

## Processes support advancement

As a qualified welding specialist, it is HA-BE's duty and a commitment to generate the highest degree of process reliability and quality. The continued development of our welding competence is at the heart of our efforts and actions; in the meantime, we have four robot-controlled laser welding units and a large number of manual welding work stations for MIG, MAG and WIG welding which help us fulfil this claim. Therefore, it is only logical to expand our quality management with a material-testing laboratory using state-of-the-art equipment for the most diverse types of both non-destructive as well as destructive testing procedures. Whether material analyses, polished samples or microscopic analyses, the HA-BE material-testing laboratory has the technology required for an extensive analysis.

### ProLine by Zwick and Roell

Using the material-testing machine, type testing in compression and tensile areas as well as shear forces up to 50 kn can be verified and by means of software, analysed and evaluated.



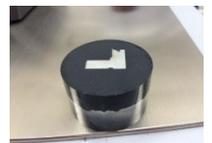
### Brillant 250 by ATM

With the Brillant 250, samples up to a maximum of  $\varnothing$  110 mm can be created through a powerful and versatile wet abrasive cut-off machine.



### Opal 460 by ATM

The Opal 460 is a fully hydraulic, water-cooled hot mounting press for mounting samples before polishing. The process sequence is carried out automatically. The fully automatic sliding closure allows quick and easy opening and closing of the mould assembly.



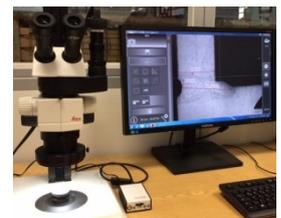
### Saphir 520 Rubin 500 by ATM

The Saphir 520 is a single-wheel grinder and polisher with mounted grinding and polishing head Rubin 500 for working wheels  $\varnothing$  200 - 250 mm.



### Stereomicroscope by Leica

Enables microscopy with 70-fold magnification including evaluation report of results.



Our application engineers as well as our quality specialists will be happy to answer your questions and provide you with further information.