US

CYTUBE

CYLASER

100%
ITALIAN
PRODUCT

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

CYLASER was born in a territory with a consolidated technological background,
home to the inventiveness of the Campana family.
In 2005, 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. Today, we are the only company in the world that focusses solely on the development and production of lasers for cutting.
CYLASER is a lean and dynamic company that offers standard systems for automated cutting,
welding and bending, which are distributed worldwide, thanks to an efficient and widespread sales network.

CYLASER. The Smartest Choice

Years of continuous product development have made CYLASER not only the leader for fiber laser cutting machines, but also a reliable partner who can provide your company with expanded process offerings, for optimized production, at a fair price.

OUR 5 PROCESS OFFERINGS:

CY2D
2D
Cutting Systems

CYTUBE
Tube
Cutting Systems

CYBEND
Bending
Systems

CYWELD
Custom Welding
Applications

CY3D
3D
Laser System

- **A valuable technology partner.**

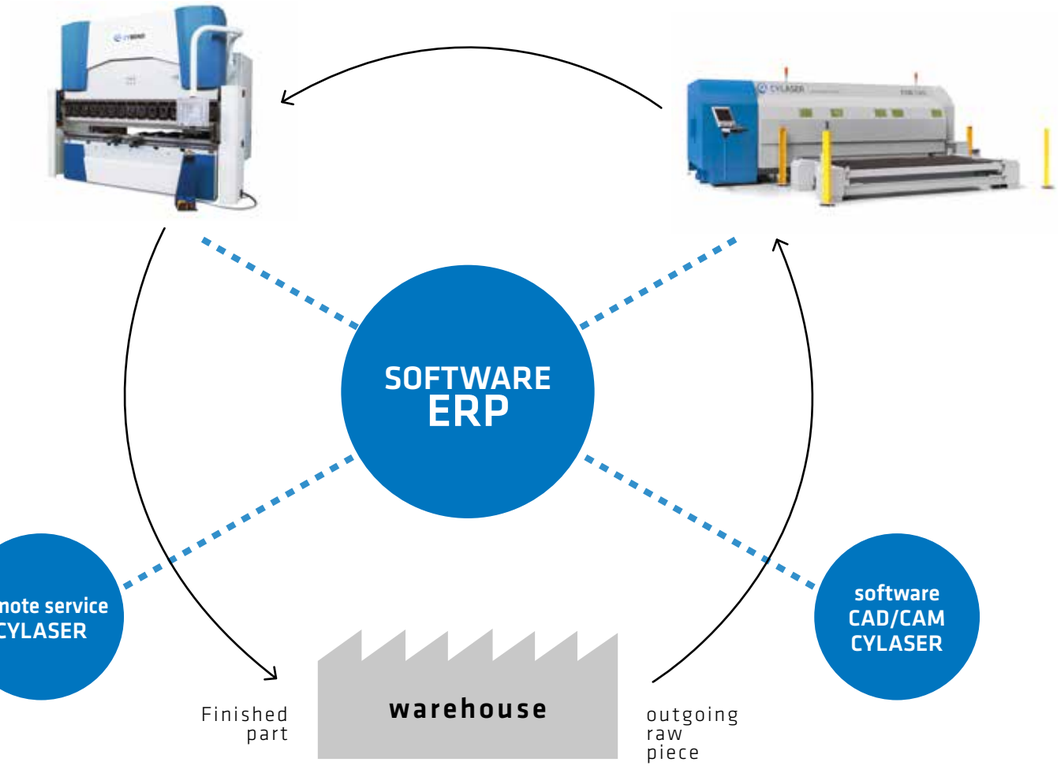
  We offer balanced solutions to our customers, basing recommendations on analysis of their specific needs.
- **Fiber laser specialists.**

  We offer an efficient and proven working process.
- **Pioneers in the fiber laser field.**

  We possess over a decade of experience and installations.

CYLASER ERP connectivity

- Our fiber lasers can be integrated seamlessly to network with other machines in the production cycle, thanks to CYLASER Open Source software, which is able to communicate with all the standard automation systems.
- It can automatically integrate with your company's logistics system.
- Embedded remote self-diagnostic software facilitates control and assistance from anywhere with web access.



