System for laser manufacturing of metallic bipolar plates



Generating and storing energy from hydrogen needs fuel cells and electrolyzers. We develop systems for the production of bipolar plates by laser joining and cutting.



Full expertise from prototype production to turnkey large-scale production systems for laser welding and cutting of metallic bipolar plates

Our patented welding module for the production of metallic bipolar plates achieves very high absolute welding speeds of 1 m/s with process reliability and a large available working area. This makes it possible to realize annual production volumes of several million units. The intelligent "butterfly weld" welding sequence enables optimum symmetrical heat input. The static structure between the optics and clamping technology guarantees maximum contour accuracy and reproducibility.

Based on the series modules, we also offer prototype production from contour cutting of individual plates using lasers, laser welding of the bipolar plates, leak testing via our technology partner ZELTWANGER, and the design and manufacture of the clamping device. This ensures guaranteed process reliability for you as a customer.

GERMAN FUEL CELL COOPERATION

Together with our partners VON ARDENNE and ZELTWANGER we offer an interface-coordinated production line in the GERMAN FUEL CELL COOPERATION where all relevant process steps - laser welding, leak testing and coating - are combined. This allows you to manufacture efficiently from metal strip to the fuel cell system.

Weil Technology

Weil Technology's core competencies are machines for sheet metal processing by laser welding and cutting. Here we can look back on over 35 years of experience. At the company headquarters in Müllheim, around 250 employees develop and manufacture our concepts and systems. We deliver solutions to realize changes in future-oriented applications as a machine supplier in the field of hydrogen and battery technology come into play.

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For more information, see: www.weil-technology.com/stories

