[™] tips

High wear resistance is one of the most important properties of ultrasonic tips. Resulting from intensive R&D, improved heat treatments, controlled gas atmosphere and cryogenic processing the DuraGradeMAX[™] super steel used in all BioSonic[®] Suvi tips represents the ultimate in the field of metallurgy.

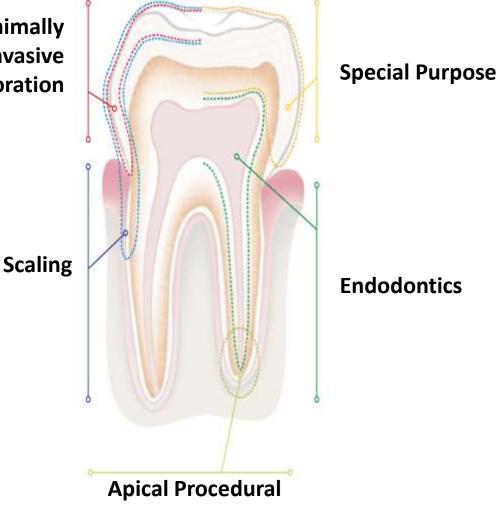






Minimally Invasive Restoration

BioSonic[®] Suvi's[®] broad tip range consists of 61 different tips that offer solutions for periodontics, endodontics, implantology and restorative treatments.





Key Features and Benefits

Better

• LED hand piece provides superior visibility, reducing eye strain (brighter than NSK and Hu-Friedy)

- Ergonomic Soft Grip reduces hand fatigue
- Combination Unit provides both scaling and air polishing in one compact device
- Power levels laser marked on Piezo tips ensure the correct power range is used.

Faster

- Silicone sleeve is quick to changed between patients
- Quick connect medicament bottles
- One Touch Cleaning function to flush water line and the powder from the polisher between patients.
- Water control on hand piece and dynamic foot pedal reduces downtime during a procedure

Economics

- Silicone sleeves reduce the number of piezo headpieces needed, lowing the cost of ownership
- Unique features reduce the time needed to turn a hygiene station between patients.



BioSonic® US100R





Power Scaling Comparison

	Magnetostrictive	Piezoelectric	Sonic
Optimal	20-42 kHz	29-32 kHz	2,500 to 7,000
Frequency			cycles per second
		V V V V V V V	\sim
Transducer	Nickel alloy wafers	Ceramic	Driven by
(converts energy to	or solid rod		compressed air
vibration)			
Stroke	Elliptical	Linear	Elliptical or orbital
Pattern	(000000000)		Jeffer-
Power	All surfaces active	Lateral	All surfaces active
Dispersion to Tip		surfaces more active	



Features

A magnestostrictive unit

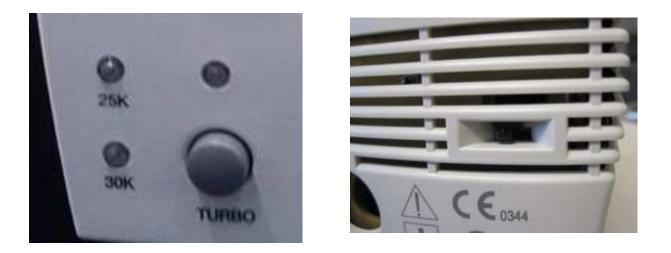
Accepts both 25kHz and 30kHz inserts

- •Offers precise water flow control
- •Kink-resistant, customer replaceable hand piece cord
- •Turbo feature
- •2 year warranty and loaner for life of the unit





25k and 30k Switch



Allowing US100R to work with both 25kHz and 30kHz inserts

BioSonic® US100R



Turbo Button



Allows the hygienist to maintain the optimal power setting on the dial, but still occasionally get maximum power with only a push of the turbo button.

BioSonic® US100R



Foot Pedal



360 degree foot pedal so the hygienist may operate at any angle.

BioSonic® US100R



BioSonic[®] US100R Inserts





Scaler Insert Benefits

- Symmetrical, easy-to-handle finger grips
- Textured, non-slip surface with hard (thin) and soft (thick) grip options
- Consistent spray and vibration
- Five different tip styles available
 - 1 #10 Universal Slotted
 - 2 #10 Universal Direct Flow (OptiMist)
 - 3 #100 Slim Slotted
 - 4 #100 Slim Direct Flow (OptiMist)
 - 5 #1000 Triple Bend Slotted
- Compatible with all Dentsply Cavitron and Bobcat units
- All insert models offered in 25K or 30K frequency options
- 90 Day Warranty





Hard Grip Insert Models

Part No.	Tip Design	Water Delivery	Frequency	Grip	Color
US1025K	Universal - #10	Slotted	25 KHz	Hard - Thin	BLUE
US1030K	Universal - #10	Slotted	30 KHz	Hard - Thin	BLUE
US1025KOM	Universal - #10	Direct Flow	25 KHz	Hard - Thin	PURPLE
US1030KOM	Universal - #10	Direct Flow	30 KHz	Hard - Thin	PURPLE
US1025KSP	Slim - #100	Slotted	25 KHz	Hard - Thin	GRAY
US1030KSP	Slim - #100	Slotted	30 KHz	Hard - Thin	GRAY
US1025KOS	Slim - #100	Direct Flow	25 KHz	Hard - Thin	PINK
US1030KOS	Slim - #100	Direct Flow	30 KHz	Hard - Thin	PINK
US10025K	Triple Bend - #1000	Slotted	25 KHz	Hard - Thin	GREEN
US10030K	Triple Bend - #1000	Slotted	30 KHz	Hard - Thin	GREEN





Soft Grip Insert Models

Part No.	Tip Design	Water Delivery	Frequency	Grip	Color
USG1025K	Universal - #10	Slotted	25 KHz	Soft - Thick	BLUE
USG1030K	Universal - #10	Slotted	30 KHz	Soft - Thick	BLUE
USG1025KSP	Slim - #100	Slotted	25 KHz	Soft - Thick	GRAY
USG1030KSP	Slim - #100	Slotted	30 KHz	Soft - Thick	GRAY
USG1025KOS	Slim - #100	Direct Flow	25 KHz	Soft - Thick	PINK
USG1030KOS	Slim - #100	Direct Flow	30 KHz	Soft - Thick	PINK





When Should Inserts Be Replaced

- Laminates are broken or bent
- Tip is bent / broken off
- Tip is worn
- Rubber "O-ring" is worn



RESTORATIVE PRODUCTS



COMPONEERTM

The Newest Innovation In Anterior Composite Bonding



COMPONEERTM

- A polymerized, prefabricated, enamel shaded composite laminate made from Synergy D6 Composite
- Is a direct Composite-Veneering-System
- Simplifies the freehand technique
- Increases the quality of front teeth restorations
- Is an economical system and solution





INDICATIONS

- Treatment of caries
- Optimization of old restorations
- Abrasion, erosion issues
- Extending incisal edges
- Malposition
- Discoloration
- Cosmetic correction
- Diastemas
- Peg Laterals



INDICATIONS





WHY ARE COMPONEERS DIFFERENT?

- Offers more restorative & esthetic indications
- Less invasive procedures
- Service time / repair feasibility
- Lower primary dentist costs
- Cost effectiveness





COMPONEER ADVANTAGES FOR DENTIST

- Easy and efficient to use
- Only one session required
- Reduces chair time dramatically compared to free-hand
- Quality restoration with excellent aesthetic results
- No impressions, temporary, or lab work
- Optimum customization potential (color, shape & structure)
- Economical for dentists and patients
- Practice builder with existing or new patients



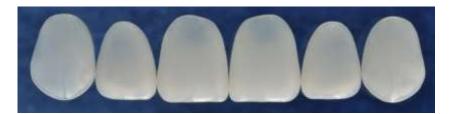
COMPONEER BENEFITS TO THE PATIENT

- Beautiful smiles after just one visit
- Minimally invasive removal of healthy tooth structure
- Reduced treatment stress
- Customized solution
- High surface and edge quality
- More economical than indirect solutions



CHANGING LIVES

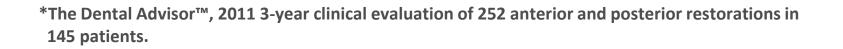




Componeer Smiles by Christian Hahn, DDS

Synergy D6 3 Year Clinical Performance

- COMPONEER material design is based on Synergy D6 Nano-Hybrid composite resin.
- Synergy D6 3 year Clinical Performance* rated Very Good or Excellent for:
 - Resistance to fracture.
 - Wear resistance.
 - Resistance to marginal discoloration.
 - Low postoperative sensitivity.
 - Esthetic qualities.