CYLASER 4.0 benefits:

- Versatility, enabling production of small batches at large-scale costs,
- Fast development, from prototype to mass production,
- Productivity, by way of fast set-up time, and great, unparalleled uptime,
- Quality parts from a reliable cutting system, at extremely low ownership cost.

CYTUBE

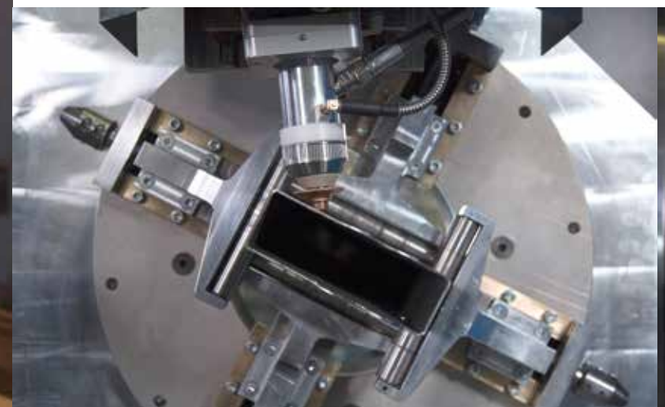
- System specifically designed to take advantage of the fiber laser technology.
- Unique construction philosophy, use of Off-the-Shelf components.
- Compact layout, easy to move, ensures a fast installation.
- Proprietary cutting head, the result of the longest process experience.
- Compatible with the main CAD-CAM software available on the market

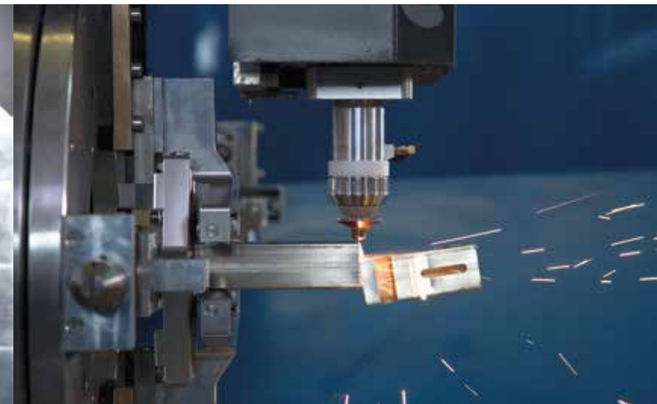
The heart of the machine, the CYLASER cutting head

Continuous development and experience since 2003 in fiber laser cutting machines, culminate today in the fourth generation of CYLASER own fiber optic laser cutting heads. Our cutting heads, specifically designed for fiber laser cutting, ensure extremely high uptime, and process stability. CYLASER cutting heads are extremely low maintenance and inexpensive to maintain.

- Optics can be customized to specific production requirements.
- Maximum reliability guaranteed by protection screens, even during the maintenance.
- Magnetic break-away torch.
- Process integrity monitoring and control.
- CYSP Servo Piercing for fast and quality piercing on plate.
- Automatic nozzle cleaning and height control calibration.
- Compressed air cutting prep in addition to oxygen and nitrogen.
- High-speed cut-on-the-fly feature.
- Vortex feature for enhanced stainless steel cut surface quality on plate.
- Etching, marking and film-protected metals cutting capability.

Magnetic anti-collision system





Total accessibility

The front sliding doors allow to access to the entire working area, for an easy and immediate inspection.

Optimized fumes suction

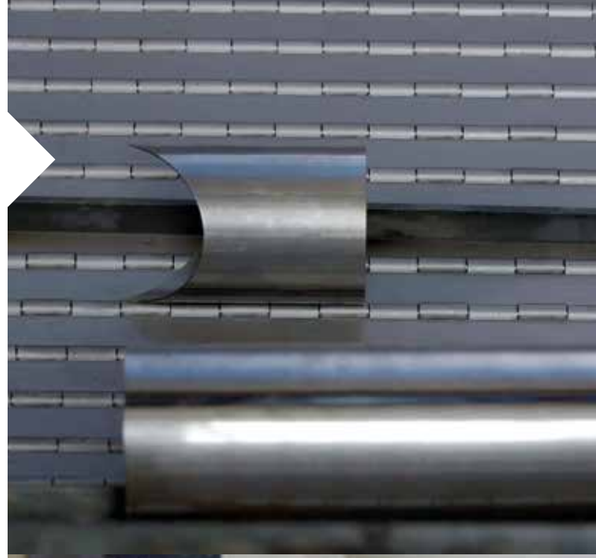
The most effective dust and fume collection is ensured at all times by CYLASER exclusive mobile dust collection unit.

