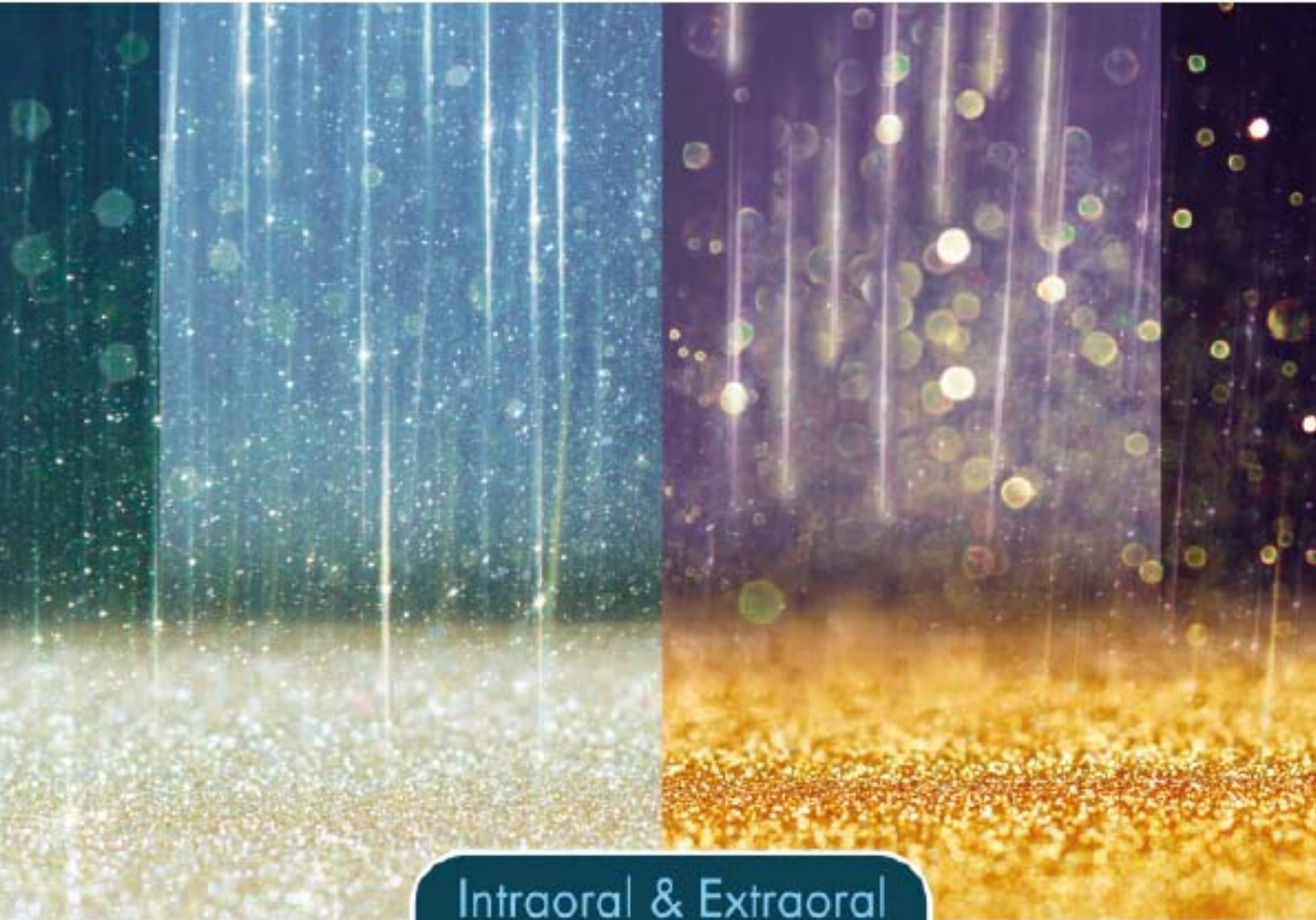




Danville
ENGINEERING & MATERIALS

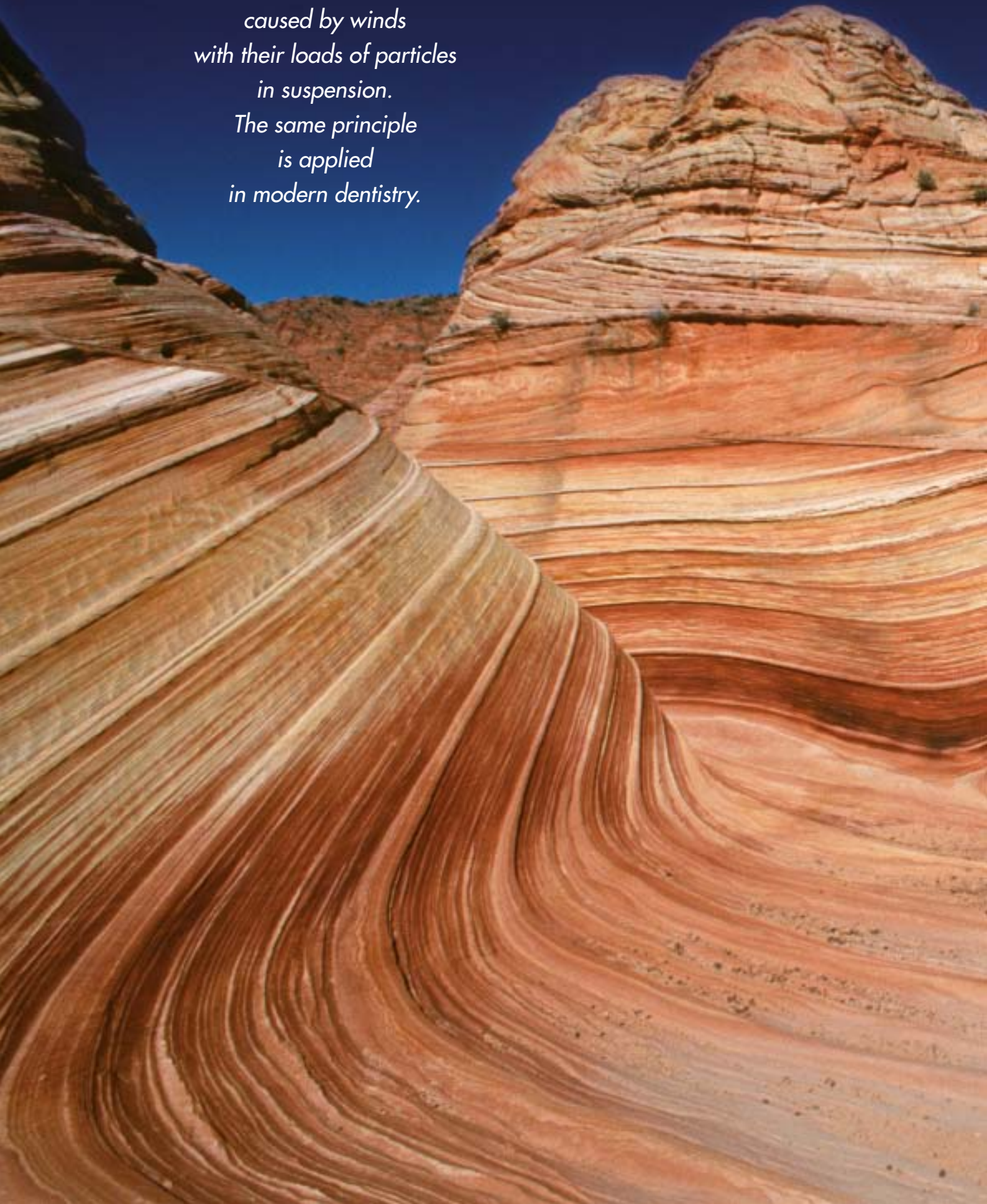
AIR ABRASION TECHNOLOGY



Intraoral & Extraoral
Microabrasion

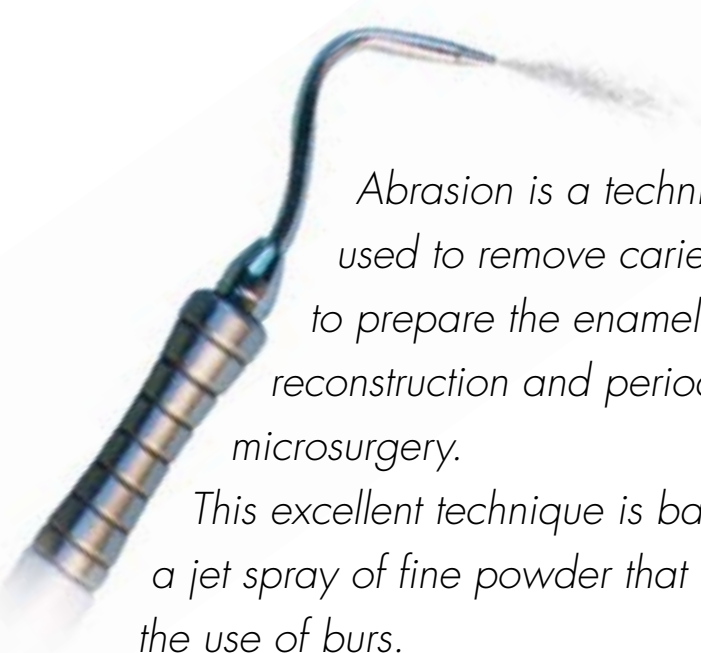


*In nature we can observe
the air abrasion effect
of disintegration
and fragmentation
caused by winds
with their loads of particles
in suspension.
The same principle
is applied
in modern dentistry.*



WHAT IS ABRASIVE AIR?

