

Introducing MetaQuip's FC3015 Fiber Laser Cutting Machine—the ultimate industrial solution. Effortlessly slicing through carbon steel, stainless steel, and brass plate, this advanced machine delivers precise cuts with super tight edges, eliminating in most cases the need for post processing. With a generous 300 x 150 cm working surface and laser powers up to 10k Watt, the FC3015 handles large-scale

working surface and laser powers up to 10k Watt, the FC3015 handles large-scale projects efficiently. Need more space? Opt for the MQ FC4020 model with a spacious 400 x 200 cm workbed or customize your size. Experience the power, precision, and reliability of MetaQuip and revolutionize your metal cutting processes.

LASER CUTTING Carbon steel, stainless steel, titanium, galvanized steel, brass

plate, etc.

**SOFTWARE** Integrated computer with Hypcut, Cypcut

**WORK AREA** 3000 x 1500 mm, 4000 x 2000mm or custom size

POWER 500W, 1000W, 2000W, 3kW, 4kW, 6kW, 8kW, 10kW

SAFETY Laser class 3R - safe in all situations without extra protection

**CERTIFICATION** CE certified - meets all machine directives





## Effortless laser cutting of metals!

Experience the unparalleled power and precision of the MQ-FC3015/FC4020, the ultimate industrial cutting machine. With its high-speed capabilities and exceptional precision, it effortlessly slices through a wide range of metals, thanks to its rigid and stable frame. Equipped with a direct fiber source, this machine guarantees optimal reliability and minimal maintenance. Ensure efficient and powerful cutting performance, enhancing productivity and revolutionizing metal cutting processes

### CONTENT

- Metal fiber cutter with remote control and integrated laser software (Hypcut or Cypcut)
- Industrial water cooler
- Product & software manual (NL, EN, DE)

### **CUTTING GASSES**

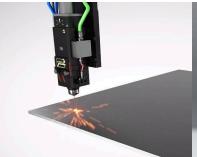
MetaQuip does not supply auxiliary gases, but can advise you.

### AIR EXHAUST & FILTERING

Protect your health and ensure a safe working environment with the FC3015. This cutting-edge machine features an intelligent extraction system that efficiently removes harmful metal vapors and dust during laser cutting.

### **TECHNICAL SPECIFICATIONS**

- Laser type: IPG, Photonics or Raycus laserbror
- Laser wavelength: 1060 nm
- Laser power: 1kW-10kW
- Work surface (cm): 300x150, 400x200 or custom
- Cutting speed: 0-30m/min (dep. on material 8 thickness)
- Z axis height: 240mm
- XYZ orientation precision: < +/- 0.03 mm/m</li>
- XYZ repeat precision: < +/- 0.02 mm/m</li>
- X/Y axis max. positioning speed: 100m/min
- Z axis max positioning speed: 30m/mir
- Machine weight: 8 ton (FC3015)
- Max. weight workpiece: 0.8 ton (FC3015)
- Dimensions [L x W x H]: 850 x 288cm x 212cm
- Cooling: watercooling
- Work temperature: 0-35 °C
- Power: 16kW, 380VAC 3 fases, 50Hz
- Autofocus: follows uneven material
- Camera system: follow progress in the machine
- Red dot laser pointer: location indication
- Optional: exchange table to save loading time









### WHY CHOOSE METAQUIP?

With honest advice and technical knowledge, we are happy to help you choose the right machine. We test if requested your materials or application.

#### THE USE

We will of course explain how to use the machine, but we also give special training. Ask about the possibilities and delivery times. .

### LASER SAFETY

Your safety is important. The FC3015 fiberlaser is a laser class 3R machine. No additional laser safety measures are required when working with this laser machine. This fiber laser is safe under all circumstances.

### **SUPPORT**

Of course you can always contact us with questions about your machine. We will always help you get back on track quickly. As a customer, you can access manuals, laser software and videos at www.metaquip.nl You can also exchange experiences with other users.

### OTHER THINGS?

The people at MetaQuip have extensive technical knowledge. They can also advise or support you in finding new applications, specific solutions or production automation.

### **WARRANTY & CERTIFICATION**

2 year warranty on the machine, 50,000 hours on the laser source (expected lifetime 50,000 to 100,000 hours, depending on the conditions under which the machine is used). CE certified complies with the machine directives, laser safety class 3R.





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### Main machine features

### **EXTREMELY RIGID MACHINE FRAME**

Extremely rigid frame, allowing the laser machine to achieve high accuracy and precision.

### HIGHEST CUTTING SPEEDS IN THE MARKET

High-intensity chains that are stable and reliable at the high speeds of the machine. Spindles and control optimized for smoothness, speed and sound. Highest cutting speeds in the market.

#### INTELLIGENT AIR EXTRACTION SYSTEM

Local cell-based extraction to prevent smoke from developing and to immediately remove hazardous metal particles that are released during cutting.

### SMART LASERHEAD

Lightweight and minimalist design suitable for high gears and speeds. Fully dust-free optical pad for long life.

### **EASY TO USE LASER SOFTWARE**

Uses high-quality Cypcut or Hypcut laser software that is easy to use and has all the features you need.

### **FAST DELIVERY OF KEY COMPONENTS**

All key components are from recognized European players that have short leadtimes and these will in most cases also be available as spare parts over longer periods.







