

ENG

CY2D



CYLASER
FIBER LASER SYSTEMS

100%
ITALIAN
PRODUCT



Tomorrow's light travels only on fiber.
It's something we've always known.











A territory with a consolidated technological background and the inventiveness of the
Campana family are the ingredients of the birth of CYLASER,
the first company to apply fiber laser technology to the cutting of sheet metal in 2005,
thus gaining a substantial technological edge over the competition.

It is a lean and dynamic company that builds customised automated cutting,
welding and bending systems and has a widespread sales network around the world.

CYLASER. The Smartest Offer

**We have become leaders in research and development for one reason only:
offering your company customised solutions
to optimise production at the right cost.**

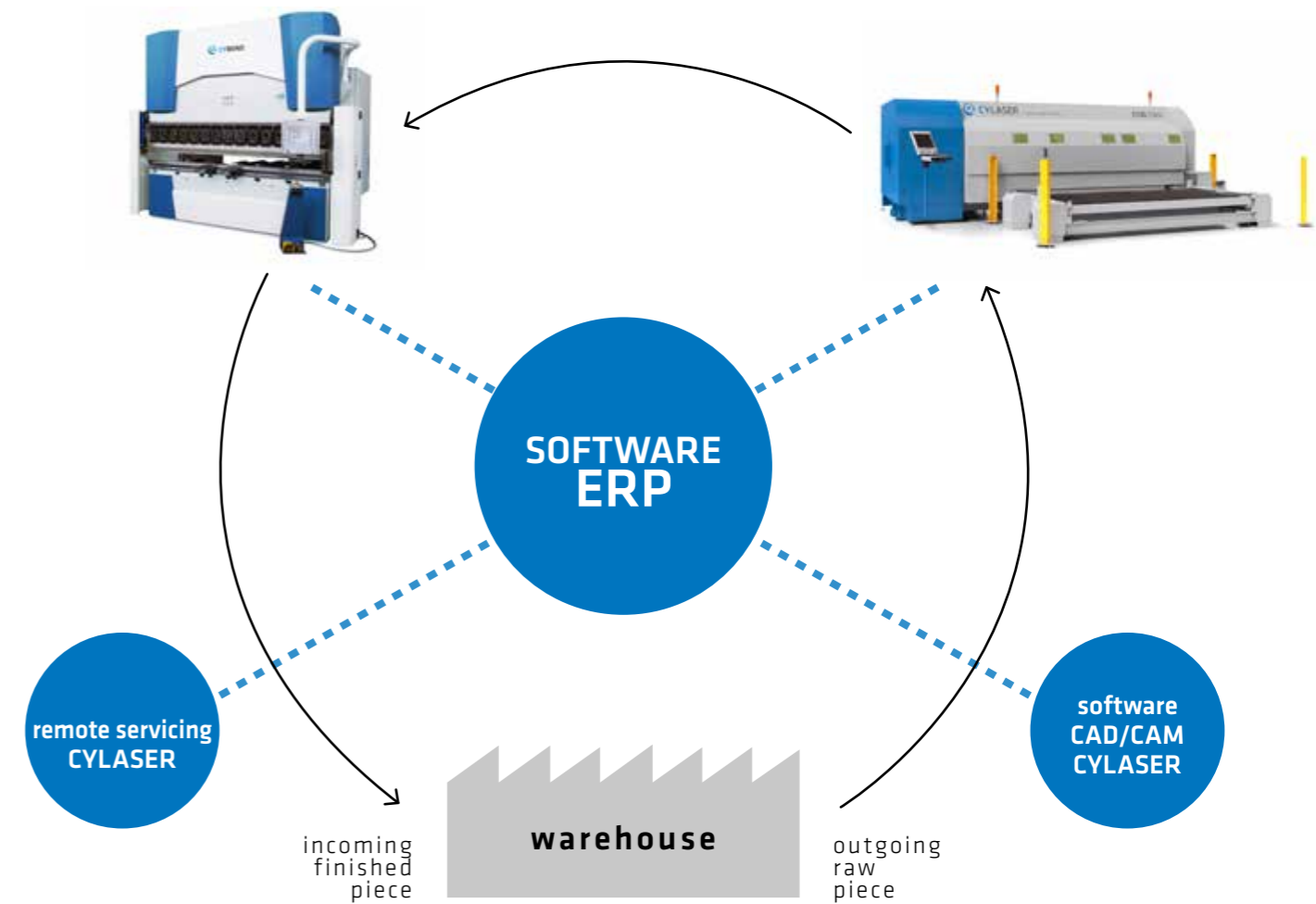
OUR 5 FIELDS OF APPLICATION:

