LASERHEAD-W

HIGH-POWER LASER PROCESSING HEAD FOR WOBBLE WELDING

OUR **LASER PROCESSING HEADS** IDEALLY COMPLEMENT YOUR **ALPHA LASER SYSTEM** AS PART OF AN AUTOMATED SOLUTION.

The **LASERHEAD-W** is designed for demanding welding applications that require a **precise wobble strategy**. In wobble laser welding, the selected pattern plays a crucial role in determining weld quality. Depending on the process requirements, **a range of wobble patterns** is available and can be customized to suit specific applications.

Typical applications include:

- **bridging of gaps without filler material**
- **stabilizing the weld pool during deep welding**
- **and the controlled melting of thick filler wires**

Targeted wobble motion also effectively reduces the risk of cracking when working with critical materials even in aluminum.

ORDER INFORMATION

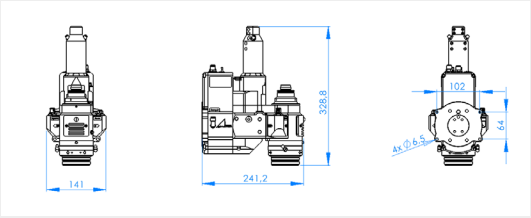
You can order the LASERHEAD-W for your AL-ROCK laser system or any other system with an integrator.

- **Item number 600-1244A (base unit)**

KEY FEATURES OF THE LASERHEAD-W

- **Coaxial Ethernet camera** for precise process monitoring and adjustments
- **Compact wobble optics** for flexible integration into complex applications
- **Integrated control functions** and **electronic components in the processing head** – no external control unit required
- **Reliable operation at peak performance**, even under the most demanding conditions
- Modular design with Crossjet and process gas nozzle for **expandable functionality and enhanced process safety**
- Water cooling **prevents overheating**, and sensors offer protection **against laser-induced damage**

DIMENSIONS



TECHNICAL DATA

Laser	max. 4000 W multi mode (CW or pulse) or 3000 W single mode (CW)
Laser type	Fiber laser (1070 nm)
Spot size	Ø 0.01–5 mm
Focusing lens	150 mm, 250 mm
Collimation	100 mm (motorized or manual)
Process monitoring	Ethernet camera
Cooling	Water
Process gas	Ar or N_2
Dimensions (W × D × H)	120 × 240 × 200 mm
Weight	approx. 6 kg
Mounting type	Machine connection via direct flange or Schunk quick clamping adapter

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