Fiber laser cutting machine

# **PUMA**

TOTAL LASER CUTTING SOLUTION



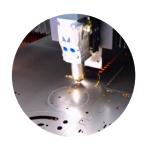


# **PUMA**

# TOTAL LASER CUTTING SOLUTION

The Puma fiber laser combines cost efficiency, dynamic laser cutting, advanced automation solutions and LVD's intuitive Touch-L control.

This all-round system offers fast processing of a wide variety of material types and thicknesses.



## **OPTIMAL CUT QUALITY**

Puma expertly cuts steels and non-ferrous materials such as copper and brass in a range of thicknesses, maintaining high quality.



#### RIGID FRAME DESIGN

The welded steel frame construction minimises deformation caused by high acceleration, ensuring overall machine accuracy.

# Why Puma?

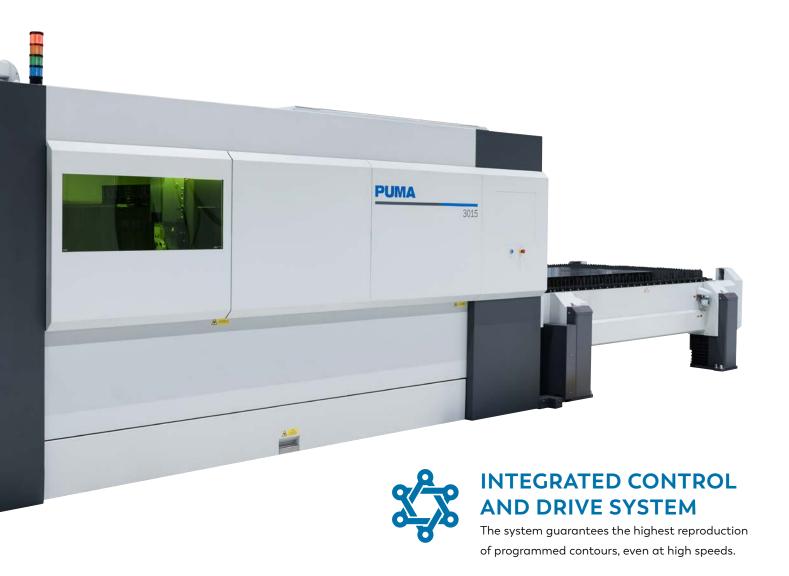
- · Lower total cost of ownership
- All-round performance
- Integrated shuttle tables
- Automation-ready



### LASER POWER RANGE

PUMA

High beam quality and stability is assured in 3, 6, 12 and 20 kW laser sources.







# INTUITIVE CONTROL

The 19" Touch-L control is user-friendly: operators of all skill levels can interact easily with Puma. Setups are fast and uncomplicated.



## **QUICK SCRAP REMOVAL**

Scrap bins underneath the exhaust unit can easily be removed.

# **HIGHLIGHTS**

### LOWER TOTAL COST OF OWNERSHIP

Puma uses field-proven production methodologies in a lower-cost design. The machine features cost-effective components selected for their quality and reliability.



Stainless steel



Aluminium



Steel



Copper

# ALL-ROUND PERFORMANCE

The cutting head features a 200 mm or 250 mm focusing lens that automatically adjusts the focus based on material and thickness. Features like crash protection, capacitive height sensing, and a quick-change protective window enhance its durability.

### **HIGH DYNAMICS**

Puma's robust frame and powerful motor ensure high stability during acceleration, delivering consistent accuracy across various materials and thicknesses.

# INTEGRATED SHUTTLE TABLES

The machine maximises uptime with an integrated shuttle table system for sheets up to  $6400 \times 2500$  mm.

## **AUTOMATION-READY**

Puma is designed to easily integrate with tower storage and warehouse solutions for lights-out production.

# FEATURES & OPTIONS

# FOR INCREASED CAPACITY

### **STANDARD**

#### Automatic cutting gas selection

Choose oxygen or nitrogen to optimise cutting performance across various materials and thicknesses.

