The Aquacut fluid abrasion system from Velopex has been widely acclaimed by practitioners seeking more patient-friendly approaches to caries treatment and general dentistry. This versatile cutting and cleaning instrument offers important benefits to both dentist and patient. It can even be used for veterinary dentistry.

Less patient trauma
Unlike conventional rotary cutting instruments, the Aquacut is not in direct contact with the tooth structure. There is no vibration, heat generation, turbine noise or smell. Local anaesthesia is seldom needed, saving time and making the Aquacut ideal for treating young, nervous or needle-phobic patients.

Unique particle control technology
The Aquacut Quattro's patented handpiece delivers a high-speed fluid stream, fed from a self-contained reservoir, to create a liquid curtain around the abrasive medium. This provides comfortable and efficient cavity preparation.

Time-saving foot control
The triple action foot control enables cut, clean, wash and dry operations to be carried out through the same handpiece, allowing continuous operation without interruption.

Function changes at the twist of a switch
The twin powder chambers permit cutting and prophy or stain removal at the twist of a switch. For example, suspicions concerning an area of possible decay can be confirmed with the Aquacut Quattro in cleaning mode, and then treated by switching back to cutting mode.

The perfect tool for modern adhesive dentistry
The Aquacut Quattro is the right tool for today's adhesive dentistry. It enables the rapid repair of composites and leaves cavity surfaces rough and ready for receiving the bonding agent and the filling materials. It is excellent for the repair of composites and of existing fillings that have begun to fail.

Safe, conservative cutting
The Aquacut Quattro cuts quickly but very conservatively, minimising the removal of sound tooth material, with risk of chipping or stress fracturing is eliminated.

Effective stain removal
In cleaning mode, the Aquacut Quattro is a valuable tool for the hygienist. It is highly efficient at stain removal and cleaning. It also increases the effectiveness of tooth whitening procedures.

Versatile, easy-to-use handpiece
The autoclavable handpiece comes in colour-coded nozzle sizes. The long-life tungsten carbide nozzles are easily changed to suit the treatment.

Convenient powder cartridge system
Colour-coded, disposable powder cartridge system ensures quick, hygienic refills and powder grade changes.

Complete and ready-to-use
The Aquacut Quattro package includes the twin-chamber Aquacut unit plus handpiece and an introductory pack of powders and fluid. A suitable air compressor can be supplied at extra cost if required.

FREQUENTLY ASKED QUESTIONS

Clinical Applications
- Class I – Class VI cavity preparation, cleaning & decay removal
- Crown preparation before cementation
- Preventive Resin Restoration (PRR)
- Composite/porcelain repair and restoration
- Orthodontic bracket etching
- Cleaning & polishing, removing tea/tobacco staining
- Removing vegetal plugs or other matter prior to diagnosis of hidden caries

Aquacut Quattro without drill or anaesthetic
Removal of glass ionomer and composite restorations, conservative preparations, etching porcelain and cleaning and etching of tooth surfaces before fissure sealing can all be done without the drill; often without the use of anaesthetic.

How does Aquacut Quattro compare for speed?
Speed, powder and water volume can be varied within very wide limits, giving the Clinician complete control and high versatility of operation: mostly used without anaesthetic, in most cases there will be a saving of time with each patient.

How safe is Aluminium Oxide?
Aluminium Oxide is not toxic and will not cause respiratory problems. Aquacut works with 53 micron powder and 29 micron, and this places them well clear of the allowable (legal) safe level in the event of any accidental inhalation.

Is soft tissue affected?
Soft tissue is not likely to be damaged since the energy of the abrasion process is absorbed by any soft tissue coming into contact.

Sensitivity of teeth under treatment
Sensitivity in the dentine is usually swiftly controlled by a slight reduction in air pressure. Cutting with short abrasive bursts will help to avoid any patient reaction. Cutting near the pulp exposure this is especially important – with low air pressure the experienced Clinician can prepare cavities without patient sensitivity.

Controlling the depth when cutting
The tip should be in motion and with short bursts of the abrasive stream. If the tip is held stationary with active abrasion the depth of cut increases.

If soft decay is encountered
Soft decay is best removed with Sodium Bicarbonate or using your usual method. For some patients anaesthesia may be necessary, but most will tolerate the mild discomfort once the procedure has been explained to them.

Using Aquacut Quattro for diagnosis of caries
In “cleaning/polishing” mode using Sodium Bicarbonate, foreign matter e.g. a vegetal plug may be concealing a carious lesion within a fissure or pit. At the twist of a control the Clinician can change to the chosen cutting medium – WITHOUT REMOVING THE HANDPIECE FROM THE ORAL CAVITY – and proceed with treating the lesion. This diagnostic use of Aquacut Quattro has proved to be a great attribute for the dental practitioner, especially for its assistance in conservative dentistry.

Versatility of control
The Clinician has a wide range of settings in his control, with air pressure, powder and water volume variable to suit all his abrasion procedures. Conservative, time-saving, patient-friendly.
AQUACUT QUATTRO
Future treatment here today - ‘Drill without the Drill’

DIMENSIONS:
Width: 300mm/11.8”
Height: 240mm/9.4”
Depth: 240mm/9.4”

WEIGHT:
4.1Kg (9 lbs)

EXTERNAL AIR SUPPLY:
Clean, dry compressed air, 6 bar (90psi)
min, 7.5 bar (110psi) max; inlet air
supply 4mm push-in fitting

FOOT CONTROL:
Triple action foot control for cut, wash
and dry; 2m (6’) three-core pneumatic
supply tube

OUTPUT PRESSURE:
Infinitely variable cutting/ polishing
air pressure between 0-7 bar (100psi),
controllable via rotating knob and
pressure gauge

CUTTING MEDIA:
53 & 29 micron Aluminium Oxide;
powder rate infinitely variable between
0-6g/ min (0.2 oz) via rotating knob
and pressure gauge

POLISHING MEDIUM:
Sodium Bicarbonate

HANDPIECE:
Anodised aluminium with protective
plastic sleeve; quick release mechanism
for easy nozzle changes; stainless steel
nozzles with tungsten carbide tips.

ACCESSORIES:

HANDPIECE:
0.4mm, 0.6mm & 0.8mm colour coded
for easy tip size identification

COMPRESSOR:
See Zephyr Compressor