

User Guide & Safety Instructions

- All of our Sintered Diamond burs and discs are intended for laboratory use by qualified technicians, and are **NOT** intended for intra-oral use.
- Always select the correct bur for the process carried out (according to the shape, size, grit type and the material being processed).
- Ensure that all turbines, handpieces and contra-angles are in perfect working condition.
- The instruments must be inserted as deeply as possible and adequately gripped by the handpiece.
- The instruments must be brought to their recommended RPM before grinding the object.
- Avoid using blunt, damaged, bent or non-concentric instruments. Using them may damage the handpiece/turbine and they may cause danger to the user.
- Cutting discs must be centered, after shaft assembly, in order to achieve free vibration work. Only top quality mandrels should be used.
- The recommended RPMs and the maximum allowed RPMs vary from product to product, always consult table below before use.
- Maintaining the speed range ensures the best working results.
- If the maximum allowed RPMs are exceeded, the instruments may cause vibration, the shaft may be bent and/or the instrument may be broken, i.e. it can lead to increased safety risk for the user.
- **The maximum allowed RPMs must not be exceeded at all times.**
- Excessive working pressure must be avoided at all times.
- Excessive working pressure may damage the instrument, it may cause greater wear and tear, it increases heat built up and in extreme case can even cause instrument breakage.
- Protective glasses must be worn at all times. Mandrels, shafts or the processed component can break in case of improper use or material defects and become dangerous flying objects.
- Always work in a well ventilated area.
- Dust extraction system must be used in order to avoid breathing in dust created in the working process. Respiratory protection is also recommended.

Instrument maintenance

- In order to keep our sintered diamond burs in perfect working condition it is recommended to clean them from time to time, using dressing/cleaning stone.
- Depending on the type of material being processed the instruments may get contaminated causing a decrease in efficiency.
- In this case the following process should be carried out:
 1. Soak the cleaning stone in water for 5 minutes. This will help to prevent heat build up and the expelling of dust, which may occur during the cleaning process.
 2. Bring the instrument to the recommended working speed and grind the cleaning stone, until a new diamond layer is exposed.
 3. The instrument is clean when it's running smoothly and the cleaning stone is grinded easily.

Diamond Grit Sizes		
Color	Grit	Processed material
Black	Super Coarse	Non precious and hard metals (such as Cr-Co, Ni-Cr, Titanium)
Red	Coarse	Non precious and hard metals
Green	Fine	Soft and hard metals (such as Cr-Co, Ni-Cr, Gold)
Blue	Medium	Ceramics, Porcelain
Yellow	Fine	Ceramics, Porcelain, Zirconia
Gold	Medium	Zirconia, Alumina

Recommended and Maximum working RPMs		
ISO Ø [1/10 mm]	Rec. RPM	Max. RPM
Up to 031	Up to 20,000	25,000
032- 050	Up to 15,000	20,000
090-100	Up to 10,000	11,000
105-120	Up to 10,000	11,000

Incorrect application leads to inferior results and may cause an increased safety risk for the user.