EtchMaster Product Review

Dr Paul Frank B.D.S.

The EtchMaster is miniature sandblasting or powder blasting unit for intra-oral procedures. It comprises the main 'handpiece' and disposable unidose prefilled tips or capsules which attach to the 'handpiece'.

The 'handpiece' or main body of the EtchMaster comes in two versions. One is an adaptor which screws directly to the standard chair-side handpiece connector – universal compatibility (3 – 6 hole). Control of the air-flow is via the standard chair-side foot pedal. The other version and the one that I use is a triple-tip-like unit with just one finger button to control the air-flow (Fig. 1). This version is very easy to install, requiring a t-piece connection into an airline and then attachment of the click on valve with integrated air pressure gauge. The unit should be operated between 35 to 45 psi.

The disposable unidose tips or capsules are all prefilled and come in two sizes and a variety of powder types. The small size capsule will cover up to 6 tooth surfaces and the large size capsule will cover up to 24 tooth surfaces. There are six powder types to choose from and the capsules are clearly coded with the appropriate coloured dot. Each powder type is designed for a particular task as set out in the table below:

Indications for Use		**Abrasive Powder**		**Tip Colour Code**
Bond Enhancement	Restorative, preventive sealants, orthodontic brackets, and cosmetic bonding	Hard	27 micron Aluminium Oxide	**RED**
			50 micron Aluminium Oxide	**BLACK**
	Porcelain Repair & Cosmetic bonding		Co-JET™ Siliconized Sand	**BROWN**
Surface Polisher	Preventive sealants & ingrained stain removal	Mild	Aluminium Oxide & Sodium Bi-Carbonate	**BLUE**
Prophy Brush	Light stain removal & cosmetic stain removal	Soft	Calcium Carbonate	**YELLOW**
	Superficial stain removal & pits & fissure brushing		Sodium Bi-Carbonate	**GREEN**

The capsules are easily fitted on the main EtchMaster unit with a simple push fit followed by a quick pull back to ensure a secure fit. The capsule is made up of two parts the plastic chamber prefilled with the powder and the metal delivery nozzle. Once the plastic chamber is securely fitted, the metal delivery nozzle is rotated slightly and pulled out to 'open' the powder chamber ready for use.

Then the nozzle is directed at the target surface holding it about 1-2mm away from that surface and the air-flow released by pressing on the finger button or your foot pedal depending on the type of EtchMaster unit you have.

The very best thing about the EtchMaster is that the powder flow is precise and discrete. It's not at all like other sandblasting units that I have used in the past which were all more like an intra-oral desert storm that you dreaded using because of the mess of powder all around the mouth which then needed to be washed away. The EtchMaster is very clean to use, only applying a controlled powder flow to the target surface with virtually no scatter. Much better for the patient and quicker to use for the dentist because washing away the minimal amount of powder used is easy. The big advantage for your assistant is no messy filling up of a powder bottle common to other sandblasting units. The capsules of the EtchMaster are all prefilled and sealed ready for use. Changing for a fresh capsule or to a different powder type on the same patient is also quick and clean to do.

Once rinsed the prepared surface is left clean and well etched ready for any bonding.

Once finished the unidose capsule is removed by pulling back the collar on the main unit, rotating the plastic capsule and pulling it out of the handpiece. At first this is the only fiddly bit but once done a few times it is easy. The application of a disposable plastic sleeve over the main handpiece part of the EtchMaster makes standard disinfection of the unit between patients easy after each use (Fig. 2).

In conclusion the EtchMaster is highly recommended because it is quick, clean, easy to use and does exactly what is should do. Its use is discrete and comfortable for the patient with excellent surface preparation results for the dentist to then apply any type of bonding required.

Fig. 1

Fig. 2