SYNERGY[®]D6 beauty made simple





SYNERGY®D6

beauty made simple

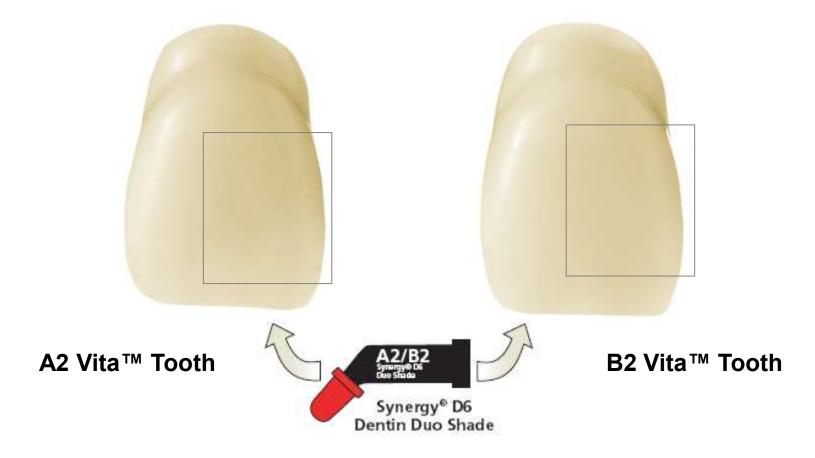
Universal Nano-Hybrid Composite

- All direct restorations both anterior and posterior
- •Class I, II, III, IV, V
- Modifications of tooth form and color
- Cusp replacement
- Diastema closures



Self-Blending Duo Shades

Two Vita[™] shade tabs were restored with a single shade of Synergy D6 (A2/B2)





What are Duo Shades?

Synergy D6[®] self-blending Duo Shades were created by grouping Vita[™] shades with similar hue (color), chroma (intensity) and value (lightness/darkness.) These Duo Shades were then refined to enhance translucency (depth) and chroma (intensity.) the result is a shade concept that simplifies shade selection.

Synergy D6[®] Dentin Duo Shade A2/B2 self-blends with teeth whose shading properties fall within the A2 and B2 color spectrum. In most cases, one Synergy D6 Duo Shade will produce undetectable restorations.



Synergy D6 Shades



UNIQUE "NESTING" SHADE GUIDE

Synergy D6 shade guide features a unique "nesting" shade selection option when performing restorations using the layering technique.





Two Enamel Shades



White Opalescent

Universal





The Unique Shade Guide

- Made from Synergy D6 composite
- Only when or if enamel translucency is desired
- Layer the selected dentin shade core under the selected enamel shade shell using a special nesting design.





SYNERGY®D6 FLOW universal flowable





Indications for Synergy D6 Flow

- Direct class V fillings (cervical caries, root erosion, wedge-shaped defects)
- Class III, IV
- Small fillings in the posterior region
- Fillings for minimal cavities
- Repairs of composite & ceramic veneers
- Block out material for undercuts
- Preventative resin restorations (e.g. extended fissure sealants)



Synergy D6 Flow Key Features

- Stable yet flowable material
- High radiopacity
- Reduced shrinkage (4.4 %)
- High abrasion resistance
- Good polishability



S.P.E.C. 3 LED Curing Light

Special Plasma Emulated Curing with 3 Modes

Intended for rapid polymerization of light-cured materials by dental professionals.

"COLTENE



Feature	Benefit
Multiple Modes	Standard Mode: For most composite curing scenarios
	3K Mode: Ideal for or bulk fill composites and rapid curing when time is an issue (children or patients with gag reflex) or dentist just wants to save time/money.
	Orthodontic Mode: Cures an entire full-arch of brackets with two 3 second intervals per bracket



Feature	Benefit
Light weight, Cordless Design	Easy to Handle Portable
Simple Controls	Easy adoption by the office staff
Customer Replaceable Lithium-Polymer Battery	Long Battery life for extended operation Customer replaceable accessory available for additional peace of mind.



Coltolux[®] Curing Lights



Coltolux[®]LED

Compact and Efficient LED Curing Light



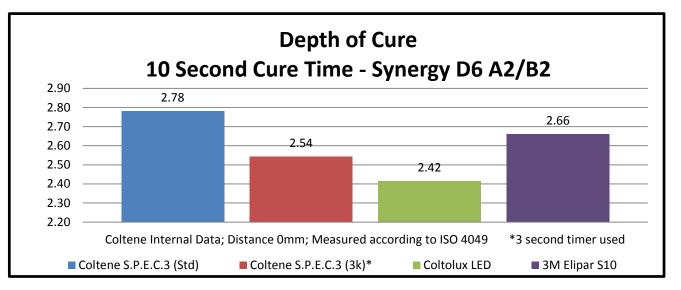


Features

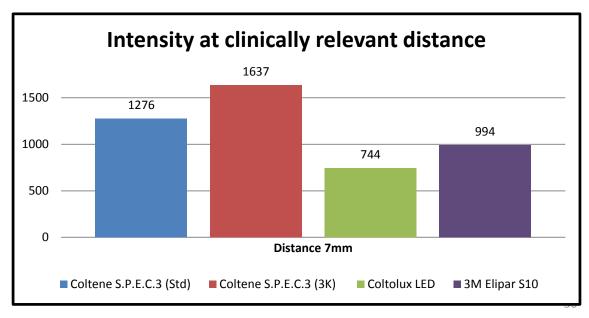
- •Cures 2 mm in only 10 seconds
- •Advanced reflector design minimizes light diffusion
- •LED output matches absorption spectrum of Camphorquinone Photoinitiators
- •Audible signal every 10 seconds and automatic power
- •20-second shutoff
- •Saving sleep mode after 15 minutes of inactivity
- •Hundreds of 10-second curing cycles with a full charge
- •Test block provided for determining accurate cure times



Product PerformanceNE



Coltolux[®]





Slim Curing Probe



Constant ¹/₂ inch diameter curing probe improves accessibility and patient comfort

Coltolux[®]LED









Coltolux[®] 75





Coltolux[®] 75 Features

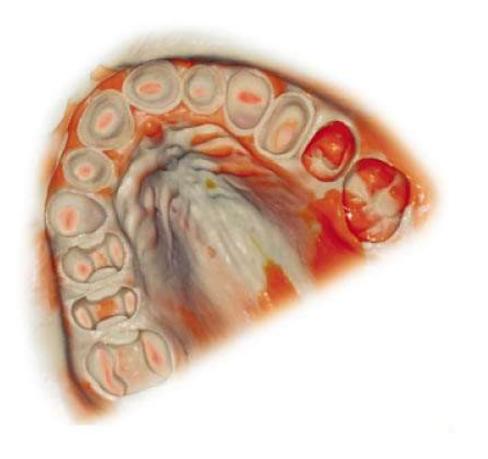
- •Efficient fast ten second cure
- •Ergonomic clean compact design
- Economical affordable, high power
- •Extra long (2m) flexible cord
- Audible trigger start and stop
- Quick and simple bulb replacement
- •Ten second beeper with auto-shut-off
- •Thermal protection against over-heating
- •Autoclavable light guides in various sizes
- •Voltage stabilizer assures constant light output
- •High efficiency fan for continuous cool operation



PROSTHETICS



Impression Materials





COLTENE developed and launched the very 1st PVS impression material!

President Impression Material 1972



THE AFFINIS FAMILY







The next generation of addition type Vinyl Polysiloxane (VPS) Impression Materials have several key improvements over earlier formulations as a result of improved surfactant chemistry and additives.