				
CY2D 2D Cutting Systems	CYTUBE Tube Cutting Systems	CYBEND Bending Systems	CYWELD Custom Welding Applications	CY3D 3D Laser System
				

- **We are a genuine technological partner.**
We recommend balanced solutions for our clients, basing them on an analysis of their actual needs.
- **We are fiber laser specialists.**
We offer an efficient and proven working process.
- **Pioneers in the fiber laser field.**
We boast over a decade of experience and installations.

The CYLASER cyber-physical system

- It can be integrated seamlessly with other machinery of the production cycle thanks to the CYLASER Open Source software which is able to manage any existing automation system.
- It automatically fits into a company's logistic system.
- Remote and self-diagnosis software applications allow remote control and assistance.



The CYLASER 4.0 innovation improves:

- versatility through the production of small batches at large-scale costs,
- fast development from the prototype to mass production,
- productivity through shorter set-up time, less errors and machine downtime,
- quality through sensors that monitor production in real time reducing production scraps.

CY2D

- System designed specifically to tap the **potential of fiber laser**.
- **A unique construction concept**, use of OTS components without forced customer loyalty.
- **Airplane structure**, which is stable over time and more precise even with large formats.
- Compact and easy-to-transport design that ensures **fast installation**.
- **Proprietary laser cutting head**, which is the result of experience with the process.
- **Compatible** with the main CAD-CAM software packages on the market.
- **Over 10 available configurations**, to meet the production needs of any customer.





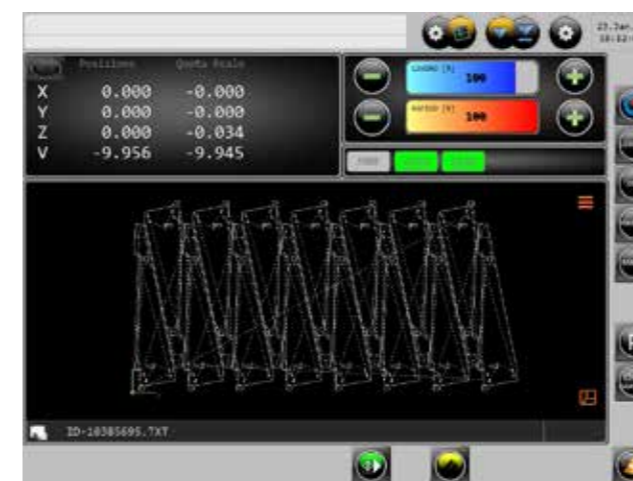
Automatic nozzle changing

- 18 positions for nozzle selection.
- Complete cycle in less than 16 sec.
- Utmost versatility in unmanned production.



Full access

- Sliding doors along the entire length of the machine.
- Full access guaranteed on both sides of the machine.
- Interlock closing system.
- Class 1 laser safety windows.



Simple and user-friendly interface:

- Easy-to-use and customizable graphic system.
- Features all the software needed for management on the machine and remotely.
- Possibility to choose a normal PC as a more flexible and affordable alternative.
- Possibility to integrate a hand-held device to control the machine from any position.



CYLASER Software:

- Certified for the main CAD-CAM software on the market for the maximum degree of integration with any existing system
- It fits perfectly into the company network to ensure remote servicing and diagnostics.
- It allows sharing the cutting technologies with management and quotation systems.