In Today's DENTAL MEDECINE, in particular the Restorative, Conservative and Adhesive Dentistry, the AAT Air Abrasion Technology is *indispensable*.



Abrasion is a technique used to remove caries and to prepare the enamel for sealing, reconstruction and periodontal microsurgery.

This excellent technique is based on a jet spray of fine powder that replaces the use of burs.



Metallic surface roughened with diamond bur



Metallic surface treated with MicroEtcher

THE ADVANTAGES OF MICRO-ABRASION

A simple, precise and fast procedure.

Micro-abrasion does not generate heat, noise, pressure or vibrations.

Does not overheat treated teeth.

Minimises the need for anaesthesia.

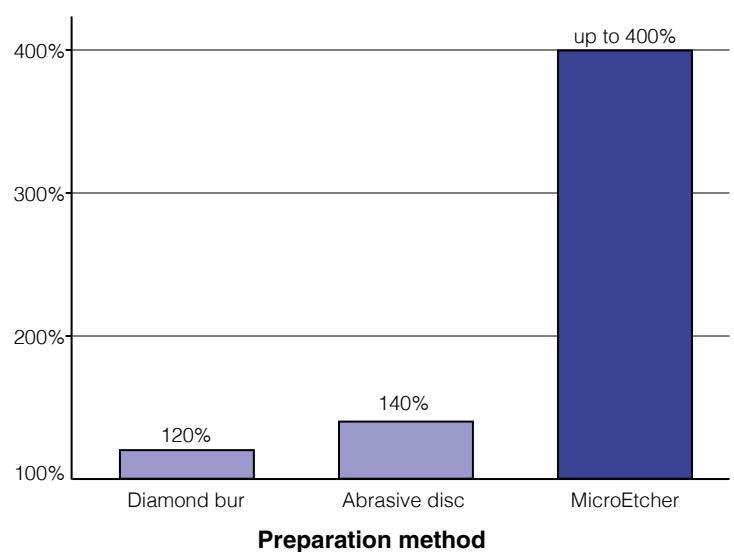
Abrasion is less invasive and preserves more of the surrounding tissue.

Reduces the risk of cracking and chipping teeth that might affect the gold-plating of the reconstruction.

Can be used to treat multiple lesions in a single session.

Significant reduction in work time with subsequent increase in profitability.