- Unique Wetting Ability
- Optimized Flow
- Better Models



Unique Wetting Ability



 The next generation materials have outstanding wetting ability in a moist environment. The selfmerging action envelops the moist tooth structure and prevents air entrapment and margin distortion



Optimized Flow



 The improved surfactant chemistry and additives provide improved wetting but do not restrict the flow of the material. This results in ideal flow and thixotropy without dripping.



Better Models



 The new chemistry allows outstanding wetting behavior of water against cured impression material. This assures an accurate, bubble-free model with the poured die stone.





Affinis Wash Materials

Two Viscosities

Light Body (Green)

Regular Body (Blue)

Two Set Times



Fast Set (50 seconds working time / 80 seconds set time) Regular Set (60 seconds working time / 120 seconds set time)





Affinis Precious Wash Materials

Two Viscosities

Light Body (Silver)

Regular Body (Gold)

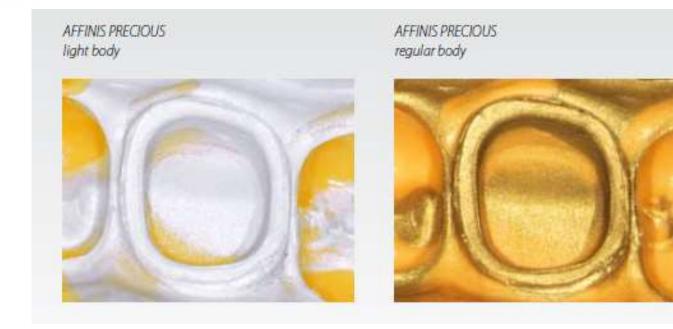
Set Time

Regular Set (60 seconds working time / 120 seconds set time)



AFFINIS PRECIOUS

AFFINIS PRECIOUS features outstanding readability of the details. Its unique silver and gold pigmentation significantly reduces light diffusion and improves the visual perception of details. The quality of the impression can be easily and reliably checked thanks to its outstanding readability.





ROTARY INSTRUMENTS







loen cassion watersents

Speedster Allown passes increases

TurboCi

pen

INCOMPANY AND ADDRESS.

SwissFlex.

Alpen. Small

A Complete Family of Rotary Instruments









Alpen[®] Multi Use Diamonds

•Alpen Multi Use Diamonds are Swiss made providing enhanced quality. They undergo a unique, multi-layer bonding production process, which secures complete and uniform coverage, especially at the all-important tip.

•Each bur is layered with natural diamonds: first an initial layer of diamonds is bonded to the steel shank for anti-vibration, and a second layer is bonded creating full diamond coverage.

•Available in packs of five.



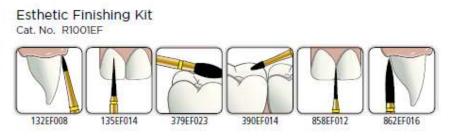
Alpen[®] Diamonds Clinical Kits



Crown & Bridge Preparation Kit Cat. No. R1005CB









Porcelain Veneer Kit Cat. No. R1004PV





TurboCut™





Alpen[®] Diamonds / TurboCut^{®®}

•Alpen TurboCut Diamonds are super coarse spiral diamonds that offer added cooling efficiency and effective debris removal for bulk reduction.

•Available in packs of five.









Alpen' x1 Single Use Diamonds

•Alpen x1 Diamond Instruments are a smart combination of convenience, efficiency, and infection control. Each bur is gamma sterilized, and individually package for your ease of use; promoting patient safety with advanced infection control.

•Alpen x1 offers one of the largest selections available in single use diamonds with an unparalleled Swiss quality and precision cutting.

•Available in packs of twenty-five.







the second se



Alpen' Speedster" Zr Plus

Alpen' Speedster[™] Zr Plus is a specialty diamond bur designed to simplify procedures involving Zirconia, Alumina & Porcelain.

The uniformly-layered, synthetic diamond coating:

- Reduces the risk of chipping or micro-fracturing.
- Provides increased surface contact due to fine and extra fine layering of diamonds enabling precise cutting.
- Reduces procedure time for Zirconia crown & bridge removal and adjustment.









Alpen' Carbides

•Alpen Carbides provide clinicians with a comprehensive line of advance one-piece carbides. Almost all carbides currently sold are based on two-piece construction. This is when a steel shank is brazed to the carbide head; creating a weak point in the carbide.

•The one-piece design of Alpen Carbides works to eliminate joint breakage, while generating a concentric bur that cuts faster and lasts longer.

•Available in packs of five, ten, and hundred.









Alpen[®] Speedster[®]

•Alpen Speedster Carbide metal cutting bus rapidly cut amalgam, metal, enamel, and dentin. These metal cutting burs cut aggressively without stalling or clogging, reducing prep and chair time.

 Alpen Speedster Carbides offer a full line of metal cutters.

•Available in packs of ten and hundred.









Alpen' SteriX

•Alpen SteriX Carbides are gamma sterilized, offering an aseptic bur right out of the box, while advocating advanced infection control and convenience.

•These carbides provide clinicians with a comprehensive line of advance one-piece carbides.

•Available in packs of ten and fifty.



Alpen' SteriX

Why Take a Chance? Alpen' SteriX eliminates the risk!

- Brand new, unsterile carbides may have colony forming units of harmful bacteria, increasing the risk of spreading infection.
- Alpen" SteriX is gamma ray sterilized ensuring zero cfu's, ready to use.







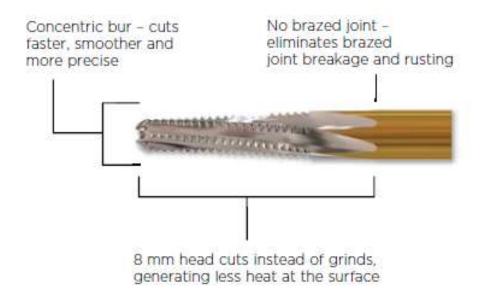




Alpen' Speedster" C&B

Diamond-Shaped One-Piece Carbides for Rapid Crown & Bridge Preparation

- Total gross reduction, from crown or amalgam removal to finish, with fewer burs.
- One-Piece solid carbide construction results in a longer lasting, smoother cutting instrument.
- Thinner diameters allow for expanded indications.











Alpen' Polishers

Indications

- Composite
- •Ceramic
- CAD/CAM Restoration
- Amalgam or Hard Alloy
- •Acrylic
- Natural Tooth



Composite

-Designed for smoothing, pre-polishing, and polishing of all types of composites and compomers -Polish paste required





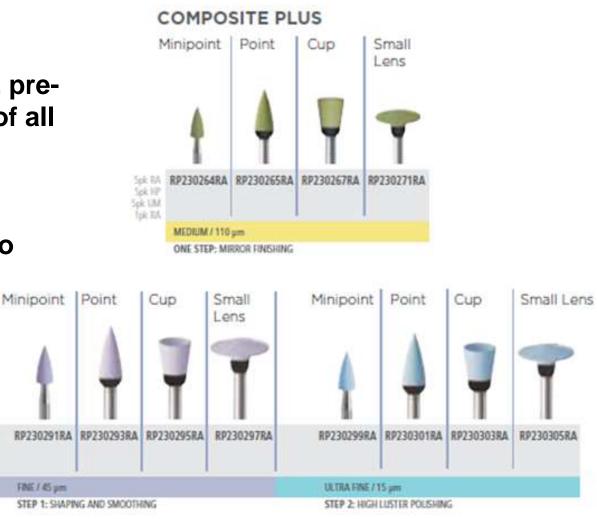
Composite Plus

-Designed for smoothing, prepolishing, and polishing of all types of composites and compomers

