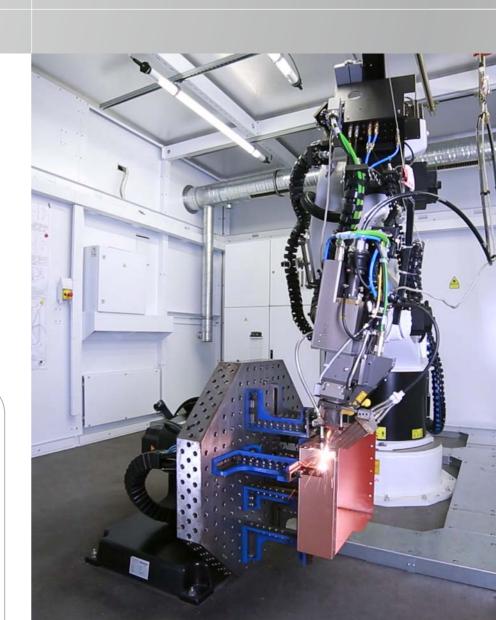


PERFECTION. PASSION. PROCESS.

Welding, which denotes "the permanent joining of components by applying heat or pressure", has long been part of HA-BE's spectrum of offers. Besides conventional fusion welding techniques, HA-BE has acquired a high level of expertise in the area of laser welding during the past few years. During laser welding, the laser generates the energy for the welding process. The laser beam reaches the joint of the work piece through fibre glass cables and the focusing device. When moving over the joint, the high energy density of the laser beam melts the material. A major advantage, because due to the small heat-affected zone, there is considerably less distortion compared with conventional welding methods.





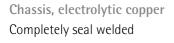
Laser welding offers major benefits. Laser-welded constructions are more attractive in price than conventional ones; the suitability for automation, short set-up times and reduced running-in periods have a positive impact on results. In addition to this, time-consuming and costly finishing processes are no longer necessary.

These cost effects are complemented by the technical advantages:

Deep penetration welding enables the fabrication of load-bearing joints, whereas heat conduction welding generates surfaces with especially smooth edges thanks to the sensor system referred to as "teach-line" technology which guides the laser beam along the joint with a camera and automatically determines the next weld seam. In this way, precision and efficiency linked with aesthetics and durability make a perfect combination.









Welded component, S355 MC
Designed for laser welding
With deep welded joints
Zinc-plated