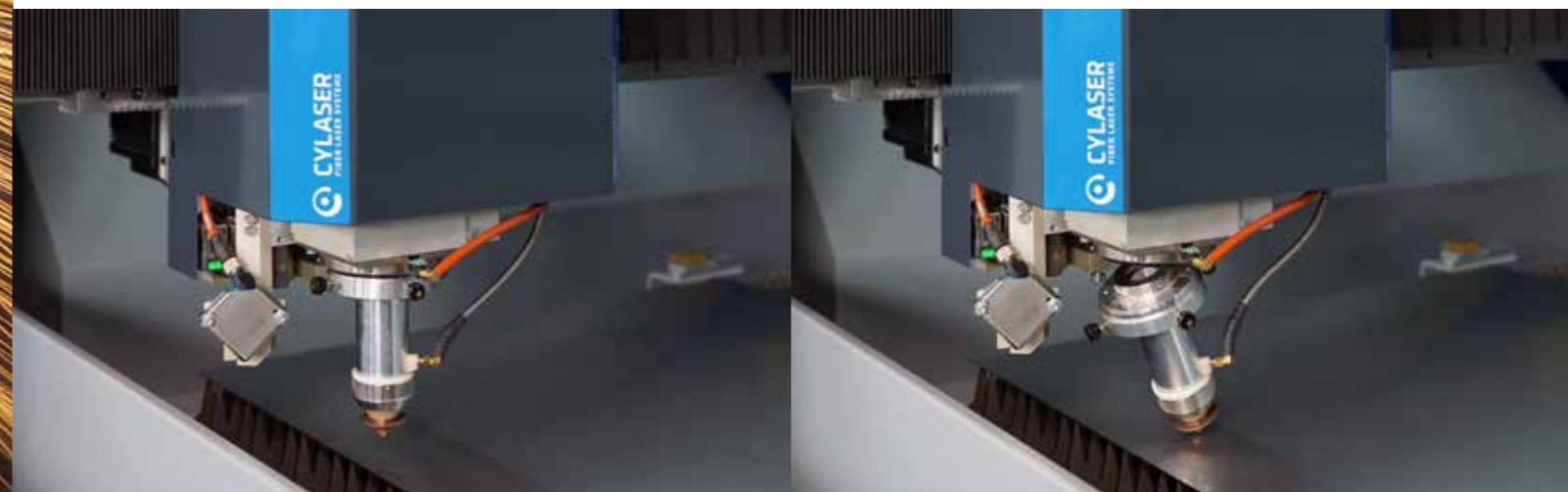


The heart of the machine, the CYLASER head



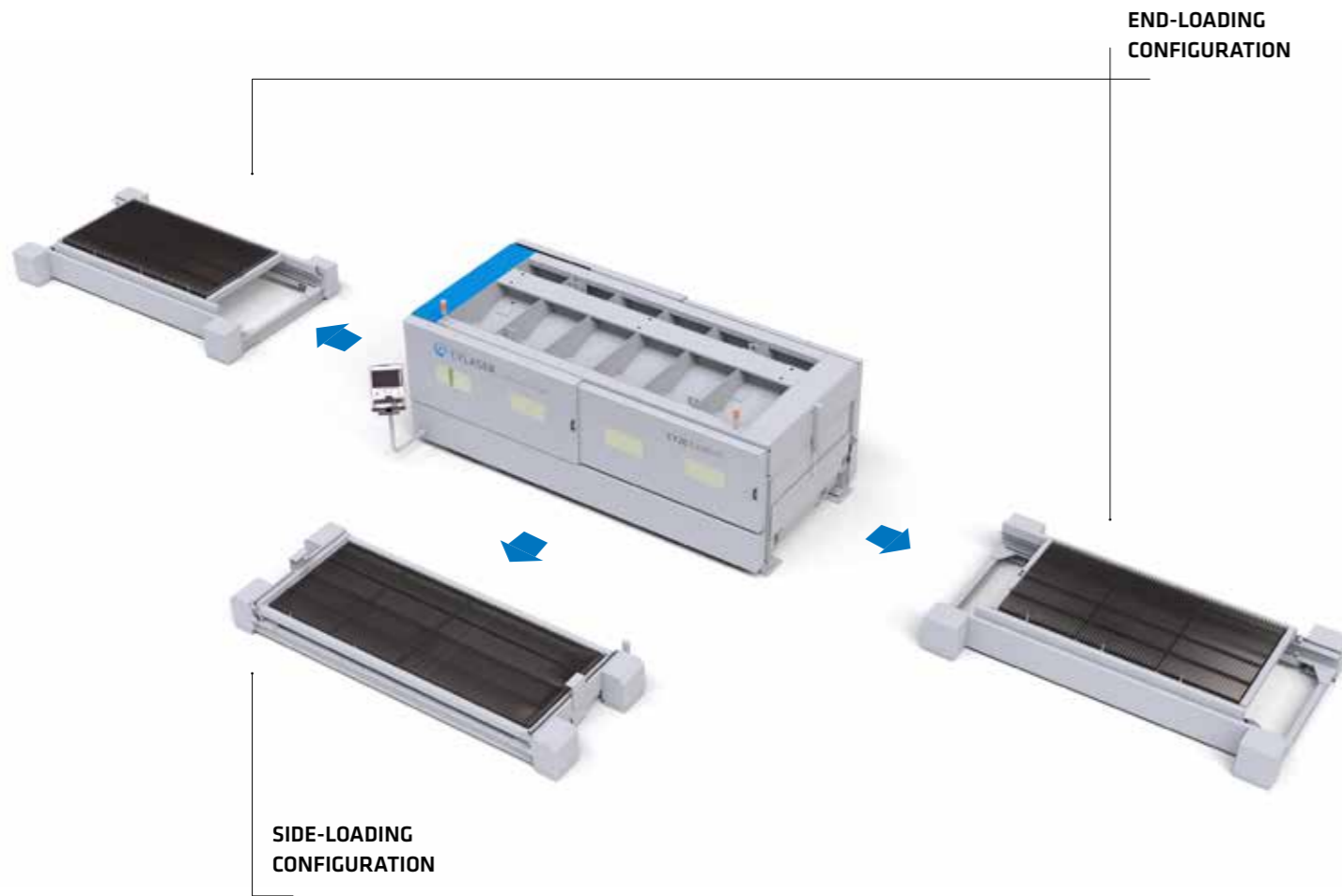
- Optics configuration designed as per customer specifications.
- Maximum reliability guaranteed by the protective glass, including during maintenance.
- Magnetic anti-collision system to reduce machine downtime to a minimum.
- Integrated process monitor to continuously keep track of production.
- CYSP Servo-piercing for fast and clean piercing of very thick plates.
- Automatic nozzle cleaning and height control calibration.
- Compressed air preparation for cutting as an alternative to technical gases.
- Flycut function for high-speed cutting of grids.
- Vortex function for better quality and reduced gas consumption when cutting stainless steel.
- Marking and incision management and film-protected material cutting.