-Diamond Impregnated-No polish paste required

Sek RA

592.117 592.135 192.135





Ceramic

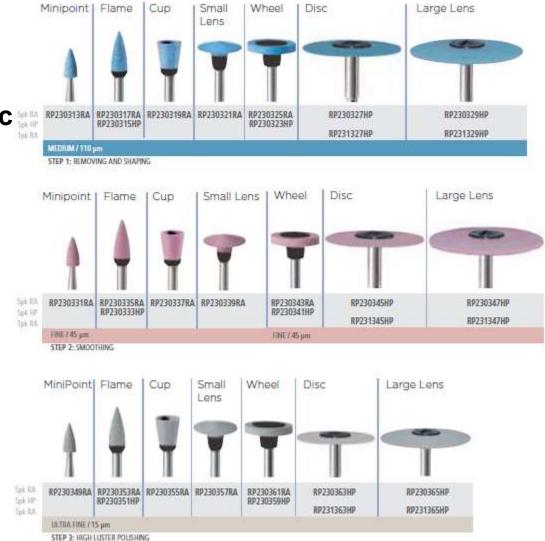
-Designed for pre-polishing, polishing removing and shaping of all types of ceramic -Polish paste required





Ceramic Plus

-Designed for pre-polishing, polishing, removing and shaping of all types of ceramic -Diamond Impregnated-No polish paste required

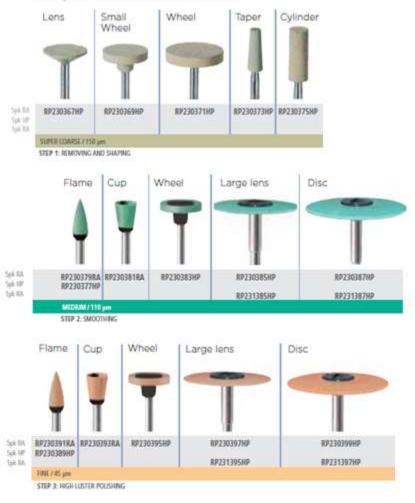


CERAMIC PLUS



CAD/CAM

-High performance synthetic bound diamond abrasive grinders for oxide ceramic -Designed for materials such as Ivoclar Vivadent's e.Max, 3M ESPE's LAVA -Diamond Impregnated-No polish paste required





Universal

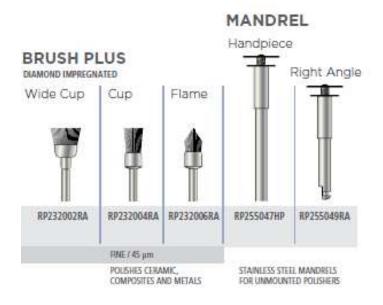
-One step designed for pre-polishing, polishing of various materials (precious and non-precious metals, acrylics, porcelain, composites) -Polish paste required





Brush Plus

-Designed polishing of all types of composites -Diamond Impregnated-No polish paste required



COLTENE

Alpen[®] Procedural Kits



Composite Polishing Kit RP250014KT

A key factor to preventing composite materials from breaking down is a smooth surface, which offers the best protection against plaque accumulation and discoloration. Alpen' Composite Polishing Kit creates a smooth, mirror surface on all types of composites.

Ceramic Polishing Kit RP250016KT

Due to the special combination of selected diamond grits and soft silicone bond, Alpen[®] Ceramic Polishers are able to shape and shine your crown to a mirror finish. Replaces conventional brushes and cotton buffs, without the need for paste.





Universal Right Angle Latch Polishing Kit RP250100KT

Alpen' Universal Kit offers an economical choice at your fingertips for removing, shaping and polishing of composite and ceramic materials.

Composite Plus Polishing Kit RP250092KT

Newer generation composite materials may have larger filler particles than older generations, making this material harder and more brittle; Alpen' diamond impregnated composite polishers are designed to work with these new composites. The Alpen' Composite Plus Kit is a two-step, diamond impregnated polishing system for pre shaping and smoothing to a high luster. No need for diamond impregnated paste with the Plus Kit.





Composite Universal Polishing Kit RP250093KT

The Alpen' Composite Universal Kit is a one-step, high-performance diamond impregnated polisher set for the mirror finishing of composites. Due to the diamond grit, a pressure dependent removal and mirror finish polishing step can be achieved. Alpen' Composite Polishers generate an outstanding polishing result, shortened polishing time and long lasting shape integrity.

COLTENE

Zr Plus Glass/Ceramic Polishing Kit RP250096KT

Glass/Ceramic material can be complex to work with at times, but this Alpen' system will alleviate this difficulty. These polishers work with delicate materials and are ideally suitable for adapting and revising of Glass/Ceramic materials.





Brush Polishing Kit RP250047KT

Alpen' Polishing Brushes integrate fine grit silicon carbide polishing powder into thin, smooth bristles so that no polishing paste is required. With three different shapes, you can easily polish those restoration areas that are difficult to access - such as fissures and interdental spaces - within seconds without flattening the surface unnaturally.

CAD/CAM Polishing Kit RP250099KT

This specially designed Alpen' polishing system works with the unique characteristics of CAD/CAM crowns, and frameworks. These polishers are ideally suitable for delicate materials and for adapting and revising CAD/CAM restorations, producing astounding results.





Zirconium Oxide Polishing Kit RP250098KT

Zirconium Oxide contains less glass than older ceramic materials, creating more flexural strength, but are harder to adjust without generating micro-fractures. Alpen' Zirconium Oxide Kit is designed to enable cutting and adjustment of high- strength materials like Zirconium Oxide, Lithium Disilicate, Aluminum Oxide, and other pressed ceramics.



SwissFlex





SwissFlex" Strips & Discs

Feature	Benefit		
Metal-free center protects your restorations from damage	Provides preventative measure against damage, unlike 1) competitors discs (3M Sof-lex)		
	2) No special technique needed		
Mandrel "Snaps-In" to disc, alleviating slippage	1) Eliminates potential for slippage		
Extra thin to allow control, and ease in polishing	Extra thin allows for focused polishing while avoiding 1) adjacent tooth		
Competitive pricing	Influences positive purchase decision saves money for 1) the dental office		
Unique SwissFlex Design	1) Enhances brand identity and product differentiation		
Competitive product offering	1) Enables broad conversion from competitors product		



SwissFlex" Strips & Discs

Cat. No.	RP250095KT	
Indication	Intro Kit	
Description	Discs and Strips	
Content	Mix	





Indication		contouring		misning		poilsning		nign iuster	
Description	mandrel	super coarse (70 µm)		coarse (50µm)		medium (30µm)		fine (5µm)	
Disc Diameter		1/2*	3/8*	1/2*	3/8*	1/2*	3/8*	1/2*	3/8"

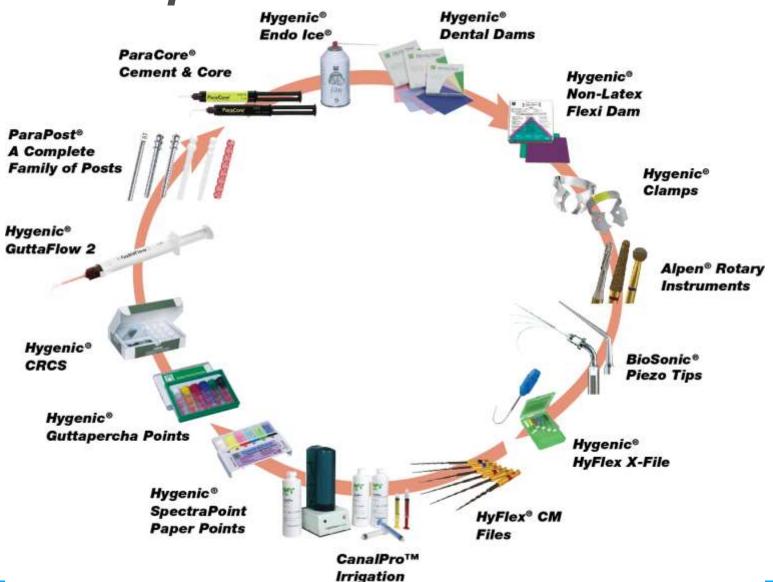
Cat. No.	RP232	016ST	RP232017ST		
Indication	contouring	finishing	polishing	high luster	
Description	coarse (70µm)	medium (50µm)	fine (30µm)	ultra-fine (5µm)	
Length in mm	17	5	175		
Width	3.	5	3.5		
Content	4	0	40		



