

Handpiece health or handpiece hell?

Are you getting the level of service that you would expect from your handpiece? If not, then Aidan Flynn BEng, MF Dental handpiece repair specialist, may be able to help by addressing some of your concerns in addition to offering you tips and advice for the care and maintenance of your handpieces

Over the lifetime of your handpiece, you may experience unexpected and repeated breakdowns.

As a result of these breakdowns, there is the cost of repair, along with the inconvenience of working with one less handpiece.

Depending on the number of handpieces a surgery may have, a breakdown can affect work efficiency in the surgery due to an increased number of sterilisation cycles.

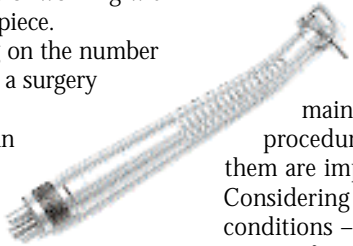
To combat this problem, it is always best practice to work towards 'preventative

maintenance behaviour' in contrast to a 'corrective maintenance process'.

Handpieces are engineered to very high specifications in order to fulfil their intended task with minimal failure.

However, this is only possible if the maintenance procedures designed for them are implemented.


Considering their operating conditions – speeds in excess of 300,000 rpm, air pressure in the region of 35 psi and sterilisation temperatures reaching 135°C/275°F, regular handpiece maintenance is



vital to ensure optimum performance.

Handpiece maintenance does work. You will find that throughout the lifetime of your handpiece, you will have saved both time and money. In short, just prescribe a daily dose of TLC – time, lubrication and cleaning!

The suggestions in this article are guidelines only and MF Dental recommends that you always refer to the handpiece manufacturer's maintenance procedures first.

Consult your handpiece manufacturer or local repair facility for further information. 

MF DENTAL®
Handpiece Repair Specialists

For further information on MF Dental's services, please contact the company; tel: 01 628 4833; fax: 01 628 4965; email: info@mf dental.ie

Maintenance tips

- **Equipment checks:** Regularly check your compressor air pressure, air/water filters and sterilisation temperature. High air pressure, debris from air/water lines and excessive sterilisation temperatures can all have an adverse affect on your handpiece performance.

- **Handpiece cleaning:** Cleaning the handpiece shell prior to sterilisation will prevent any build-up of residue material on the outer shell. The shell can be cleaned using soapy water however soap must always be rinsed off prior to sterilisation. Never submerge handpieces in solvents or cleaners, as this will cause degradation of bearings and handpiece components over a very short period of time.

- **Between patient flushing & lubrication:** Flushing the handpiece prior to sterilisation helps to remove debris from the handpiece head. Debris can bake onto the turbine components over time, resulting in premature part failure. Handpiece lubrication is also necessary to extend bearing lifetime and minimise o-ring/gasket degradation.

- **Cooldown process:** Rapid cool down of the handpiece (e.g. under cold water) may cause stress damage to the turbine. To avoid such circumstances, a gradual cool down process is advised. For example, leave handpieces to cool at room temperature or fan cool before use.

- **Chuck/spindle cleaning:** Weekly flushing is recommended to remove debris build up within the spindle. This is of particular importance for push button spindles, where debris can cause bur retention problems.

- **Staff training:** Ensure staff are fully trained on your documented office handpiece maintenance procedures.