




# CY 2D

ENG



**CYLASER**  
FIBER LASER SYSTEMS



The light of tomorrow travels via fiber.  
This, we have always known.



In 2005, CYLASER patented  
the first industrial system for Fiber Laser cutting.



## The first to bring the laser into the future

CYLASER was born in a territory with a consolidated technological background, home to the inventiveness of the Campana family. Our company has always had just one objective: exceeding your expectations.

**In 2004, we initiated an industry change.**

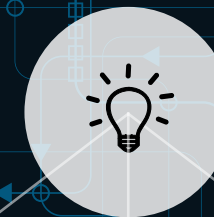
**We were the first to apply fiber laser technology to a stand-alone cutting system for sheet metal and plate.**

Our dynamic organization makes our know-how fully available to you, our customers and prospects. We are experts in standard automatic systems for cutting and welding that are now distributed worldwide, thanks to an efficient and widespread sales network.

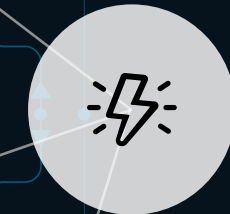
PRODUCTIVITY  
AND SPEED



SIMPLE TO USE



ENERGY  
EFFICIENT



**FIBER  
LASER**

ECO-FRIENDLY



COST-EFFICIENT



## Why buy a CYLASER fiber laser system?

- > **We are a true technological partner.**  
We recommend balanced solutions to our client; solutions based on a realistic needs analysis.
- > **We are fiber laser specialists.**  
We offer an efficient and proven working process.
- > **As fiber laser pioneers,**  
we have more than a decade of experience and installations.



## CY2D

- > Our own laser cutting head
- > Multiple applications, up to 8,000 x 2,500 mm
- > High cutting capacity:
  - 25 mm carbon steel
  - 20 mm stainless steel
  - 20 mm aluminium alloys



## The CY2D system, a winning choice!

- > A system engineered specifically to optimize **the advantages of the fiber laser**.
- > **A unique construction philosophy**, using commercially available components.
- > **The airplane structure** is more stable over time and more precise, even in large formats.
- > The compact layout can be transported easily, **thereby guaranteeing quick installation**.
- > **Proprietary laser cutting head**, developed as a result of our years of experience with this process.
- > **Compatible** with leading CAD-CAM software currently available on the market.
- > **More than 10 configurations available**, to meet the production needs of every customer.



- > Automatic nozzle changer (optional).
- > Sheet finder and automatic nest centering.
- > Marking on 4 power levels.
- > Joystick for manual axes movement (optional).

- > Additional access to the work area from rear of the machine.
- > Front sliding doors for full access to the work area.
- > Video camera for process monitoring.
- > Class 1 Laser windows.
- > Scrap conveyor (optional).



- > Remote assistance and diagnostics.
- > Power modulation according to the contour of the piece.
- > Cutting lines on the SQL dynamic database.
- > Touch screen or laptop interface with interactive graphics.
- > Scheduler for automatic cycles (optional).
- > Fly-cutting function.

- > Dual tables.
- > Sheet clamps (optional).
- > End-loading and side-loading configurations.
- > Automation ready.





## The heart of the machine, the CYLASER laser cutting head.

- > **Motorized single-focus**; can be customized to specific production requirements.
- > **100% sealed**, even during maintenance.
- > Integrated **cooling circuit**.
- > **Anti-collision system, with magnetic torch**, and no controlled-breakage replacement parts.
- > **Process monitor** to control the status of the optics and stop the process in case of contamination.
- > **CYSP Servo piercing** for quick and clean piercing of plate.
- > **Cross-jet** for the removal of piercing spatter.
- > **Automatic nozzle cleaning**.
- > **Quick assist gas change capability**, and compressed air cutting option.





## Light Gauge

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### Machine CY2D20L4020 + Compact Server

#### ADVANTAGES

- > Increased productivity thanks to the 4000 x 2000 mm work area due to dual tables, produce more pieces per cycle and reduced scrap.
- > Optimization of space thanks to a compact design; it can be easily integrated into automated cells.
- > Increased production efficiency thanks to dedicated automation, reduced loading/unloading times, and to benefit from nitrogen cutting speed.



