NEW Adjustable Ring Mode Fiber Laser – Higher Power with Double Brightness

The new Highlight FL-ARM laser combines higher power levels (up to 10 kW) into even smaller ARM™ fiber. Customer can benefit from the dynamic adjustable beam profile with doubled brightness enabling them to use it in even more demanding cutting and welding applications.

ARM with Double Brightness

Cleaning or preheating metal surface can add significantly to the efficiency and productivity of sheet metal cutting. ARM technology allows reliable and efficient one step cutting process without special equipment or accessories for thicknesses up to 30 mm. Laser allows to cut thin and thick materials with same optics, maintaining excellent quality and speed.

With ARM laser the power intensity and temperature gradient of welding process can be controlled very precisely.

ARM technology offers intelligent solution for the most challenging welding applications: precise beam profile control (Center/Ring ratio) combined with stable back reflection resistance system enables stable penetration and minimum spatter even in coated metals overlap welding.

FEATURES

• Dynamic adjustable beam profile which can be adjusted on-the-fly
• High output power, as standard up to 10 kW
• Superior back reflection resistance
• Coating material removal
• Excellent stability over the whole power range (1-100%)
• Closed loop power control for center and ring beams
• Easy integration to automation

BENEFITS

• Reduced spatter
• Faster processes, steady quality
• Smaller fiber diameter
• Aluminium welding
• High brightness

APPLICATIONS

• Welding
• Cutting
• Drilling
• Cladding
• Annealing
• Heat Treatment
• Laser Additive Manufacturing
**ARM TECHNOLOGY**

Coherent ARM technology creates a dynamic ringmode which can be adjusted on-the-fly as the application requires.

**ARM CUTTING CONCEPT**
- **THICK METAL**
  - Ring laser beam
  - Center laser beam
  - Molten material
  - Cutting with center laser beam
  - Preheating and removal of impurities by ring laser beam

**ARM WELDING CONCEPT**
- **ZINC COATED STEEL**
  - Ring laser beam
  - Center laser beam
  - Zinc coating removal and melting with ARM ring beam from the top plate
  - ARM center beam vents zinc coating fume from plates interface

---

Coherent, Inc.,
5100 Patrick Henry Drive Santa Clara, CA 95054
p. (800) 527-3786    |   (408) 764-4983
f.  (408) 764-4646
tech.sales@coherent.com   www.coherent.com