A servo valve regulates the gas pressure for different cutting tasks to ensure optimal cutting conditions.

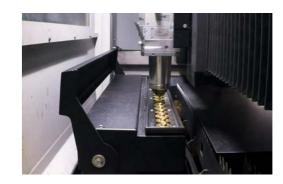
### **OPTIONS**

#### Nozzle changer

An automatic nozzle changer adjusts the nozzle based on the job list, monitors nozzle quality, cleans nozzles, checks nozzle alignment, and calibrates capacitive height sensing, enhancing autonomy and throughput while reducing setup time.

#### Compressed air or mixed gas cutting

In addition to nitrogen and oxygen, compressed air or mixed gas can be used as cutting gas options. Compressed air can significantly reduce part costs and is ideal for high-volume jobs. Mixed gas provides high cut quality for projects that require high precision.



#### **Bevel head**

Bevel cutting offers a fast and cost-effective way to prepare material for subsequent welding operations or to create geometrical shapes. The option is available on Puma 6525.

#### **MOVit automation systems**

Connect your Puma to a MOVit automation system for lights-out manufacturing, fully automatic loading and unloading during cutting, efficient handling of workpieces and highly reliable production.

#### Advanced CADMAN® software

CADMAN-software ensure perfect cooperation between hardware and software:

- CADMAN-Flow coordinates the production process,
- CADMAN-B unfolds the parts,
- CADMAN-L imports the parts, optimises nesting and generates cutting programs, integrated into Touch-L.







# **SPECIFICATIONS**

	Puma 3015	Puma 4020	Puma 6020	Puma 6525
Machine specifications				
Maximum sheet size	3050 x 1525 mm	4065 x 2035 mm	6160 x 2035 mm	6400 x 2500 mm*
X-axis travel	3185 mm	4200 mm	6280 mm	6510 mm
Y-axis travel	1560 mm	2070 mm	2070 mm	2600 mm
Z-axis travel	130 mm	130 mm	130 mm	130 mm
Maximum sheet weight on table	1050 kg	1600 kg	2500 kg	3600 kg
Table changeover time	35 sec.	39 sec.	48 sec.	50 sec.
Maximum positioning speed X-Y	140 m/min	140 m/min	140 m/min	140 m/min
Maximum positioning speed Z	30 m/min	30 m/min	30 m/min	30 m/min
Repetitive accuracy	+/- 0,025 mm	+/- 0,025 mm	+/- 0,025 mm	+/- 0,025 mm
Positioning accuracy**	+/- 0,050 mm	+/- 0,050 mm	+/- 0,050 mm	+/- 0,050 mm
Bevel cutting head	-	-	-	optional on 12 kW
Nozzle changer	optional	optional	optional	optional
Machine dimensions (excluding lig	ght guards, filter and ch	iller)		
Length	8825 mm	13,000 mm	17,200 mm	17,200 mm
Width	2560 mm	6300 mm	6300 mm	6700 mm
Height (access door opened)	3400 mm	3360 mm	3360 mm	3900 mm
Approximate weight	13,000 kg	16,500 kg	21,500 kg	28,000 kg

Laser power	3 kW	6 kW	12 kW	20 kW	
Maximum cutting perform	ance				
Mild steel	15 mm	25 mm	30 mm	45 mm	
Stainless steel	12 mm	25 mm	30 mm	30 mm	
Aluminium	12 mm	25 mm	30 mm	30 mm	
Copper	6 mm	8 mm	15 mm	15 mm	
Brass	5 mm	8 mm	15 mm	15 mm	

Specifications subject to change without prior notice.

<sup>\*\*</sup> Achievable workpiece accuracy depends on the type of workpiece, pre-treatment and sheet size, as well as other variables. According to VDI/DGQ 3441.







LVD Company nv, Nijverheidslaan 2, B-8560 GULLEGEM, BELGIUM Tel. +32 56 43 05 11 - marketing@lvdgroup.com - www.lvdgroup.com

<sup>\*</sup> Bevel cutting: 6100 x 2000 mm