ENDODONTICS

COLTENE

Comprehensive Product Line





Endodontics

SHAPING AND CLEANING THE CANAL



Create Glide Path

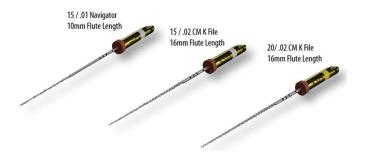
HyFlex-X NiTi Hand Files

- Sizes #15 and #20
- Note all hand files are .02 Taper



HyFlex GPF Rotary Files

• Sizes 15/.01, 15/.02, 20/.02





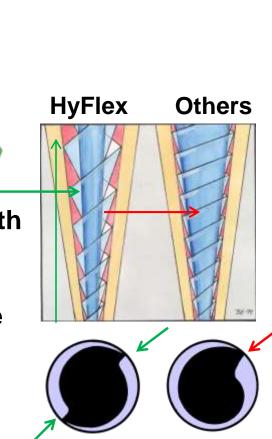
HYFLEX X-File

Unique flute and Core design

•Cylindrical Core vs. conical core

•Flutes successively increase in depth and length from tip to handle

Double cutting edge versus single cutting edge

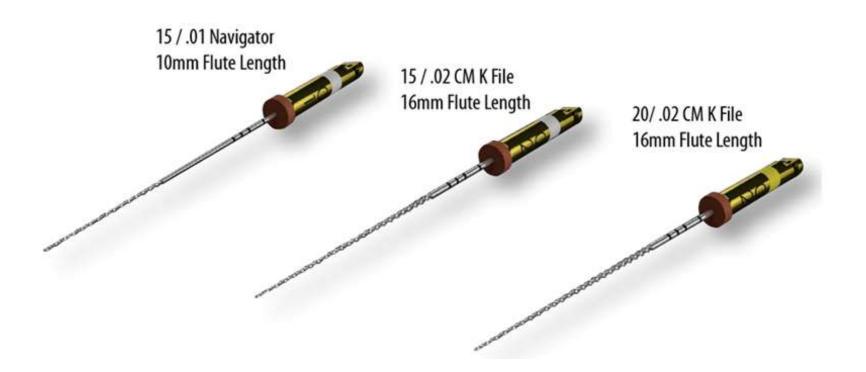


Benefits

•High cutting efficiency and exceptional flexibility that easily follows curvature of canal



HyFlex[®]GPF[™]





HyFlex[®]GPF[™]

Features and Benefits

- Negotiate working length quickly and efficiently
- Files 2 and 3 have controlled memory (CM) technology
- CM glide path files track well in the apical third and allow safer, more efficient preparations
- Decrease chance for transportation and ledging
- Can reduce torsional stress and increase the lifespan of the rotary instrument used for canal preparation
- Lessen hand fatigue and save valuable chair time



HyFlex[®]GPF[™]

3 Glide Path Files Available

File 1:

15/.01 Navigator 10mm flute length

File 2:

15/.02 CM (Controlled Memory) K File 16mm flute length

File 3:

20/.02 CM (Controlled Memory) K File 16mm flute length

Available in 21, 25, and 31mm lengths





Standard NiTi Rotary Files





Nickel-Titanium alloy - NiTi

- 55 wt% Ni and 45 wt% Ti
- Nitinol
- Derived from its composition and place of discovery Nickel Titanium Naval Ordnance Laboratory, who discovered its properties in 1962
- NiTi has two extraordinary properties:
 - ✓ Super elasticity
 - ✓ Shape memory



While standard NiTi has provided benefits to root canal instruments there are also issues.

- **1.** Difficult to stay centered in the canal
 - Ledging, Apex Transportation, Perforation
- **2.** Breakage
 - Limited warning signs before it happens

What if we could make a NiTi file:

✓ Without shape memory?

✓ That provided a visual warning prior to breaking?



Controlled Memory (CM) NiTi Rotary Files





HyFlex [™]CM HyFlex CM NiTi files (Controlled Memory)

 No shape memory at room temperature as a result of a proprietary treatment process

Changing the DNA of NiTi



Controlled Memory Benefits

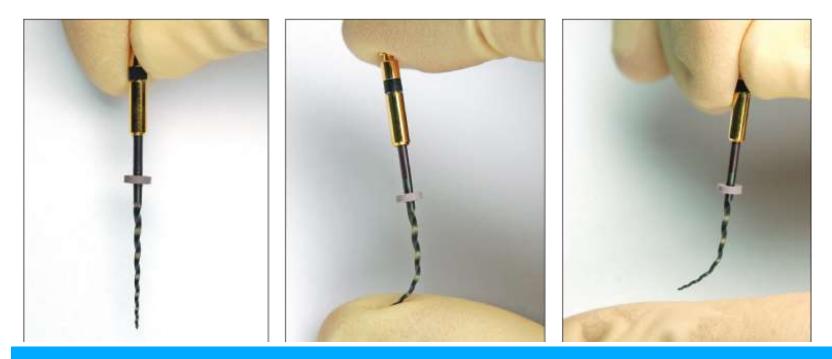
- **1. Superior Canal Tracking**
- 2. Outstanding fatigue resistance
- **3. Regenerative properties**





1. Superior canal tracking

- Extreme Flexibility > easily follows very curved canals
- No Shape Memory = no spring effect > keeps file more centered in the canal

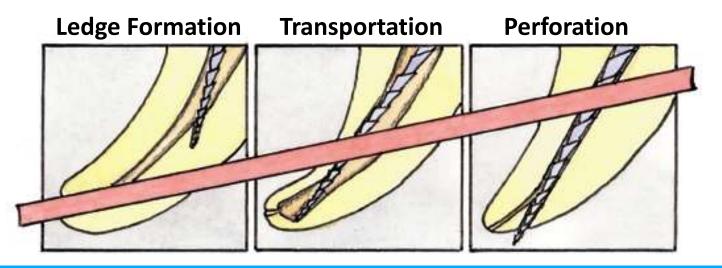




1. Superior canal tracking

- Extreme Flexibility > easily follows very curved canals
- No Shape Memory = no spring effect > file stays more centered in the canal

Virtually eliminates problems such as:





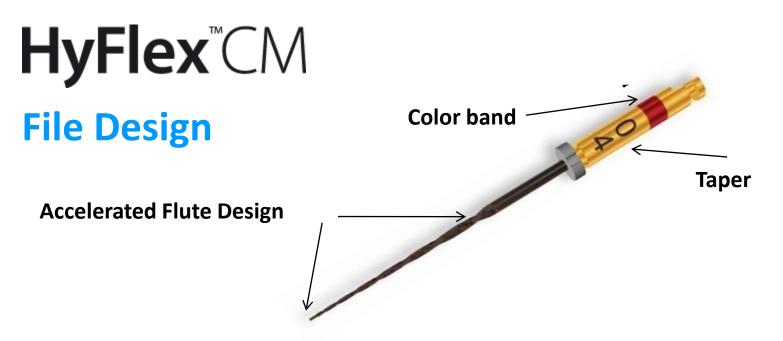
Gordon Christensen Clinicians Report

Conclusions:

76% of evaluators stated they would incorporate HyFlex CM into their practice.

