## Binocular loupes in hand surgery: 2.5 x magnification proves its worth

I generally use the HEINE HR Binocular Loupes in combination with the ML4 LED HeadLight in outpatient hand surgery and inpatient operating environments. The $2.5 \times$ magnification is primarily used here for osteosyntheses of the hand. This setup is also effective for standardised soft tissue procedures, such as tendon sutures and sutures of larger vessels.

One of the best things about the product is how comfortable the headband is to wear. Compared to the headbands from other manufacturers, it has a very good fit and is nicely cushioned. It is also adjustable and very lightweight, making it extremely convenient.

The HEINE headband doesn't press against the head, even during long operations. Models from other manufacturers have occasionally caused me pressure marks or headaches during surgery.

The $2.5 x$ magnification provides an extremely wide field of view and is very easy to adjust to suit the individual wearer's eye spacing and working distance. The combination of binocular loupes with LED headlight ML4 illuminates the whole operating area extremely effectively without any shadowing at the edges.


HEINE ML 4 LED HeadLight with HRP Binocular Loupes

The $3.5 \times$ magnification is similarly good in handling but offers a considerably narrower field of view, which causes sight "tunnel vision". This takes some getting used to, although the optical quality of the magnified picture is very good.

In combination with the ML4 LED HeadLight and the battery holder on the headband (mPack UNPLUGGED), the process of setting the light field and the field of view with the $2.5 x$ magnification was ideal for me.

User report: HEINE magnifying spectacles with 2.5x and 3.5x magnification and HEINE ML 4 LED HeadLight
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