

# Moverio BT-200 smart glasses help improve dental care



# Moverio BT-200 platform helps dentists create accurate dental prosthetics and enhance the level

German adults are keeping their teeth for longer and longer, thus enhancing their quality of life. Epson's Moverio BT-200 binocular smart glasses are a vital component in achieving this.

## Affecting the day-to-day dental duties

A trip to the dentist is an important part of maintaining oral health and key to avoiding major dental interventions, such as surgery.

However, sometimes these interventions are necessary and the technology and procedures used in them are evolving at a rapid pace. For example, casting is a process in which a negative of a tooth is cast and then used to create a positive of the original. Such moulds are then used to create prosthetics or tooth replacements like crowns. Modern digital CAD/CAM techniques bypass the physical casting of the tooth, instead employing camera-based optical capture and CAD systems. The virtual equivalent created in this way is then used in the treatment. Dentures are created with such models.

## Modern technology for better dental health

CEREC is a leading provider in the optical casting field. Thanks to a lightweight, compact HD camera, its system aids the dentist in making a precise image of the patient's teeth. This is then reproduced and displayed on an external monitor in real time. In addition, it shows surfaces in their natural colour, making it easier to distinguish between amalgam, gold or other composite materials. One disadvantage of the system is the external monitor, positioned to one side, forcing the dentist to turn around regularly during the treatment. This impedes hand-eye coordination and is inconvenient for the patient.

IDENT, a dental professional training and consultancy firm, has created a solution, eyeCAD-connect. This system eliminates head turning by using the Moverio BT-200 platform as the playback device. Thanks to this heads-up display, the dentist is always looking at the patient and sees the image from the camera as a layer over their view of the patient's teeth. This enables better hand-eye coordination and a more precise treatment time.

## Dentist's comfort means patient's well-being

"For the dentist, it is very important for the glasses to be comfortable to wear, in addition to providing a good graphical image," says Dr Sven Holtorf, Dentist and Trainer at IDENT. "What's especially important in this head-up display is the option of seeing stereoscopic images, as well as transparent lenses that overlay the projections on top of the actual view. This makes it easier to observe the situation inside the mouth and enables a more precise view."

The Moverio BT-200 offers qHD resolution and interchangeable lenses so it can be adapted to cater for vision defects.

Dr Holtorf adds: "The speed of the data transfer and the resolution is good. We distribute our solution in a number of European and non-European countries. What we want is for all patients to receive the best treatment possible in the dentist's chair."

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**Dr Sven Holtorf**

*Doctor and Trainer*



Dr Sven Holtorf and Dr Martin Becker (both from IDENT) are impressed by the Moverio glasses in use.

Further information:  
 About eyeCAD-connect:  
[www.eyecad-connect.com](http://www.eyecad-connect.com)

About Cerec:  
[www.cerec.com](http://www.cerec.com)



eyeCAD-connect with Moverio BT-200 augmented-reality glasses.



CEREC-Omnica with eyeCAD-connect solution. With the Moverio glasses, the dentist sees his or her normal field of vision, with the image taken by the camera (in the model) overlaid.

## Key Facts

Thanks to the Moverio BT-200's heads-up display, the dentist is always looking at the patient and sees the image from the camera as a layer over their view of the patient's teeth.

The good data transfer speed of images between the camera and the Moverio BT-200 smart glasses allows dentists to carry out their work without interruptions.



CEREC-Omnica™ with eyeCAD-connect with Moverio BT-200 augmented-reality glasses.