

# HighLight Weld





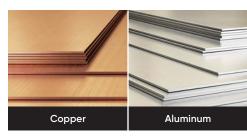
# HighLight Weld

Coherent HighLight Weld products offer the easiest and most direct path to implementing high power fiber laser welding in a wide range of applications. They save time and cut development costs, and also deliver superior results and outstanding reliability in operation. This increases production throughput and yields, reduces rework, and minimizes downtime.

The process starts by having Coherent applications engineers—who have years of experience in demanding welding applications, and hundreds of customer trials and installations—identify the optimum configuration for your application. Then, they design an integrated solution, including a HighLight FL or ARM laser, beam delivery components including process fiber and optics, a scanner and control system, machine vision, and all the associated control electronics and software. You get the complete solution quickly, without having to become a laser welding expert yourself.



# **Materials**







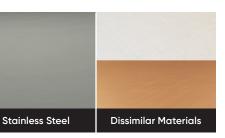
#### **Features**

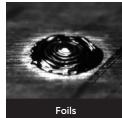
- Available with HighLight FL and ARM lasers and various delivery fiber diameters
- Up to 8 kW output for scanner solutions and 10 kW with fixed process optics
- Wide range of process fibers
- Wide selection of scanner platforms, focusing optics, and working magnifications to support different welding applications
- · Optional vision system, seam tracking, process monitoring, and chiller

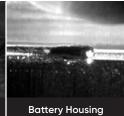
#### **Benefits**

- Single point of contact for installation, service and application support
- Reduce time to market by relying on Coherent laser, process, software, and safety expertise
- Streamlined solution package with top-edge technical components

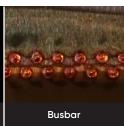
# **Applications**











#### **Process Head Options**





## 2DWeld

2D scanning system based on intelliSCAN30 III scanner and ALI-macro controls. Vision system as an option.

- Power level up to 5 kW CW
- Cost competitive solution
- Several magnifications and working areas



#### HIGHmotion 2D™

2D scanner system with optional vision system HIGHvision™. Comprehensive software solution completely integrated.

- Power level up to 8 kW CW
- Magnification options of 2.25, 3, or 4
- Large 2D working area of up to 200 x 300 mm<sup>2</sup>
- Compatible with robot and gantry systems



#### **RLSK**

3D scanner system with optional vision system HIGHvision™, seam tracking, and OCT feature. Comprehensive software solution completely integrated.

- Power level up to 8 kW CW
- · Magnification of 3
- Large 3D working space 200 x 300 x 200 mm³
- Compatible with robot and gantry systems





#### PH50 FL

Modular fixed optic for welding applications up to 10 kW, compact and light weight, prepared for TTL process monitoring.

- Power level up to 10 kW CW
- Several magnifications
- Excellent vision quality
- Minimum power loss and focal shift

# HighLight Weld

# **Laser Options**



## **HighLight FL-ARM Series**

High-Power Adjustable Ring Mode (ARM) Fiber Lasers

HighLight FL-ARM Series are ARM fiber lasers that utilize a unique center/ring beam for effectively welding delicate or heat-sensitive materials.

- High Brightness Single mode center beam option
- High Power Up to 10 kW
- Detachable Fiber QBH or QD connector



## **HighLight FL Series**

High-Power Fiber Laser

HighLight FL Series are cost-effective, industrial, multi-kW fiber lasers for welding tasks that maximize operational flexibility with detachable process fibers.

- High Power Up to 10 kW
- Mode Options Single and multi-mode
- Field Serviceable Field replaceable process fibers



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