

# OmniMat Fiber

Minimum Maintenance  
Maximum Cut Performance



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The compact Messer Fiber Laser ...  
High efficiency, highest reliability, low maintenance cost

## Cutting Capacity

Power	Material	Min (in mm)	Max (in mm)
1.0 KW	MS	0.5	12
1.0 KW	SS	0.5	6
2.0 KW	MS	0.5	16
2.0 KW	SS	0.5	10

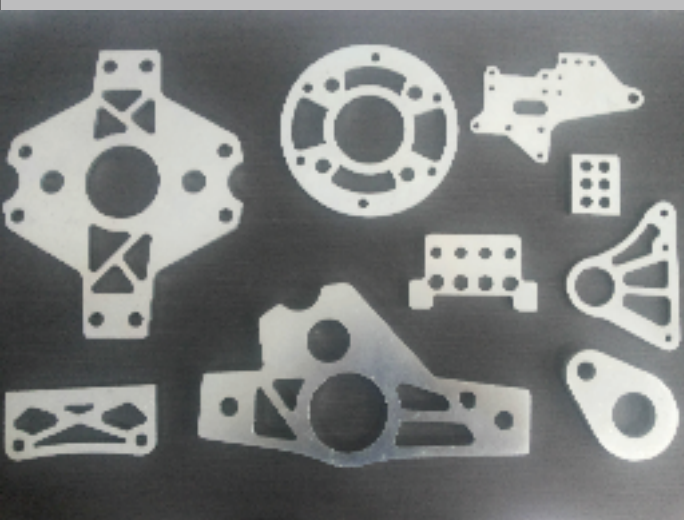
## Advantage

- Higher total efficiency of the fiber laser of approx. 30% (Co<sub>2</sub> Laser : approx. 10%)
- Positive bilateral longitudinal drives for good acceleration
- Reliable automatic height sensing
- 35m/min drive speed save time between cuts
- No moving parts in the laser resonator
- The emitter diodes have long working lives (over 50,000 hours)

Machine with laser  
cutting head and  
smart lifter

## OmniMat Fiber





## The Concept

- The laser beam is guided through a optical fiber from resonator to the cutting head
- No need for laser gas
- No mirror
- Simple beam guidance

## Cutting Power - Comparison

Fiber Laser	Co <sub>2</sub> Laser
1.0 KW	~ 2 KW
2.0 KW	~ 4 KW

## Smart lifter

- Patented stand-off control SensoMat<sup>®</sup> ensures the exact distance from torch to material for better quality
- integrated Z axis for fast, accurate positioning
- Faster stroke with spindle drive ensures lower non-productive times and optimum cut quality
- Completely maintenance free

## Laser Head

### Adaptive Auto focus unit

- Auto Focusing for different thickness
- Controlled & Precise focusing

### Auto Piercing Sensor

- Reduce Piercing time

### Laser Power Monitor

- Analyzes the process light and controls each Laser Pulses for Swift & Smooth Cut

### Auto Height Setting

- Saves time for cut height setting
- Accurate Scaling

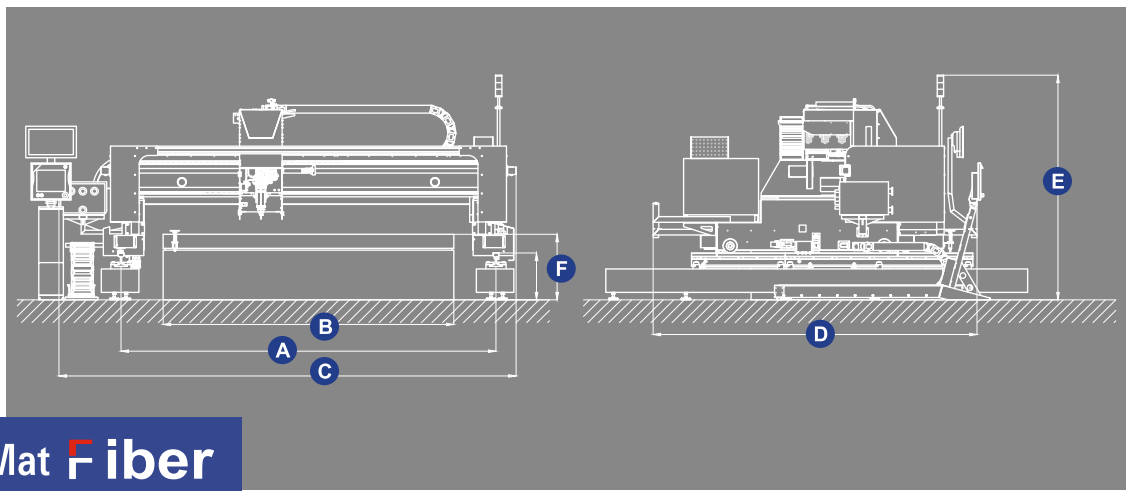
## The Controller

- Equipped with Messer Global Controller
- One of the most modern control concepts in the cutting machine world

## Economic Advantages

- Low investment cost
- Low running costs
- Economical entry into the world of laser cutting

# Technical Data



## OmniMat Fiber

### OmniMat Fiber

A	Track gauge	4000
B	Working width*	3000 ***
C	Overall width**	5070
D	Length	1940
E	Height**	2100
F	Track height**	500

\* Working width applies for machines equipped with vertical torch units and with one tool per plate. When equipped with multiple tools, the working width is reduce accordingly.

\*\* The total overall dimensions depend upon equipment fitted and may vary from the above figures.

\*\*\* Working with larger than 3000 mm is available on request.

All dimensions in mm



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