

Is Bigger Always Better?

For decades researchers, studying cutting properties of diamond burs, debated what is the optimum diamond particle size to deliver the best performance.

Researchers attempted to improve the cutting speed and efficiency of their coarse grit diamond burs by introducing larger diamond particles to their gross reduction burs. First manufacturers came with the "super coarse" diamond particles followed by the extra coarse diamonds with particle size even larger than the super coarse instruments.

Two reasons why larger particles do not necessarily create improved cutting ability in clinical circumstances are fewer particles and the higher bond level required for larger diamonds.

Larger diamonds create excessive vibration, generated by the large diamond crystals pounding and chipping away at the tooth structure.

Along with vibration problems, burs with excessively large diamonds can also exhibit performance problems resulting from the larger diamonds being dislodged and removed from the burs during use. The remaining few diamonds can become

significantly rounded while still being required to do the cutting. Poor cutting and surface burnishing can occur.

So, while the size of the diamond doesn't necessarily mean more aggressive cutting, what is apparent is that the exposure of correctly sized diamonds above a customised bonding mechanism, such as PBS bonding, is the key to more efficient cutting.

burs. The spiral action circulates water spray more efficiently to reduce heat energy and accelerate cutting.

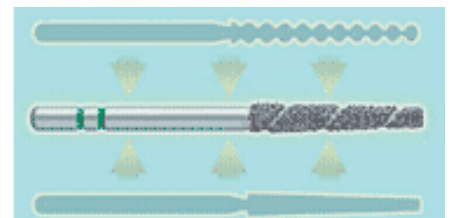
If you want to reduce chair time for yourself and your patients, save time and money, ask your local GUNZ sales representative to show you this innovative range of diamonds.



GUNZ Dental is proud to introduce Premier's TS2000, a new addition to their already widely established and successful Premier Two Striper brand.

TS2000 fast cutting diamond bur.

Premier's TS 2000 speed-cut diamond burs are truly two diamonds in one. They simultaneously perform rapid gross reduction and create a precise finished margin without the need to change a bur. On average TS 2000 is 50% faster than other spiral designs. The uniquely sized diamond particle is designed to cut cooler and faster than electroplated super coarse diamond



Light up your Low Speed Handpieces

NSK air motor reliability now has a bright future with the development of the Optic Air Motor - Ti 205L.

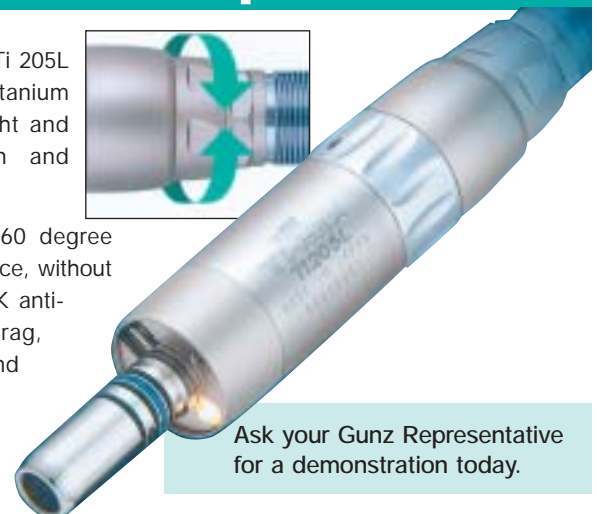
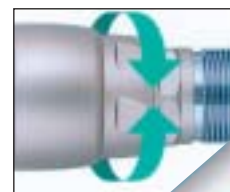
Tired of working in the dark and wishing for an air motor that can light up?

If the answer is yes then the new Optic air motor from NSK might be just what you are looking for.

The NSK Optic Ti205L air motor delivers powerful, smooth and quiet rotation, with loads of torque at all speeds. Speed can be varied to a maximum of 22,000 rpm

in the forward direction. As the Ti 205L body is constructed of solid Titanium the motor is also light in weight and highly resistant to corrosion and repeated autoclaving.

The Ti 205L allows full 360 degree swivel of the low speed handpiece, without the loss of illumination. The NSK anti-twist system prevents hose drag, minimises hand fatigue and connects directly to all brands of E-type optic and non-optic low speed handpieces.



Ask your Gunz Representative for a demonstration today.