Intelligent part sorting

Work parts unloading can be selected during programming. According to size, parts can be discreetly separated: onto a conveyor belt for parts shorter than 14”, or onto a storage accumulation ramp for longer parts.

Minimal scrap

Thanks to the “in between the chucks cut” capability, the scrap material at the tube end is minimal.



Automatic spindle opening adjustment

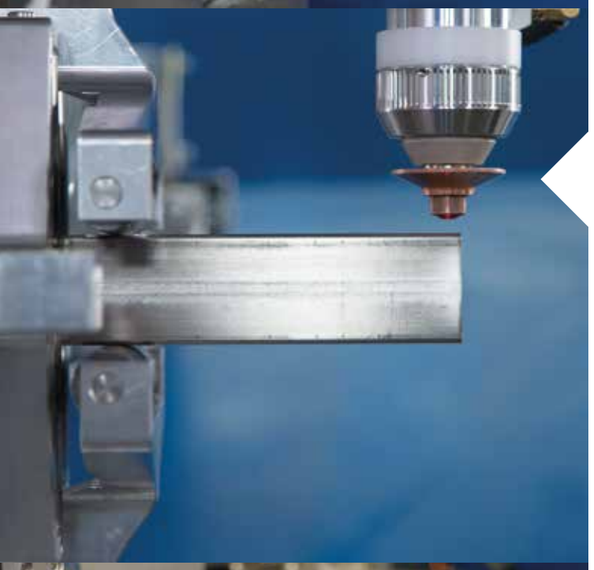
The chucking operation is performed by an exclusive CYLASER adaptive system, numerically controlled. The jaws are automatically activated and, based on the tube material and its wall thickness, the system automatically selects the necessary clamping force for a secure tube holding.

Adaptive tube chucking

This hybrid mechanical-hydraulic managed motion lends high accuracy of positioning to this important step of the process, reducing change over time and scrap material.

Tube weld detection system

It provides automatic
weld searching and detection;
rotates the tube where directed.



Tube dimensions control

Onboard laser system that enables the user to measure the actual size of the tube. Automatic compensation can be utilized from the CAD-CAM software.

Tube internal protection

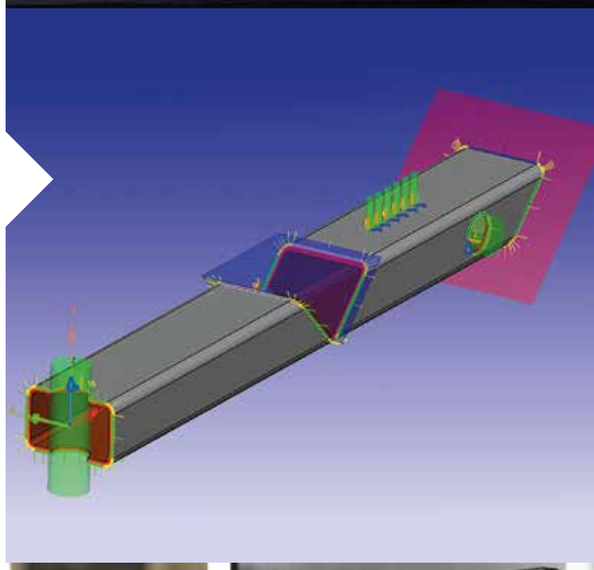
A protection device slides inside the tube to be cut to prevent visual damage to the internal surface of the part.

Simple and user-friendly interface

Modern, large operator touch screen panel, easy to use and customizable, with sharp graphics. The panel hosts software for machine side operation or remote access. It is also possible to integrate a mobile hand-held device for machine operation from any location around the machine.

Cy-Laser Software

Open to commercially-available CAD/CAM software. Laser machining data can be integrated into your existing CAD/CAM software for seamless integration of other processes into the same database. Inventory management and quotation systems. Remote servicing and diagnostics.



Express cut

While the machine is great for high volume, long run production, it remains extremely flexible. It is also possible to set up a cut cycle machine-side at any time. Programs can be easily launched directly on tube or tube remnants, for sample cuts, rush jobs, short runs, prototypes or other.