100% rated it excellent and worthy of trial by colleagues





- ISO color coded handle indicates size of file, diameter [mm] at the tip
- Numbers indicates degree of taper.
- Accelerated flute design tip strength and debris transportation.
- Non end cutting tip
- Color codes rubber stops indicating degree of taper
 - 04 Grey > 06 Pink > 08 Orange



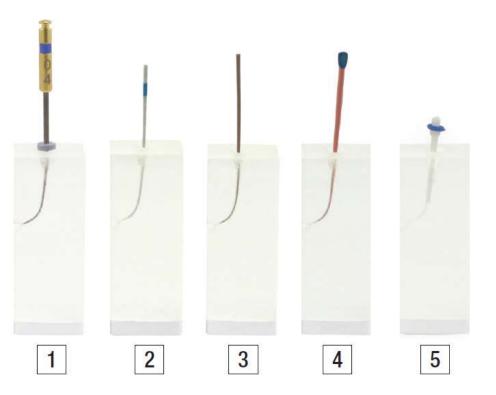


- Files can be used with the dentist preferred technique by simple ordering preferred the sizes and tapers
- Assorted packs are available for Crown Down and Single Length techniques.
- Using all files in these packs are in simple cases typically not necessary. The dentist makes the clinical judgement how many files are needed.
- Recommendations:
 - 500 rpm
 - 2.5 N·cm torque
 - Light pecking motion





The ColteneEndo System





Shaping

HyFlex[®] X-File, HyFlex[®] CM[™] NiTi File

Drying Hygenic[®] SpectraPoints



4

1

2

Temporary Treatment Calcium Hydroxide Points, Coltosol, DuoTemp

Obturation

Hygenic[®] Gutta Percha Points, Hygenic[®] Spectra Points, Hygenic[®] Spectra Greater Taper Points, GuttaFlow[®] 2

Post Systems / Core-Build-up: 5

ParaPost® Fiber White, Fiber Lux, Taper Lux, ParaPost® X, XH, XP, ParaCore®



Endodontics IRRIGATION AND OBTURATION



CanalPro[™] Endodontic Irrigation System



CanalPro[™] Endodontic Irrigating Solutions

There is a famous saying with regard to endodontic treatment "It does not matter what you put in, it is more important what you take out" (from root canals). And irrigation protocols can play a key role in disinfecting and debriding root canal system. Another important aspect is that chemo-mechanical action is needed to optimally clean the canal system. Mechanical part is done by instruments and chemical prep is done by using irrigation.



Endodontic Irrigating Solutions

CanalPro NaOCI EXTRA

- For irrigation/debridement of root canals during and after instrumentation
- 2x wetter: Powerful wetting agents and proprietary surface modifiers enable penetration into hard-to-reach areas such as lateral canals and isthmuses
- 2x more digestive than regular Sodium Hypochlorite, cuts tissue dissolution time in half





Endodontic Irrigating Solutions

CanalPro NaOCI

- For irrigation/debridement of root canals during and after instrumentation
- Available in 6% and 3% formula





Endodontic Irrigating Solutions

CanalPro EDTA

- 17% EDTA Solution (pH 8.5)
- Removes smear layer and dentin mud
- Opens dentin tubules for:
 - -Disinfection solutions to work better
 - -Better adhesion of sealers and obturation material





Endodontic Irrigating Solutions

CanalPro CHX-Ultra 2%

- 2% Chlorhexidine Gluconate with powerful wetting agents and proprietary surface modifiers
- Improves the depth of penetration and kills planktonic bacteria 10X faster than normal 2% Chlorhexidine
- Final Irrigation step for long-lasting disinfection





Irrigation Technique

FILE



INSTRUMENTATION with NaOCI

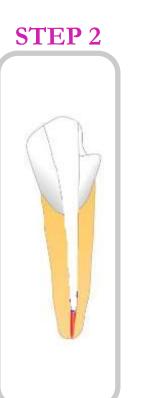
for lubrication



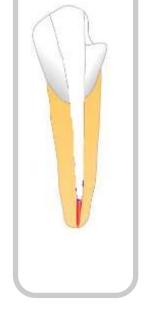
STEP1

for pulp dissolution and antimicrobial benefits

IRRIGATION WITH EDTA for smear layer removal IRRIGATION WITH NaOCI to penetrate, clean and disinfect canal









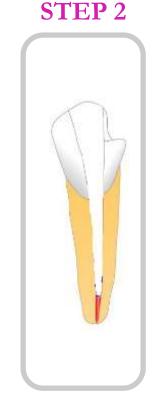
When a tooth becomes infected, a second appointment is often necessary.

In those cases, a secondary irrigation technique should be performed. CHX is introduced into the technique.



Second Irrigation Technique

STEP 1



STEP 3

IRRIGATION WITH NaOCl

for pulp dissolution and antimicrobial benefits

IRRIGATION WITH EDTA for smear layer removal IRRIGATION WITH CHX

a broad spectrum antimicrobial with sustainability

*Flush with distilled water in between each step



Important to note:

If NaOCI and CHX are used immediately after one another you will see an orangish-brown precipitate (para chloroaniline), which is carcinogenic.

Do not use these irrigants one after the other.



EDTA neutralizes NaOCI, so typically you should rinse with EDTA after using NaOCI and before using CHX.



Endodontic Irrigating Tips

CanalPro NiTi Tips

- The "Gold Standard" for endodontic irrigation
- Extremely flexible for superior canal tracking
- Adjustable needle angle for maximum flexibility
- Longer life cycle with less clogging
- Autoclavable for cost-effective repeated use
 -Patented



Endodontic Irrigating Tips

CanalPro Flex-Tips

- Bendable to facilitate easy access for irrigation, application and micro-aspiration
- Excellent canal tracking
- Unique non-kink polyamide tip
- Disposable (single use) tip
 Patented



Endodontic Irrigating Tips

CanalPro Irrigating Tips

Ideal for irrigation of canals, pockets and fistulas





Endodontic Irrigating Accessories

CanalPro AirWater Irrigator

- Direct air/water flow without overspray or splashing
- Delivers a gentle and effective stream of water and/or air for superior and efficient cleaning or drying of any work
- Fits most standard and "Quick Change" AirWater syringes
- Adapts all luer lock style needle tips



Autoclavable



Endodontic Irrigating Accessories

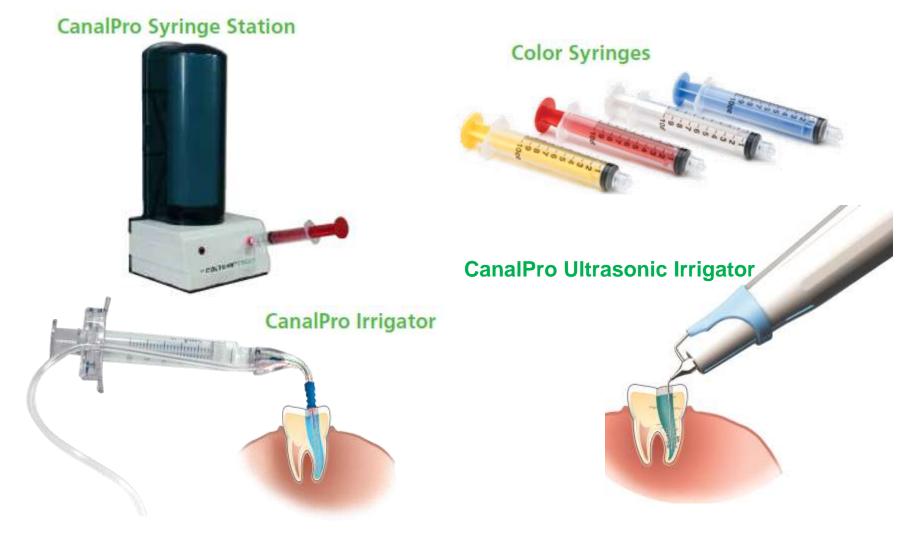
CanalPro Blue Tips

- Soft plastic tip for irrigation and aeration
- Autoclavable





Endodontic Irrigating Accessories





poorea aun-

Endodontic Irrigating Accessories

Color Syringes

- Helps increase safety and minimize the chance of syringe swap
- Latex-Free, 10cc color-coded syringes offer a fast, easy way to organize and identify syringes for irrigants and solution
- Color-coded sililcone ring on top of each syringe permits easy identification under a microscope-without needing to pull away from the microscope
- Standard luer lock style

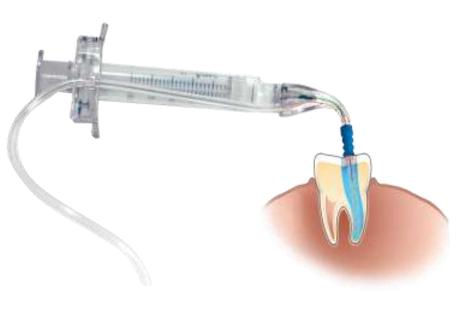
COLTENE

CanalPro[™]

Endodontic Irrigating Accessories

CanalPro Irrigator

- Designed for easy one-hand use
- Provides safe, cost-effective apical irrigation and evacuation
- Fluid flows from apical to coronal region to virtually eliminate clogging
- Ratcheting syringe allows for a tactile and audible signal for every 0.2mL delivered
 - -Patent pending



CanalPro[™]