Increase in adhesive surface area



FIELDS OF APPLICATION

General Dentistry

- Preparation of all types of cavities
- Removal of old composite and amalgam fillings and inlays
- Cleaning and preparation of dental surfaces for sealing
- Etching of surfaces for adhesive reconstructions
- Silicating powder preparation (Siljet) of metallic, ceramic, zirconium, aluminium oxide and composite surfaces for repairs
- Microsurgery of periodontal pockets (glass beads)



Identification of various metals cutting a crown supported by a metallic post



By cleaning the pulp chamber, the aluminium oxide will form a white deposit and show the root canal orifice

Cosmetic Dentistry

- Removal of surface stains
- Removal of discoloured composite or fractured resin fillings
- Cementation of veneers



Sandblasting is used to prepare the adhesive surface of the natural tooth and the veneer

Endodontics

- Identification of endodontic orifices
- Root canal retreatment with removal of posts
- Endodontic accesses through ceramic crowns



Cleaning of the cavity after removing the temporary cement for cementation of the inlay

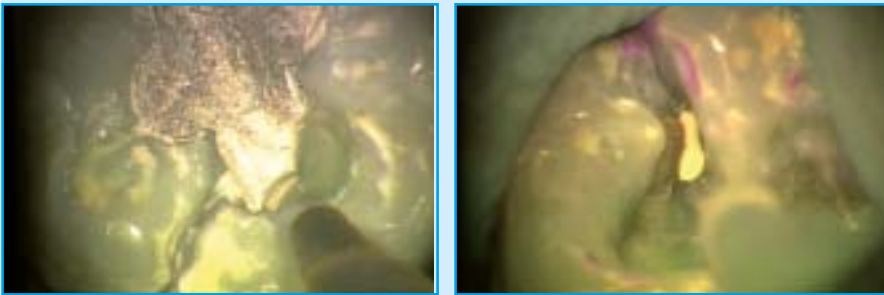


Preparation of metallic abutment for crown reconstruction



Preparation of occlusal grooves for sealing

FIELDS OF APPLICATION



Removal of old amalgam filling



Microsurgery of periodontal pockets with glass beads



Cleaning an old fracture for cosmetic reconstruction



Removal of old restoration



Horizontal fracture

Frangement sandblasting with MicroEtcher

cementation completed

Orthodontics

- Abrasion of the orthodontic bands before applying adhesives or cement
- Removal of composite resins after removing brackets

Prostheses

- Cleaning of the preparation before re-cementation
 - Sandblasting of the metallic surfaces
- Modelling of the edges of the crown

Paediatric Dentistry

- Reduces the use of diamond burs and minimises the use of anaesthesia

**In Today's DENTAL MEDECINE, in particular the Restorative,
Conservative and Adhesive Dentistry,
the AAT Air Abrasion Technology is **INDISPENSABLE**.**

PREP START™

The Prepstart is the answer to this need

**The Air Abrasion technology avoids the traumatizing
of the Pulp/Dentin System**

- No vibration, no water - therefore a minimum of pains and almost no anaesthesia
 - Minimum invasive therapies
- Cavity preparation - adhesive power increased for more than 400%
 - Cleaning of cavities
 - Cleaning and removing posts
 - Removal of cement surpluses
- Tunneling preparation under the marginal ridge from the occlusal surface
 - Removing of old composites and preparation of anterior teeth
 - Extremely fast cleaning of crowns, ceramic parts, etc.
 - Preparation of ceramic restauration silanization
 - Removal of incisal pits in anterior theet
 - Preparation and repair of angle fractures
 - Creation of extra coronal and intracoronal periosplints
 - Repair of composite restaurations
 - Alla types extraoral cleaning work, e.g., crowns, brackets, etc.

**Powder flow can be adjusted between 4.5 and 7.5 bar
Powder flow cane be adjusted between 0.8 and 4.8 gr/minute
Therefore extremely fast and precise work possible**



PREPSTART™

Air Abrasion Cavity Prep Unit Connession to existng air supplies

Specification:

- Portable and Ultra compact Unit
- Extreme working precision
- Crisp on/off control for a precise cut
- Adjustable Flow regulator
- Adjustable pression control
- 3 Stage Air control
- Availability of multiple tip sizes for rapid cutting at low pression (patient comfort)
- Pressure setting: 4/8 bar
- Powder size 27 micron



PrepStart Air Abrasion System
Reference 650700

Prepstart includes:

- Prepstart Unit with Foot Pedal
2KG (16.5 cm W x 140 H x 23 cm L)
- Handpiece & Nozzle Kit
2 Handpieces, .015 & .019 Tips
- Instructions & Technique Manual
- 450 g Aluminum Oxide 27
- 1 year warranty

PowerPlus™

PrepStart Air Pressure Booster

Normally, it is easy to increase the pressure range in your Office by adjusting the controller box on the compressor. If, however this adjustment is not possible the PowerPlus is the perfect solution.