CYT5 Machine

ADVANTAGES

- Fully automatic system, 21 CNC Axis.
- Compact layout, modular extendable length.
- Automatic load and automatic unload.
- Flexibility, great for high production and short runs.
- Fast change-overs thanks to automatic adjustment of all the machine components set up.
- Surface protection of the cut parts guaranteed by the scratch-proof setup of all the tube handling components, from load to unload.
- Reduced change-over times and costs thanks to the advanced multi-bar nesting software.
- High accuracy capability, even on small-diameter tubes, thanks to the adaptive steady rests.
- Very low maintenance.
- Very low cost of operation.

CYT9 Machine

ADVANTAGES

- Fully automatic system, CNC 21 Axis.
- Compact layout, modular extendable length.
- Automatic load and automatic unload.
- Flexibility, great for high production and short run.s
- High accuracy capability thanks to the tube measuring and compensating system.
- Greatly reduced material waste thanks to the “in between the chucks cut” capability.
- Enhanced ease of assembly of structural cut parts, thanks to the weld detection system.
- Very low maintenance.
- Very low cost of operation.

CYTUBE Technical data

Model		**CYT5**	**CYT9**
Working range	ME		
X-axis	ft	21’	21’
Y-axis	in	15.750”	15.750”
Axis Z	in	9.842”	9.842”
Round tube (min/max)	in	0.6”/ 4.724”	0.6”/ 8.858”
Square tube (min/max)	in	0.6” x 0.6” / 3.5” x 3.5”	0.6” x 0.6” / 6.3” x 6.3”
Rectangular tube (min/max)	in	0.6” x 0.8” / 4.7” x 1.6”	0.6” x 0.8” / 7.9” x 3.9”
Load and unload capacity			
Load capacity	lb/ft	14	27
Loader unit capacity	lb	6600	6600
Tube length (min/std/max)	ft	10.5’ / 21.3’ / 28’	10.5’ / 21.3’ / 28’
Output tube length (min/std/max)	ft	6.5’ / 14.7’	6.5’ / 14.7’
Load type		bundle	bundle / step loader unit
Bar load time	sec.	30	30
Machine speed			
Minimum and maximum processing speed	mm/min (in/min)	150 to 30,000 (6 to 1181)	150 to 30,000 (6 to 1181)
Positioning speed (X and Y axes)	mm/min (in/min)	100000 (3937)	85000 (3346)
Acceleration	g	1.5	1
A - B spindle rotation speed	Rev./sec	1	0.6
Machine precision			
Mechanical repeatability precision	mm (in)	0.03 (0.001”)	0.03 (0.001”)
Cutting perpendicularity (per mm of thickness)	mm (in)	0.01 (0.00039”)	0.01 (0.00039”)
Minimum programme increase	mm	0.001	0.001

Overall dimensions on the ground		**CYT5**	**CYT9**	
Length	ft	45’	45’	
Width	ft	20’	20’	
Height	ft	9’	9’	
Suction unit requested		4C	4C	
Installed power (excluding the generator)	kW	14	14	
Colour	RAL	7040 5015	7040 5015	
Power supply		480V three-phase (ON REQUEST)) 50 / 60Hz	480V three-phase (ON REQUEST)) 50 / 60Hz	
Generator				
Generator model	IPG	10K	20K	30K
Rated power	kW	1	2	3
Maximum absorption	kW	4	8	12
Wavelength	nm	1074	1074	1074
Cutting capacity				
Carbon steel	in	0.250”	0.400”	0.600”
Stainless steel	in	0.150”	0.250”	0.315”
Aluminium alloys	in	0.150”	0.250”	0.315”
Brass	in	0.040”	0.150”	0.250”
Copper	in	0.040”	0.080”	0.080”

CYTUBE

A laser that converts ideas into a reality

CYLASER®

USA
CY-LASER America LLC
6110 15 Mile Road
48312 Sterling Heights MI - USA

info@cy-laser.us
www.cy-laser.us

US

CYLASER

CY-LASER AMERICA LLC
6110 15 Mile Road, Sterling Heights, Michigan 48312
P +1 586 983 9282 - F +1 586 314 4173
info@cy-laser.us - www.cy-laser.us