Endodontic Irrigating Accessories

CanalPro Ultrasonic Irrigator

- For non-corrosive, controlled delivery of NaOCI
- Provides enhanced cleaning power through ultrasonic penetration of irrigants into dentinal tubules
- Autoclavable nickel-titanium tip allows for access to all parts of the canal
- Disrupts biofilm when ultrasonic agitation is used with the irrigation regimen



CanalPro[™]

Endodontic Irrigating Accessories

CanalPro Syringe Station

- Cost-effect way to create a dedicated area for syringe filling
- Syringe activated valve
- Low level light indicator

-Patented

- Helps prevent counter, carpet and scrub damage
- Several units may be connected to create a convenient station for filling multiple solutions







GuttaFlow[®] 2 Cold Flowable Gutta-Percha





GuttaFlow[®]2

Cold Flowable Gutta-Percha

- No heat no shrinkage
- Sealer and Gutta-percha in one material
- Exceptional flow plus expansion no condensation required
- Adheres to Gutta-percha and dentin



GuttaFlow[®]2 Cold Flowable Gutta-Percha

< 30 µm ╋

Sealer **Gutta-Percha Powder**

= GuttaFlow²

The first "Two in One" cold fluid filling system



GuttaFlow[®] 2 Cold Flowable Gutta-Percha

Ingredients:

- Gutta-Percha
- Sealer
 Silicone based
 Zircon dioxide
 (radiopacity)
 Micro-silver (antimicrobial)

GuttaFlow[®] 2 Cold Flowable Gutta-Percha



Two Delivery Systems

GuttaFlow2

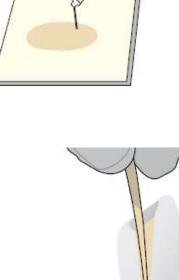
5ml

- Automix Syringe
- Capsule

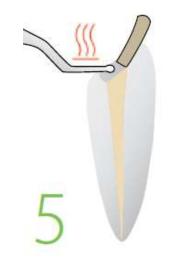




Syringe: Step by Step



4. Tip: If the canal is not sufficiently filled add on or more auxiliary GP points



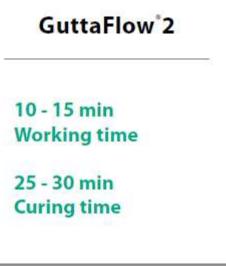


Syringe

- Dispenses just the quantity required
- Ready to use
- Homogeneously and hygienically mixed and free of air bubbles

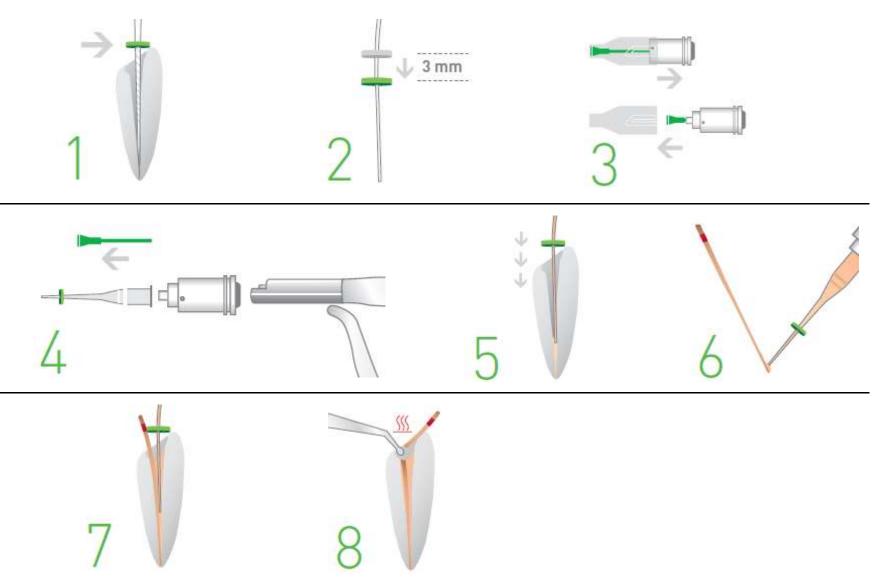








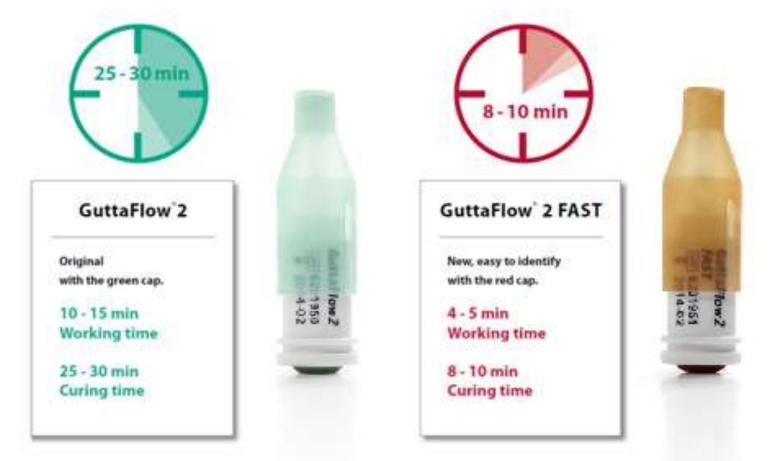
Capsule: Step by Step





Capsule

Ideal for back filling





Use GuttaFlow 2 With Hygenic Gutta-Percha Points

Hygenic Gutta-Percha Points are high quality, very precise, radiopaque, machine-rolled cones manufactured from Gutta-Percha.

- Precise in size and taper
- Available in 3 size specifications: ADA Spec #57 (Conventional),
 Original (Classic) Hygenic Spec, and AAE/ ISO Spec

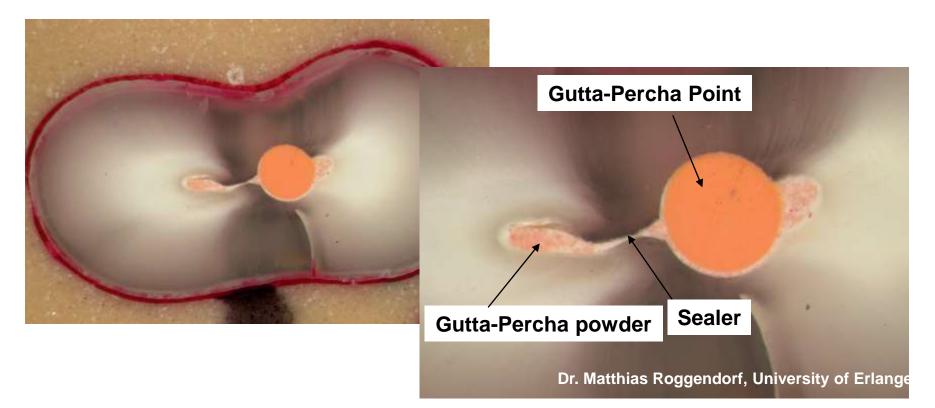
SpectraPoint Greater Taper Gutta Percha Points are made for obturating root canals that have been instrumented with .04 or .06 tapered files. Top color coded to match ISO colors.



GuttaFlow[®] 2 Cold Flowable Gutta-Percha



Excellent filling of lateral canals and isthmuses





Endodontics **POST AND CORE**



ParaPost[®]

&

ParaCore® DUAL CURED CORE & RESIN CEMENT







The World's Most Trusted Post Manufacturer

- Over 350 third party studies asserting ParaPost as the best choice
- We invented prefabricated post
- We are the best resource available for support in post & core procedures





ParaPost[®] XP



Original flat head design

- •Color Coded
- Parallel-sided for stress free fit
- Raised diamond pattern for improved retention
- Venting to allow escape of excess cement
- •Chamfer for ease of insertion



ParaPost[®] XH



Rounded head design, anti-rotational

grooves

- •Color Coded
- Parallel-sided for stress free fit
- Raised diamond pattern for improved retention
- Venting to allow escape of excess cement
- •Chamfer for ease of insertion



ParaPost[®] XT



A perfect post design for a passive / active, metal post

- Ideal for situations requiring extra retention such as wide and/or short canals or sclerotic dentin
- Patented, low-profile, interrupted threads located in the coronal section of the post where root walls are thick to provide extra retention
- Passive, raised diamond retention pattern in the apical section to provide increased safety and resistance to rotation



ParaPost[®] Cast Post



Prefabricated for direct and indirect casting technique

- •Parallel-sided for stress free fit
- •Raised diamond pattern for improved retention
- Venting to allow escape of excess cement
- Chamfer for ease of insertion



Metal vs. Fiber Ask yourself these questions

- Are cosmetics important?
- Is this patient at higher than normal risk of fracture?
- Are all fundamental post and core conditions present?
- Do I have adequate ferrule?