- Air booster is the easiest and fastest way of providing an upper range of air pressure for maximum performance.
- Totally pneumatic
- With the PowerPlus station you don't have to touch your compressor
- Styled to be addition to Prepstart or Prepstart H₂O



PowerPlus Air Pressure Booster
Reference 650701

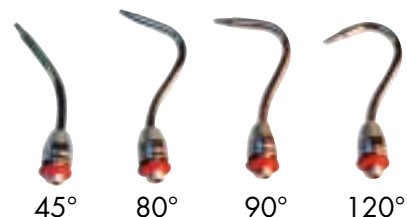
Handpiece adapter 4/5 hole
Reference 650718

PrepStart Noozle

All Noozle are made on high quality materials, precise, and fully autoclavable

Orifice Size	45°	80°	90°	120°
.015	650706	650707*	650708	650709
.019	670710	650711*	650712	650713
.019 Straight	670705	650704	-	-
.026	650714	650715	650716	650717

*Available also a Set of 3 tips



PREP START H₂O™

Hydro Abrasion Cavity Prep Unit

The addition of a cone of water mist surrounding the air/abrasive stream captures almost all of the dust! Cutting results continue to be optimal. Use of warm water further enhances patient comfort. Water mist starts & stops instantly with air/abrasive flow.

Specification:

- Captures almost all dust
- Warm water increases patient comfort
- No water connection, water is self contained
- On-Off water switch
- Adjustable water flow
- Air connection only to PrepStart foot pedal line

PrepStart H₂O tip

incorporate carbide orifices for long life.
Orifice size .019 – 80°



H₂O Hydro Abrasion Unit Accessory

To transform your Prepstart unit in a Prepstart H₂O

- Update Prepstart in approximately 5 minutes
- Offer to the Prepstart the benefit of Hydro abrasion

Specification:

- H₂O installed on new PrepStart top cover
- Handpiece with .019 inch nozzle
- All tubing & connections
- Instruction manual
- 1 year warranty

H₂O TECHNIQUE Procedure Guide



Patient presents a failed restoration with recurrent decay on DEJ surfaces as confirmed by DIAGN-dent*



PrepStart H₂O creates prep without anesthesia.



Water spray surrounds aluminum oxide to control powder spray. Cutting action is not affected.



Completed preparation



Composite shade A-1 is used for final restoration

PrepStart H₂O Hydro Abrasion
Reference 650800



PrepStart H₂O tips
Reference 650804

PrepStart H₂O Unit Accessory
Reference 650801



* Not a trademark of Danville Materials

The MICROETCHERS

The INTRAORAL and EXTRAORAL Sandblaster

- Precision micro roughening
- Pit and fissure preparation
- Tough stain removal from grooves
- Crown, bridges, and posts and other restorations roughened for maximum bond
 - Existing composite, porcelain and amalgam can be etched intra orally
 - Siljet powder application
- Intraoral porcelain repair and acrylic re-facing
 - Denture repairs
- Silanization of metals, composites and other surfaces for maximum bond
- Using GLASS BEADS the unit can also be used for TOOTH CLEANING
- Widely used in ORTHODONTICS for bond, bracket roughening, and cement removal for reuse

***Microetcher CD connects to all major turbines,
such as KAVO, Sirona, Bien-Air, NSK, W&E***

CD works at turbine air pressure of 2.5 - 3.8 bar

Microetchers II and IIA work at compressor air pressure of 5-7 bar

***Model CD and IIA have a slim profile
patented nozzle fully autoclavable***



MicroEtcher™ CD

Intraoral Sandblaster

The most valuable tool for dentistry is now even more versatile!