### PALLET EXCHANGE TABLE (OPTIONAL)

Save loading time

### **OPEN MODELS**

Open structure makes loading and unloading easier and faster. Required to take extra laser safety measures before use.







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# Settings materials - thickness - laserpower

Material	Thickness (mm)	Cutting speed for reference (m/min)													
		700/750W 1000W			1500W		2000W		3000W		4000W		6000W		
Stainless Steel Nitrogen (N <sub>2</sub> )	1	14.0-18.0	12.0-28.0		16.0-22.0		20.0-28.0		30.0-42.0		35.0-50.0		50.0-60.0		
	2	3.0-3.8	4.8-5.6		5.2-7.6		10.0-15.0		18.0-23.0		18.0-27.0		30.0-40.0		
	3	1.2-1.8	1.8-2.5		3.0-4.2		5.0-7.0		7.0-10.0		10.0-15.0		17.0-22.0		
	4	0.4-0.6	0.6-1.0		1.5-2.5		3.5-4.5		4.0-6.0		5.0-7.5		9.50-14.0		
	5				0.6-0.8		1.8-2.8		2.5-4.0		4.0-5.0		7.80-12.0		
	6						0.7-0.8		2.0-3.2		3.0-4.0		5.8-8.0		
	8						0.5-0.6		1.2-1.8		1.5-2.6		4.0-5.0		
	10		·						0.7-0.9		0.7-1.3		1.8-2.5		
	12										0.4-0.6		1.2-1.8		
	16												0.6-0.8		
	20												0.3-0.4		
Aluminum Nitrogen	1	3.0-5.0	5.0-7.5		7.0-10.0		10.0-15.0		13.0-16.0		15.0-20.0		20.0-25.0		
	2		2.5-4.5		4.0-5.5		5.0-6.7		7.0-10.0		8.0-12.0		15.0-18.0		
	3		1.0-1.5		2.0-3.5		3.5-5.0		4.0-5.5		5.5-7.0		7.0-10.0		
	4				1.0-2.0*		2.0-3.5		3.0-5.0		3.5-5.0		5.0-5.5		
	6						0.8-1.5*		1.8-3.0		2.5-3.5		3.5-5.0		
$(N_2)$	8								0.8-1.4		1.20-2.0		2.2-3.5		
	10								0.4-0.7*		0.7-1.1		1.0-2.0		
	12										0.4-0.6		0.8-1.2		
	16												0.5	j-0.7	
Brass Nitrogen (N <sub>2</sub> )	1	1.5-2.0	2.5-4.0		4.0-6.0		5.0-7.0		8.0-12.0		10.0-15.0		15.0-18.0		
	2		1.5-2.0		2.5-4.0		3.5-5.0		4.5-6.0		5.5-7.0		6.0-10.0		
	3		0.8-1.5*		1.5-2.0		2.0-4.0		3.5-5.0		4.0-5.5		5.0-7.0		
	4				0.8-1.2*		1.5-1.8		2.5-4.0		3.0-4.5		4.5-6.0		
	5						0.8-1.2*		1.5-2.0		2.0-3.0		2.5-4.0		
	6								1.0-1.6		1.4-2.0		2.0-3.5		
	8								0.5-0.6*		0.7-0.8		1.0-1.5		
	10												0.6-0.9		
O z ulz z uz			O2	AIR/N2	O2	AIR/N2	O2	AIR/N2	O2	AIR/N2	O2	AIR/N2	O2	AIR/N2	
Carbon Steel Oxygen (O <sub>2</sub> )	1	12.0-18.0	9.0-12.0	15.0-18.0	9.0-13.0	16.0-21.0								50.0-60.0	
	2	4.6-6.0	5.3-6.8		6.2-8.5		5.0-6.5	8.0-12.0	6.0-7.5	14.0-18.0	7.5-12	16.0-20.0		30.0-40.0	
	3	2.0-3.0	2.4-3.2		2.6-4.3		3.0-4.6		3.5-5.0	6.0-9.0	3.8-4.5	10.0-14.0		17.0-22.0	
Use air or	4	1.8-2.2	2.0-2.6		2.5-3.6		2.8-4.0		3.0-4.5	4.0-5.5	3.5-4.8	4.5-6.5	3.9-5.2	5.5-8.5	
Nitrogen	6	1.2-1.5	1.4-1.8		1.8-2.8		2.2-3.2		2.4-3.6		2.6-3.8		2.8-4.2		
can speed up for	8	0.6-1.0	0.8-1.2		1.4-2.0		1.8-2.5		2.0-2.8		2.2-3.0		2.4-3.5		
cutting	10	0.5-0.6*	0.6-0.8		1.0-1.4		1.2-1.8		1.4-2.0		1.8-2.4		2.2-2.8		
Carbon Steel	12		0.5-0.6*		0.8-1.0		1.0-1.4		1.1-1.4		1.2-1.5		1.6-1.9		
thickness	16						0.8-1.0		0.9-1.2		1.0-1.5		1.2-1.8		
within 2mm	20						0.5-0.6*		0.6-0.8		0.7-1.0		0.8-1.4		
411111	22										0.5-0.6		0.55-0.65		
	25											1	0.4-0.6		