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Magnetic anti-collision system
—



We make space for all needs

The CY2D range offers a great variety of models thanks to the modular system that allows different configurations and dimensions.



Automated production

CYLASER systems can be integrated with different types of automation, from the loading/unloading server to the automated storage tower for completely unmanned production. The CYLASER software allows the integrated management of third-party integration systems thanks to the open source concept.



Proprietary scheduler for automated cutting management of the different programmes assigned to different storage tower

Seq.	Operation	Name	Area L.	Centro/Quadrante	Veloc.	Fine	Stato
1	23-01-17 18:03:32	03-10385005	1	2/2			
2	23-01-17 18:03:41	03-12548864	1	1/1			
3	23-01-17 18:03:32	03-10385005	1	2/2			
4	23-01-17 18:03:50	03-10996374	1	1/1			
5	23-01-17 18:03:32	03-10385005	1	1/1			
6	23-01-17 18:03:50	03-10996374	1	2/2			
7	23-01-17 18:03:41	03-12548864	1	1/1			
8	23-01-17 18:03:41	03-12548864	1	2/2			
9	23-01-17 18:03:50	03-10996374	1	1/1			

Buttons: Inverti, Modifica, Esegui, Crea, Copia, Incolla, Elimina, Stampa, Imposta, Salva, Carica, Esci

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Parameter management of automation event: Double thickness/plate separation/desired suction cup plane setting (1000x1000-1000x2000-1250x2500-1500x3000mm)

STATO	MANSUALE		NESSUN ALLARME		CICLO AUTO OFF	
VENTOSA 1	X	Y	X	Y	X	Y
	0	0	0	0	0	0
VENTOSA 2	0	0	7	0	0	0
VENTOSA 3	0	0	8	0	0	0
VENTOSA 4	0	0	9	0	0	0
VENTOSA 5	0	0	10	0	0	0
			11	0	0	0
			12	0	0	0
			13	0	0	0
			14	0	0	0
			15	0	0	0

Diagram showing a coordinate system with X and Y axes and a suction cup icon.



THIN GAUGE

CY2D20L4020 Machine + Compact Server

ADVANTAGES

- Greater productivity thanks to the 4000x2000mm plate format, more pieces per cycle and less production scrap.
- Optimized space thanks to the compact design; it can be easily integrated into the production process.
- Up to 70% greater production efficiency thanks to dedicated automation and the shorter loading cycle to benefit from the nitrogen cutting speed.