A custom disconnected at the rear of the MicroEtcher CD, allows you to plug the unit directly into your Kavo, Sirona or Bien-Air handpiece quick connector.

Features:

- MicroEtcher CD handpiece
- Fully Autoclavable (except jar)
- 360° rotatable and removable nozzle
- Slim Profile nozzle offers better intraoral usability
- Use 50 micron ALOX only and GLASS BEADS
- 8 - 12 gr / Minute powder use



MicroEtcher CD for Kavo
Reference 650100

MicroEtcher CD for Sirona
Reference 650101

MicroEtcher CD for Bien-Air
Reference 650102



Replacement nozzle for Microetcher CD, IIA, II

Nozzles to be replaced every 1-3 months according frequency of usage



650108



650106



650107

Nozzle diameter 1,2 mm
Reference 650108 (standard)

Nozzle diameter 0,8 mm
Reference 650106 (pit&fissure)

Nozzle diameter 1,2 mm
Reference 650107 (slim profile)

MicroEtcher™ IIA

Intraoral Sandblaster

The MicroEtcher IIA is recognized as one of the most valuable tools for dentistry. The MicroEtcher provides precise surface micro-roughening, improving bond strength up to 400%. Surface area and surface reactivity is dramatically increased for maximum bond. Sandblasting is fast and easy with most surface roughening procedures requiring only a few seconds. It offers all stainless construction and replaceable carbide tip. Now with a spill resistant abrasive filter.

Features:

- MicroEtcher IIA handpiece
- Fully Autoclavable (except jar)
- 360° rotatable and removable nozzle
- Slim Profile nozzle offers better intraoral usability
- Use 50 micron ALOX only and GLASS BEADS
- 8 - 12 gr / Minute powder use



MicroEtcher IIA
Reference 650500

Filter IIA Jar cap 10 pk
Reference 650109

MicroEtcher™ II

Intraoral Sandblaster

All the performance and application offered by the model IIA. Only the nozzle is autoclavable. All stainless construction. Replaceable carbide tip. Now with a permanently affixed jar lid and spill resistant abrasive filter.



MicroEtcher II
Reference 650503

Connections for MicroEtcher IIA/II

650502



650501



650504



650505



Handpiece Adapter Kavo Style
Reference 650502

Quick disconnect Kit
Reference 650501

Quick disconnect station
Reference 650504

Quick disconnect (for laboratory)
Reference 650505

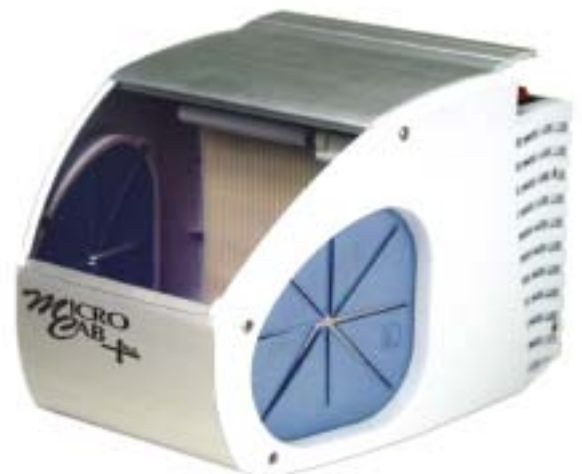
MICRO CAB+

MACRO CAB+

The DUST CABINETS

Both, MICROCAB+ and MACROCAB+ are indispensable for the use in AIR ABRASION TECHNOLOGY.

