

ARM

FIBER LASER





ARM™ FIBER LASER

Multiple ways of processing with one laser!

ARM™ is a special fiber laser that enables new era for fiber laser materials processing. ARM™ creates dynamic adjustable beam profile to the output of the laser that enables revolutionary benefits for materials processing.

ARM™ technology is all-fiber design without moving parts.

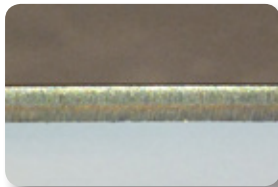
KEY APPLICATION BENEFITS

CUTTING

- any thickness up to 30 mm
- any metal
- variable thickness cutting
- high cutting quality
- piercing power

WELDING

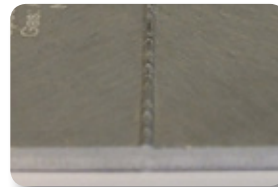
- reduced hardening effect
- relaxed butt welding mechanical tolerances
- melting of filler wire with ring, key hole welding with center



STAINLESS STEEL CUTTING



ALUMINIUM CUTTING



ALUMINIUM WELDING



COPPER WELDING

FIBER EXCELLENCE

ARM™ is built upon Corelase's unique expertise and innovations in the field of fiber laser technology. This stand-alone fiber laser series offers new exciting solutions for high value-added processing of metal cutting, welding and drilling.

SUPERIOR BACK REFLECTION RESISTANCE

ARM™ is equipped with five-step back reflection resistance system. It enables processing of sensitive and tough materials with outstanding protection against back reflection caused by processing highly reflective materials such as copper, aluminium and brass.

EASE OF SYSTEM INTEGRATION

Clear customer interfaces with compact design and small footprint makes ARM™ ideal to be integrated into a broad variety of new or existing high quality cutting and welding machines.

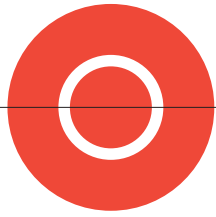


ARM™ FIBER LASER

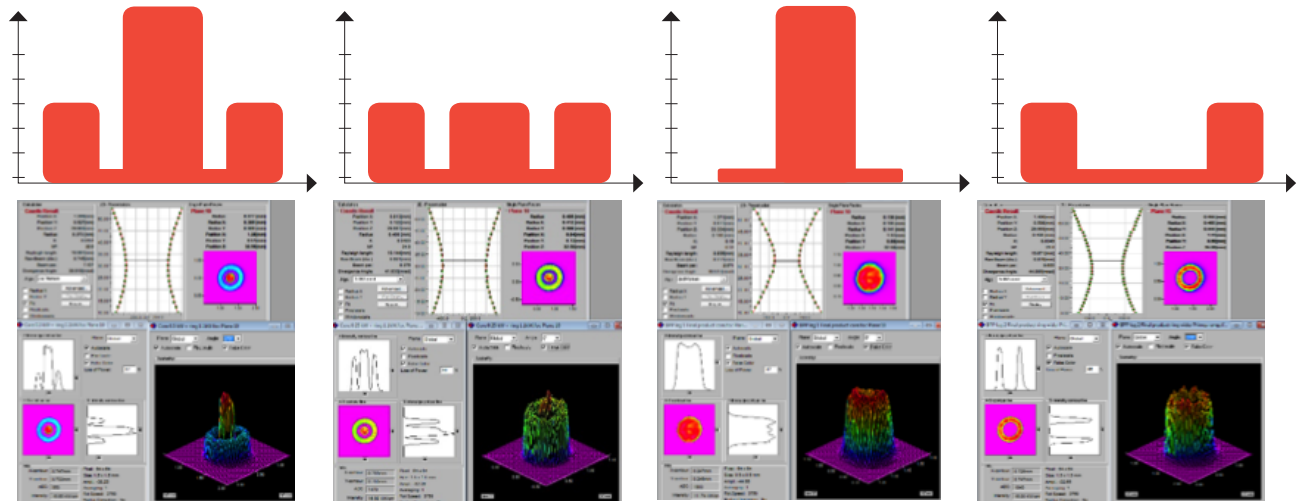
Universal tool!

ARM™ TECHNOLOGY

ARM™ is a patented technology that creates dynamic ringmode which can be adjusted on-the-fly as the application requires.



FREE POWER CONTROL SEPARATELY IN RING AND CENTER



SPECIFICATIONS

POWER RATING

Power at the outer ring [kW]	Power at the inner spot [kW]			
	2	4	6	
2	Standard	Standard	Standard	
4	Standard	Standard	Contact Corelase	
6	Standard	Contact Corelase	Contact Corelase	
8	Contact Corelase	Contact Corelase	Contact Corelase	

OUTPUT FIBER

Fiber optic cable	QBH/QD
Fiber Length	20m

INTERFACES

Digital I/O, Analog control, Ethernet

COOLING

Flow (liter/minute)	75–130
Cooling water temperature	+25 ± 1 °C

DIMENSIONS

H x W x D [mm]	830 x 800 x 903 or 1328 x 800 x 903
----------------	-------------------------------------

OPTIONS

Optics	External optics (Optoskand)
	Cabinet air conditioner



ARM™ FIBER LASER

Universal tool!

ARM™ FIBER LASER

APPLICATIONS

- Welding
- Cutting
- Drilling
- Cladding
- Annealing
- Heat treatment
- Laser additive manufacturing

BENEFITS

- Dynamically adjusted beam profile to fit variety of demands of material processing
- Designed for highly reflective material processing
- Easy integration for existing systems

FEATURES

- Dynamic adjustable beam profile which can be adjusted on-the-fly
- High output power, as standard up to 8kW
- Superior back reflection resistance system



Corelase Oy
Kauhakorvenkatu 52
P.O. Box 73
FI-33721 Tampere, Finland
phone: +358 (0)3 447 6400
fax: +358 (0)3 447 6401
email: info@corelase.fi or sales@corelase.fi
www.corelase.fi or www.corelase.com

We reserve the right to introduce improvements to the product without prior notice.