ParaPost[®] **FIBER LUX**[™]

ParaPost[®] **Taper Lux**[®]



When do we place fiber posts?

- The advent of all ceramic crowns has given rise to the need for cosmetically appealing posts
- How do we make the choice between metal & fiber posts?





Fiber posts offer...



- Superior esthetics
- A higher degree of flexibility
- Chemical Bondability
- Deep transfer of curing light



Superior esthetics

 Fiber & resin post restorations offer a powerful tool to combat the "shadow effect" caused by metal posts.





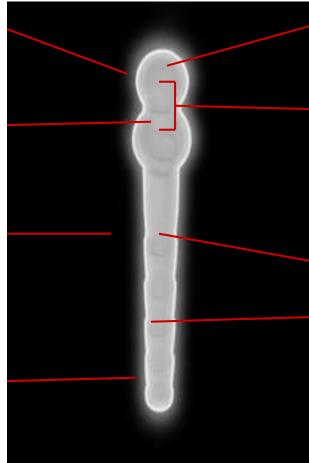
The Perfect Design for an Esthetic Post

Greater Surface Area for optimal chemical adhesion.

Anti-Rotational Flats

Translucent fiber resin material minimizes shadowing in restorations where the dentin walls are thin.

ParaPost[®] Fiber Lux can transmit polymerizing light, allowing the use of light, self, and dual cured cements.



Round Head reduces stress points in the core material.

Double Undercuts lock composite core material solidly to the post assuring superior mechanical retention.

Fiber Lux is radiopaque.

Safe, Passive, Parallel Design evenly distributes functional forces, providing protection against dentin failure.



ParaPost[®] FIBER LUX[™]

Rounded head design with anti-rotational flats

- •Color Coded Band
- Parallel-sided for stress free fit
- Retention ledges



ParaPost[®] TAPER LUX[®]

Rounded head design

- •Color Coded Band
- •.04 Taper design for narrow canals and greater taper preparations

Retention ledges



ParaCore® DUAL CURED CORE & RESIN CEMENT



ParaCore® DUAL CURED CORE & RESIN CEMENT



25 ml Cartridge



5ml Syringe



Burn CD

Key Features and Benefits of 25mL

- Use as Post Cement <u>and</u> Core Build-up)
 -Monoblock
 - -Saves time
- Cuts like Dentin
 - -Improved finishing of core, limits grooves & troughs
- Ideal Consistency
 - Stackable, non-slumping, allows free-hand core build-up
- Dual Cured
 - -Light curing for immediate cure
 - -Chemical cure for complete curing where light might not reach
- Fluoride Release and Radiopaque
- Two Shades: White and Dentin (25mL)



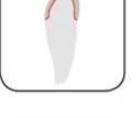
Key Features and Benefits of 5mL

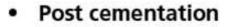
- Use as Post Cement, Core Build-up, and C&B Cement
 -Monoblock
 - -Saves time
- Cuts like Dentin
 - -Improved finishing of core, limits grooves & troughs
- Ideal Consistency
 - Stackable, non-slumping, allows free-hand core build-up
- Dual Cured
 - -Light curing for immediate cure
 - -Chemical cure for complete curing where light might not reach
- Fluoride Release and Radiopaque
- Three Shades with two set times (5mL)

 Regular Set: 120 seconds (White and Dentin)
 SLOW Set: 200 seconds (Dentin and Translucent)



 Crown & bridge cementation





Core build ups



ParaCore can also be used to cement inlays, onlays, and veneers





Endodontics

AUXILIARY PRODUCTS



Endo Ice > Diagnosis

- Cold stimulus for diagnosing pulpal health (–26° C)
- Apply with a micro-brush (cotton absorbs=reducing effectiveness)



No chlorofluorocarbon (ozone friendly)

"Ice has never been a good tool since it melts rapidly in the mouth, causing potential false positives as the cold water from the melting ice comes into contact with adjacent teeth. Endo-Ice is a much better tool since it is very cold (-26° C)" -Dr. James Kulild / Dental Economics

COLTENE

Hygenic Dental Dam > Isolation

+1/2" (12mm)

Used as a barrier during endo procedures

- Latex. Non-latex dam and NEW Elasti-Dan
- Framed Flexi-Dam (non-latex)
- Extended reach punch
- Wedjets (latex, non –latex)
- Dental dam clamps (Fiesta Color-coded)

Hygenic Clamps are available in both gloss and non reflective matte finish (no glare). In addition, Fiesta Clamps are color coded for easy identification.





HYFLEX X-File > Hand filing

- Universal file can replace both a K and H-Files
- Sizes 08 &10 are Stainless Steel all other sizes are NiTi



- Sharp, double-fluted design cuts faster.
- Reciprocating, Rasping motion

HYFLEX X-Files are great for initial canal location, creating a glide-path for HyFlex CM and NT files) and for leaning thin canals





Hygenic paper points > Canal drying

- Canal walls must be totally cleaned by continuously flushing it until the clinician is assured that all the debris is gone.
- After irrigation, the canal is dried with Hygenic paper points
- 1. When contacting sodium hypochlorite, the point whitens
- 2. Upon contact with other irrigants and fluids, the point darkens.

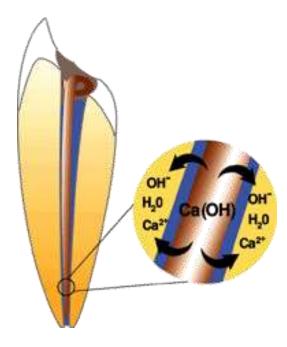




Hygenic Calcium Hydroxide Points

> Disinfection

- For two visit treatment when canal has been infected
- Kills Bacteria by raising and maintaining pH level to12+.
- In canal 3-5 days, moisture activated.
- 1. No mixing time saving
- 2. Easy and clean to apply no smearing around the access cavity during insertion
- 3. Easy to remove





RoekoSeal> Sealing

 After shaping and cleaned the canal, a sealer is applied before obturating the canal with Gutta-Percha.





Low film thickness –flows into all areas Does not shrink – tight seal Automix syringe or single dose package Eugenol-free and Insoluble



Hygenic CRCS > Sealing

• After shaping and cleaned the canal, a sealer is applied before obturating the canal with Gutta-Percha.



- 1. CRCS combines the benefits of calcium hydroxide (which encourages rapid healing) with zinc oxide Eugenol with it's proven sealing ability.
- 2. CRCS is radiopaque powder/liquid product supplied in aseptically packaged unit doses.



Hygenic Gutta-Percha Points

Hygenic Gutta-Percha Points are high quality machine-rolled cones manufactured from Gutta-Percha and very precise in size and taper

- Available in 3 size specifications:
 - ADA Spec #57 (Conventional) & Original (Classic) Hygenic Spec,
 - AAE/ ISO Spec.(02, 04 and 06 tapers)

Hygenic Greater Taper G-P Points are made for obturating root canals that have been instrumented with .04 or .06 tapered files and perfectly matched to HyFlex CM files





CanalPro CL > Endo Motor

- Light weight and ergonomical cordless hand piece
- Micro-head for better access to hard-to-reach areas
- 6 head positions for optimal accessibility
- Memory for up to 5 programs
- Auto-reverse
- Rotation Speed: 140~550 rpm
- Torque Level (N·cm): 0.3~3.0
- 2 Year Warranty



THANK YOU FOR VIEWING OUR COMPREHENSIVE LINE OF PRODUCTS!



Questions?