## Plate

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### Machine CY2D50L8025

#### ADVANTAGES

- > High precision, even on 8000 x 2500 mm tables, no repositioning and improved nesting.
- > Increased performance thanks to modulation of the laser power, less energy wasted and easier heat management.
- > High productivity thanks to the dual tables, with more efficient loading/unloading times.

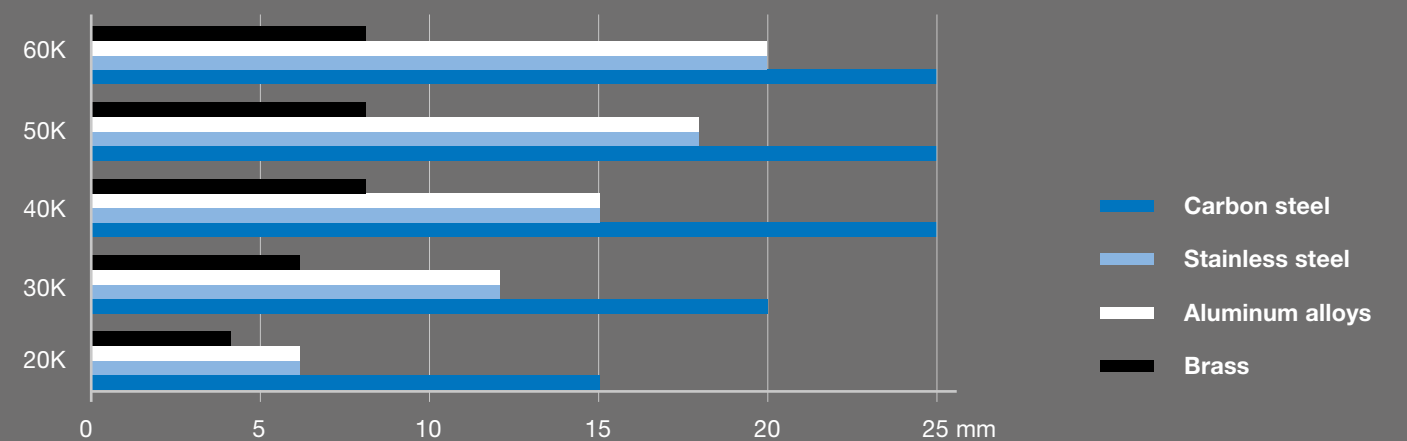
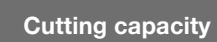


Working area			
X-Axis	mm	from 3100 to 8100	
Y-Axis	mm	1550 to 2530	
Z-Axis	mm	60	
Loading capacity on each table		kg	up to 5000
Table change speed		mm/min.	30.000

Axis speed		
Minimum and maximum cutting speed	mm/min.	150/50.000
Positioning speed (X and Y Axes)	mm/min.	110.000
Interpolated positioning speed	mm/min.	155.000
Acceleration	mm/sec²	9000
Precision		
Repeatability precision	mm	0,03
Parallelism and squareness over 30 Inch	mm	0,08
Cut perpendicularity tolerances over each 0.04 inches of thickness	mm	0,01

Footprint		Reference layout
Total weight (excluding auxiliary equipment)	kg	from 8.000 to 25.000
Installed power	kW	See Generator Model Chart
Color	RAL	Gray 7040 / Blue 5015
Voltage		400V trifase
Frequency		50 / 60Hz

Generator model						
		20K	30K	40K	50K	60K
Carbon steel	mm	15	20	25	25	25
Stainless steel	mm	6	12	15	18	20
Aluminum alloys	mm	6	12	15	18	20
Brass	mm	4	6	8	8	8



Generator model		20K	30K	40K	50K	60K
Output power	kW	2	3	4	5	6
Installed system power	kW	20	30	40	50	60
Power requirement of laser source	kW	8	12	16	20	24
Frequency	nm	1074	1074	1074	1074	1074





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