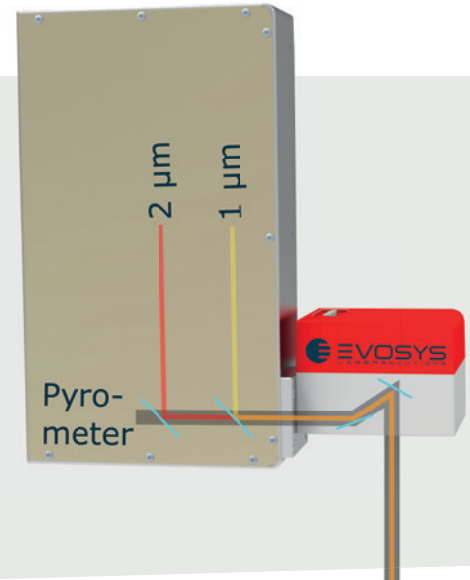


EVO 0750 AQW

Laser module advanced quasi-simultaneous welding

- ▶ Customized laser optics
- ▶ Software for laser plastic welding
- ▶ Two wavelengths in one laser module
- ▶ Process-reliable machining



The **EVO 0750 AQW** is a laser module with a customized optical configuration for coupling two lasers with different wavelengths in one processing head using the patented Advanced Quasi-Simultaneous Welding process (AQW process). The simultaneous or alternating irradiation with two lasers at a frequency matched to the material achieves an optimum welding result.

The direct heating of both joining partners favors a faster welding process and enables new material combinations as well as higher strengths.

Thanks to the use of the AQW optics module, both clear-clear and transparent-absorbing processes can be realized in one system, and the module can be expanded with different configurations. Integrated online process monitoring systems ensure the high quality of the welded joint.

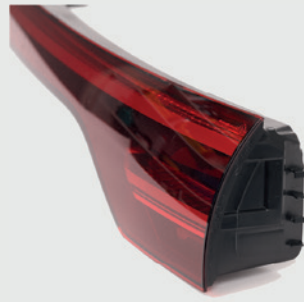
During assembly, each **EVO 0750 AQW** passes through Evosys Laser GmbH's unique CQC calibration concept, which ensures the comparability of the systems.

Technical data

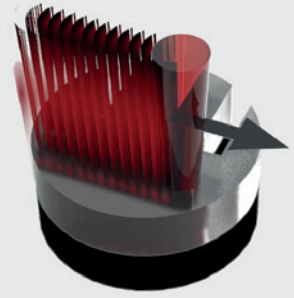
| | | | | | |
|--------------------------------|---|--------------|-------------------------------|------------------------|-------------------------------|
| Laser class | 4 | | | | |
| Laser wavelength | 1 μm, 2 μm | | | | |
| Laser power | up to 400 W at 1 μm, up to 200 W at 2 μm | | | | |
| Laser spot | 2.5 mm at 1 μm, 1 mm at 2 μm (others on request) | | | | |
| Integrated pilot laser | Yes | | | | |
| Operating distance | 400 mm (others on request) | | | | |
| Working field | 300 mm x 300 mm (others on request) | | | | |
| Power supply | 400 VAC / 50-60 Hz / 2 kW | | | | |
| Configuration | <ul style="list-style-type: none"> ✓ Fully integrable laser module ✓ Interfaces for communication and data exchange ✓ EVOSYS industrial control | | | | |
| On demand | <ul style="list-style-type: none"> ✓ Visualization on touch panel ✓ Pyrometer ✓ Adjustable beam diameter ✓ Remote maintenance module | | | | |
| Dimensions (WxHxD) and weights | <table border="0"> <tr> <td>Welding head</td> <td>420 x 400 x 135 mm / ca.13 kg</td> </tr> <tr> <td>Control/switch cabinet</td> <td>600 x 1.200 x 500 mm / 120 kg</td> </tr> </table> | Welding head | 420 x 400 x 135 mm / ca.13 kg | Control/switch cabinet | 600 x 1.200 x 500 mm / 120 kg |
| Welding head | 420 x 400 x 135 mm / ca.13 kg | | | | |
| Control/switch cabinet | 600 x 1.200 x 500 mm / 120 kg | | | | |



CONSUMER



AUTOMOTIVE



LASER WELDING

Layout description

The **EVO 0750 AQW** is a flexible, integrable laser module. Thanks to its space-saving design, it fits into almost any production environment. It combines two laser wavelengths in one laser module in the smallest space. All components such as laser, control and power supply unit are integrated in the control cabinet or the plug-in module. The robust welding head is optimized for integration into an automation environment. Control options via common fieldbus systems enable efficient project planning and flexible use in production.



Evosys Process Cockpit:
All important process data at a glance.
Simple operation of the Evosys HMI.



Integration example:
Laser module EVO 0750 AQW
integrated in Evosys turnkey machine.

EVOSYS is the ideal partner for laser welding of plastics. Whether a simple off the shelf machine or complex customized systems, we will convert your challenges into solutions.

CONTACT

Evosys Laser GmbH
www.evosys-group.com

*Technical data are
subject to change.*

Version: 09/15/25

We are the specialists when it comes to bringing the latest optical technology into your production!