- They differ in size only, not in performance
- They are built in suction filter systems - depending on the frequency of use they need to be cleaned regularly
- The Dust Cabinets are good and efficient for all type of Extra oral use of Prepstarts and MicroEtchers for sandblasting, handpiece grinding, etc.
- Depending on the frequency of use, also the WINDOWS need to be replaced regularly.
- Both, MICROCAB+ and MACROCAB+ have full hand access into the interior chamber through hand guards
- Acrylic temporaries and stone dies can also easily be trimmed in Dust Cabinets



Macrocab Plus (dim. 32x27xH20)
Reference 650400

10 crystal shield replacement
Reference 650405

Filter replacement
Reference 650402

Handgards
Reference 650404

Microcab Plus (dim. 22x27xH20)
Reference 650600

10 crystal shield replacement
Reference 650605

Filter replacement
Reference 650602

Handgards
Reference 650607

Wall Mount 220volt
Reference 650606



Siljet Kit per intraoral restoration
Reference 650300

Dental Surface Silicating Powder for cementation and repair

Siljet is a bonding enhancement air abrasive powder. Siljet allows effective bonding and repair of ceramic, composite, zirconia and metal restorations. It is used in both chairside and intraorally. Powder is applied with a Microetcher, or similar device.

Kit includes 40 g of Siljet powder, 2 each syringes of composite opaquer, 10 ml perhydrolized saline, 10 ml of enamel bonding agent, needle tips, Microbrushes and a dispensing well.



Siljet powder refill 3x40g
Reference 650301

Siljet Kit per intraoral restoration

includes:

- 40 g Siljet powder
- 10 ml S-Bond
- 10 ml E-bond
- 40 Microbrushes
- 2 g each Accolade OP
- Mask Tooth and White shades
- twenty 25 gauge tips.

PORCELAIN REPAIR Procedure Guide



Place a generous bevel on the remaining porcelain.



SilJet the fractured porcelain, exposed metal and ceramic layers. 40-45 psi air pressure is optimal.



Entire surface to be repaired should exhibit a silica coating.



Generous air spray is applied to blow off alumina particles. Silica will remain attached to the surface.



S-Bond silane primer is applied in a thin layer to all SilJet treated surfaces.



After 30 seconds dwell time, dry the silanated surface with a water free air stream.



Accolade OP Mask can now be applied directly from the syringe via needle in a very thin layer to block any grey or yellow metal that may be exposed. Light cure at a minimum of 600 mwatt for 30 seconds.



E-Bond is applied liberally over the entire repair surface. E-Bond is air thinned to assure an even layer.



The E-Bond layer is cured with a 600 mwatt minimum curing light for 10 seconds.



A paste type composite may now be applied to match the existing fractured porcelain. Finally, finish the restoration by polishing.

Abrasive Powder and Pearl

The final performance and result is greatly influenced by the abrasive selected. Danville only sells the highest quality medical grade alpha alumina. Particles are precisely sized and desiccated for an even flow and efficient cut. Poorly graded abrasives can clog equipment, enter or cause intermittent flow, due to the presence of oils, contaminants and moisture content.

ABRASIVE	APPLICATION	FOR USE IN
Aluminium Oxide (white) - 27 µm	bonding and cavity preparation, General use, metal, porcelain, acrylic, composite and metal	Prepstart, Prepstart H2O
Aluminium Oxide (white) - 50 µm	bonding and cavity preparation, General use, metal, porcelain, acrylic, composite and metal	Microetcher Prepstart, Prepstart H2O
Aluminium Oxide (tan) - 90 µm	bonding and cavity preparation, General use, metal, porcelain, acrylic, composite and metal	Prepstart, Prepstart H2O
Glass Beads - 90 µm	Not for bonding preparation; creates satin luster on metal surfaces and removes plaque from dentures. Removes extra cement from instrument	Microetcher
Orthophrophy - 85 µm Soft Alumina	Resin removal. Remove orthodontic, pit and fissure resin, ceramic bracket cement, temporary cement without damage to enamel	Microetcher

Aluminium Oxide 27 µm (white)
Reference 650202

Aluminium Oxide 50 µm (white)
Reference 650200

Aluminium Oxide 90 µm (tan)
Reference 650203

Glass Beads 90 µm
Reference 650201

Orthophrophy 85 µm Soft Alumina
Reference 650204



Sand trap intraoral Dust Confinement

Soft plastic sphere slips onto high speed suction, and with the MicroEtcher tip inserted through the top opening, trap the abrasive.



