



Veni, vidi, vici! Better vision, better treatment!

There have been rapid improvements in the quality of dentistry over the past few years. The accuracy of the fit with regard to prosthetic restoration, the opportunities in aesthetic treatment, the sophistication of surgery, and last but not least the demands of the patients have risen dramatically. However, our eyesight has remained the same.

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It is no longer possible to imagine producing our individual materials and using our instruments without the use of optical magnification. The grinding instruments now used allow the teeth to be prepared with precision. With optimized cast materials, plasters, embedding compounds, and scanners, dental technicians can achieve margins of 10–20 µm.



For these results, we assume that a microscope with 20x magnification is used. However, when we view the preparation under the microscope or see photographs of our work on a 19-inch screen, the limits of our dentistry skill can become obvious. The prepared tooth which appeared clean and smooth when viewed macroscopically in the mouth now seems rough and uneven in the dental technician's model.

There are two options available to the dentist plagued with self-doubt in this dilemma:

Either continue working in the macroscopic environment and find technicians and patients who don't look too closely

at dental work or teeth; or decide to shed some light on the subject.

We started working with top-quality magnifying glasses in our practice about eight years ago. In the beginning with only used 4.3x magnification, no light source. These glasses resulted in an enormous increase in the quality of our work. But it wasn't until the addition of a halogen light source with fiber optic light guide whose beam projection ran parallel to our vision that our work seemed to reach perfection. However, the weight of the glasses and more importantly the fragility of the light guide were a great disadvantage of this system. Plus the light source was stationary. We therefore tried out LED systems which do not require a light guide and produce shadowless illumination precisely where you need it. These proved to be much better suited for practice due to their compactness. Unfortunately, the light housing had the tendency to become extremely hot near the light source on the glasses, so there was a high risk of burns when they were touched or worn around the neck. In addition, the battery's idle and charging times were a bother. So we continued the search. In the end we found the HEINE HRP binocular loupe with 3S LED head light. We didn't want to give it back after the



test. Because of the secure fit with the head band, it was possible to wear the instrument for longer periods without fatigue, and short-term unergonomic positions were not a problem.

The stylish mPack lithium battery pack, which is also suitable for partial charging and only needs 120 minutes to be fully recharged, permits more than four hours of complete mobility. The LED light has a noiseless mini-ventilator as well as plastic housing so that there is no risk of burns. The S-Guard protective glasses also offer optimum protection against infection.

Another major problem of all loupe systems is that although they provide an excellent view of the individual tooth, their field of vision is extremely limited. Heine's innovative system rises to the challenge with a swiveling loupe bracket (called



the i-View) that allows the optics to be easily swiveled up for non-magnified viewing, e.g. for treatment of front teeth or axis alignment for implantology, with the light remaining in the line of vision. The handles of the i-View can of course be sterilized.

With this, Heine offers a very well designed system that meets all the requirements of dental practitioners and truly sheds light in any angle, in any application.

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