Rapid Vacuum Beam Processing

EVOBEAM specializes in designing and constructing rapid vacuum beam processing systems such as CNC-Electronbeam-, Laser in Vacuum- and EB-Diffusion welders using proven technologies to meet the most demanding customer specifications. Modular design and state of the art components result in high quality machines that quickly amortize investment costs. This concept results in vacuum beam processing systems that are highly productive as well as ergonomic to operate and maintain.

EVOBEAM systems are optimized for high throughput, precision, and energy efficiency. All modules are integrated in a single sea container compatible rigid base frame with minimized footprint. Plug and work with only electrical and pneumatical supply.

Six-Side Welding in one Clamping and one Evacuation

- Work Envelope: 400 mm x 400 mm x 400 mm
- Gun Travel: 400 mm
- Dry Vacuum System: 50.000 l/s
  \[ \leq 5 \times 10^{-4} \text{ mbar} \leq 100s \]
- Watch the Video under www.evobeam.com!

Modules

- High performance dry vacuum systems $\leq 200.000$ l/s
- Customized Stainless Steel Vacuum Chambers
- Siemens 840 D CNC controls $\leq 31$ axes
- Electron Optical Vision
- Electron Optical Seam Tracking
- Light Vision: HDR-CCD, Cross Hair, Motorized lens, Vapor Protection, Down Beam LED
- Parameter Recorder $\geq 3\mu$s
- Free Programmable High Speed Deflection
- Dynamic Lens
- Beam Diagnostics
- X-Y-table
- Six Side Rotary Tilt Positioner
- Gun Slide
- Chamber-Integrated Electro-Mechanic Press
- Tiltable Multi-Spindle Rotator incl. Tailstocks
- Cycle Type Indexing Table
- Head and Tail Stock
- Carriage Run Out Platform
- Wirefeed
- Remote Maintenance