

NEW PRODUCTS AND FOCUS ON IMAGING AND PERIODONTOLOGY

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TAKING HANDPIECES UP A GEAR

A dental practice is a haven of high-tech products which have developed over time. Whilst handpieces have developed considerably with electric motors being introduced in the 1960s, air motors in the 1970s, fibre optics in the 1980s, air abrasion in the 1990s and the regaining popularity of speed increasing options today, the handpiece in whatever shape or form remains central to the dental surgery.

There are many intricate mechanisms behind the technology and, when cared for correctly, these potentially delicate instruments can serve reliably for many years, delivering a substantial return on investment. With this in mind, dental hand-

pieces should be thoroughly researched before an investment is made, with the design, safety, reliability and productivity all taken into account.

New MASTERmatic handpieces from KaVo

KaVo Dental is delighted to announce the launch of its new range of MASTERmatic speed increasing handpieces, the M25L and M05L Mini.

As well as providing two different head sizes, 20.9 mm for the M25L (head height with bur, 19 mm length) and 18.9 mm for the M05L (head height with bur, 16 mm length) and 100° head angle/19° knee angle combination for better access and visibility, the handpieces also boast unique triple gear technology.

How does triple gear technology help?

Adding a third gear to the handpiece mechanism means that the handpiece can increase from its

starting speed to the highest speed more smoothly than is possible with one or two gears. Avoiding abrupt movements and significant resistance will prevent the bur from stalling and allow it to rotate concentrically as desired. A smoother transition between speeds also reduces the vibration omitted from the handpiece.

Exposure to hand-arm vibration can result in a condition known as hand-arm vibration syndrome (HAVS) and although the prevalence of such a disorder has been reported as relatively low among dentists,¹ a risk still exists due to the longevity with which dental tools are used over a working life. As part of the European Physical Agents (Vibration) Directive implemented in July 2005, exposure to vibration needs to be minimised amongst users and manufacturers have a responsibility to reduce risks as far as possible under the European Medical Devices Directive.

Benefits of reduced vibration

Minimised vibration is listed amongst the ideal qualities of dental handpieces² and offers a number of advantages:

- Reduced noise levels – enhances the comfort for the practitioner, dental team and patient. In particular, patients may feel a reduced sense of anxiety.
- Handpiece longevity –

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subjecting the bearings to less aggressive movements, helps to extend the working life of the handpiece.

- More control – smoother operation allows for more precision with treatment procedures coupled with reduced operator fatigue.

The MASTERmatic range also includes shanks: M07L, M20 L, M29L and straight handpiece M10L.

KaVo handpieces are available to trial and rent via the KaVo Handpiece+ Programme. Visit www.kavo.co.uk/handpieceplus for details.

1. Mansfield N. The European vibration directive – how will it affect the dental profession? *Br Dent J* 2005; **199**: 575–577.
2. Little D. Handpieces and burs: The cutting edge. PennWell Online Publishers, 2009.