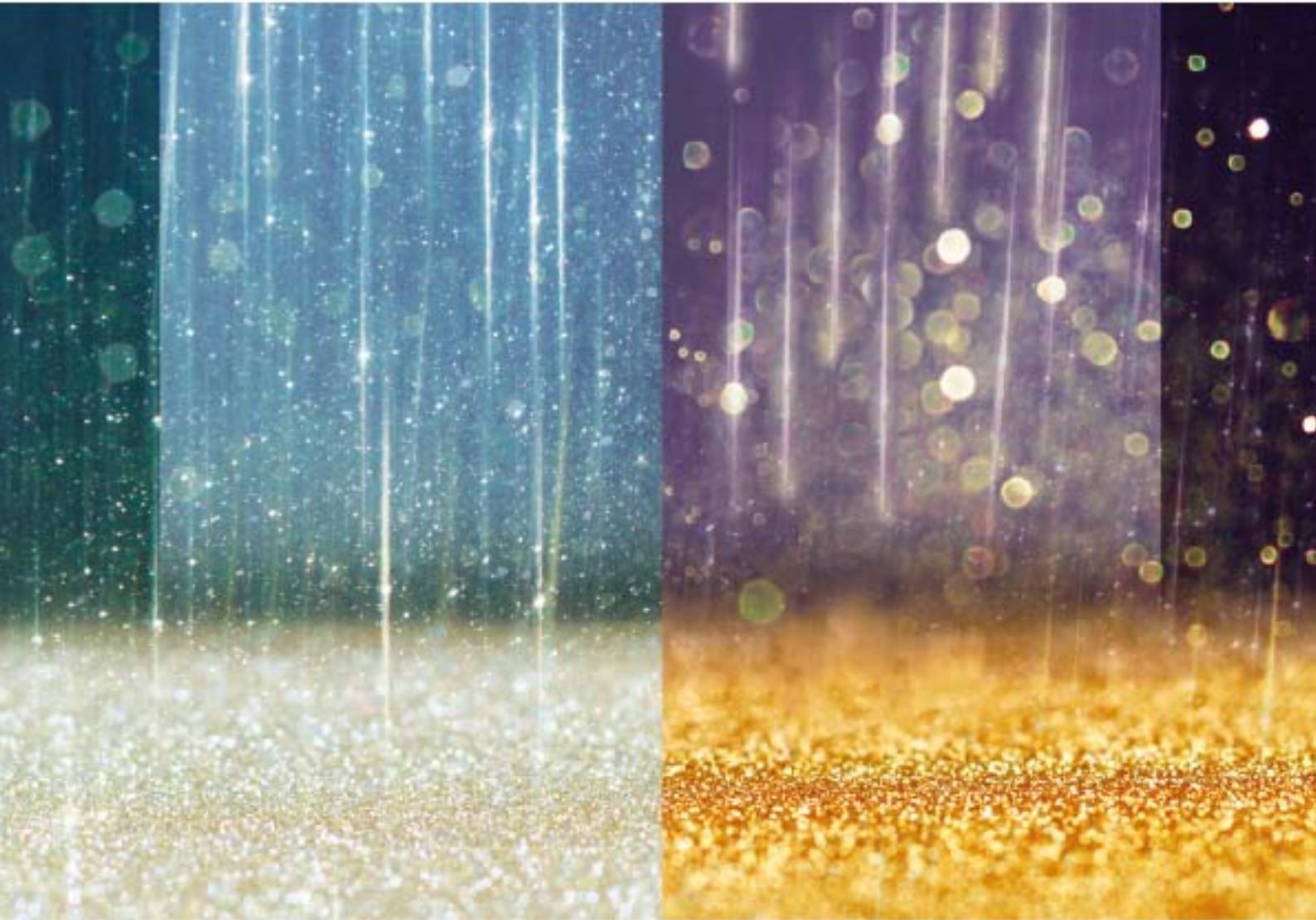
Sandtrap adaptor for saliva ejector
Reference 650103





ENGINEERING & MATERIALS

AIR ABRASION TECHNOLOGY



European Exclusive Distributor



INTERNATIONAL DENTAL SUPPLY

17100 Savona

Via Valletta San Cristoforo, 28/10

Tel. +39 019 862080 - Fax +39 019 2304865

email: info@idsdental.eu

www.idsdental.eu