THICK GAUGE

CY2D50L8025 Machine

ADVANTAGES

- Greater precision thanks to the 8000x2500 format, no repositioning and improved nesting.
- Increased performance thanks to laser power modulation, less energy wasted and easier heat management.
- High productivity thanks to the dual tables, with more efficient loading/unloading cycles and less idle time.

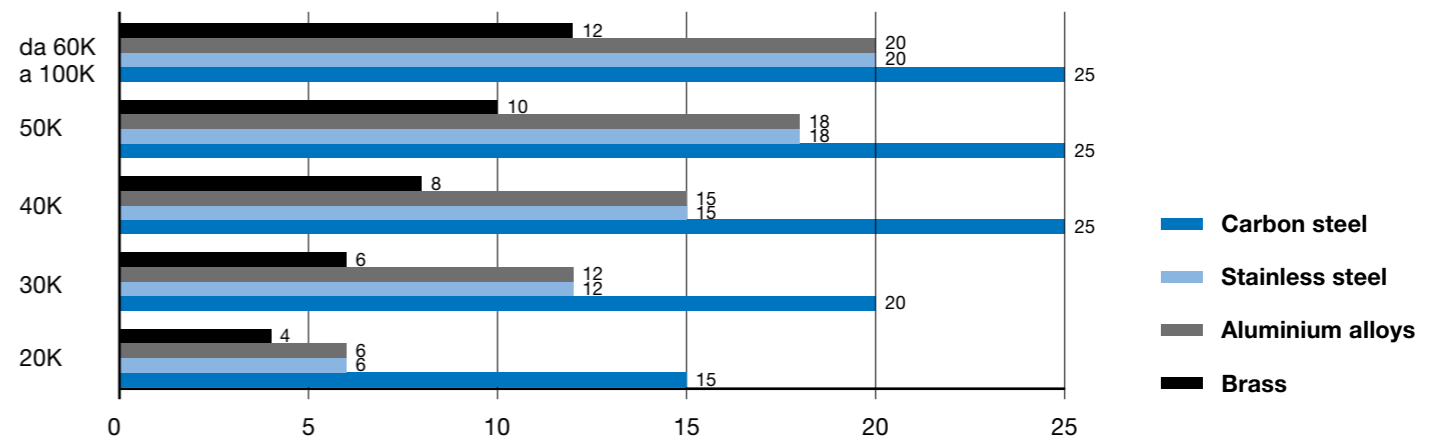


CY2D Technical data

System Model		C	L / S	HT
Working Area				
X Axis Travel	mm	2.550	From 3.070 to 8.100	From 3.070 to 4.070
Y Axis Travel	mm	1.280	From 1.550 to 2.530	From 1.550 to 2.030
Z Axis Travel	mm	120	120	120
Max Loading Capacity on each pallet				
	kg	250	Up to 4.000	Up to 1.600
Pallet Changer Cycle Time				
	sec	15	From 30 to 70	From 30 to 40
Axis Kinematic				
Min\Max Cutting Speed	mm/min.	150/30.000	150/50.000	150/50.000
Positioning Speed (Assi X+Y)	mm/min.	50.000	110.000	110.000
Interpolated Positioning Speed	mm/min.	70.700	155.000	155.000
Acceleration	mm/sec ²	6.000	9.000	13.500
Accuracy & Precision				
Accuracy	mm	0,05	0,03	0,03
Precision each	mm	0,1	0,08	0,08
800mm travel				
Perpendicularity tolerances	mm	0,01	0,01	0,01
Machine Overall Dimensions				
		See Layout	See Layout	See Layout
Machine Weight				
	kg	8.000	From 11.000 to 25.000	From 11.000 to 15.000
Required Dust Collector				
		2C	6C/12C	6C
Color				
	RAL	Grey 7040 Blue 5015	Grey 7040 Blue 5015	Grey 7040 Blue 5015
Voltage Required (**):				
		Upon Request	Upon Request	Upon Request
		50 / 60Hz	50 / 60Hz	50 / 60Hz

Maximum Cutting Capabilities		10K	20K	30K	40K	50K	60K	80K*	100K*
Carbon Steel	mm	10	15	20	25	25	25	25	25
Stainless Steel	mm	4	6	12	15	18	20	20	20
Aluminum	mm	4	6	12	15	18	20	20	20
Brass	mm	2	4	6	8	10	12	12	12

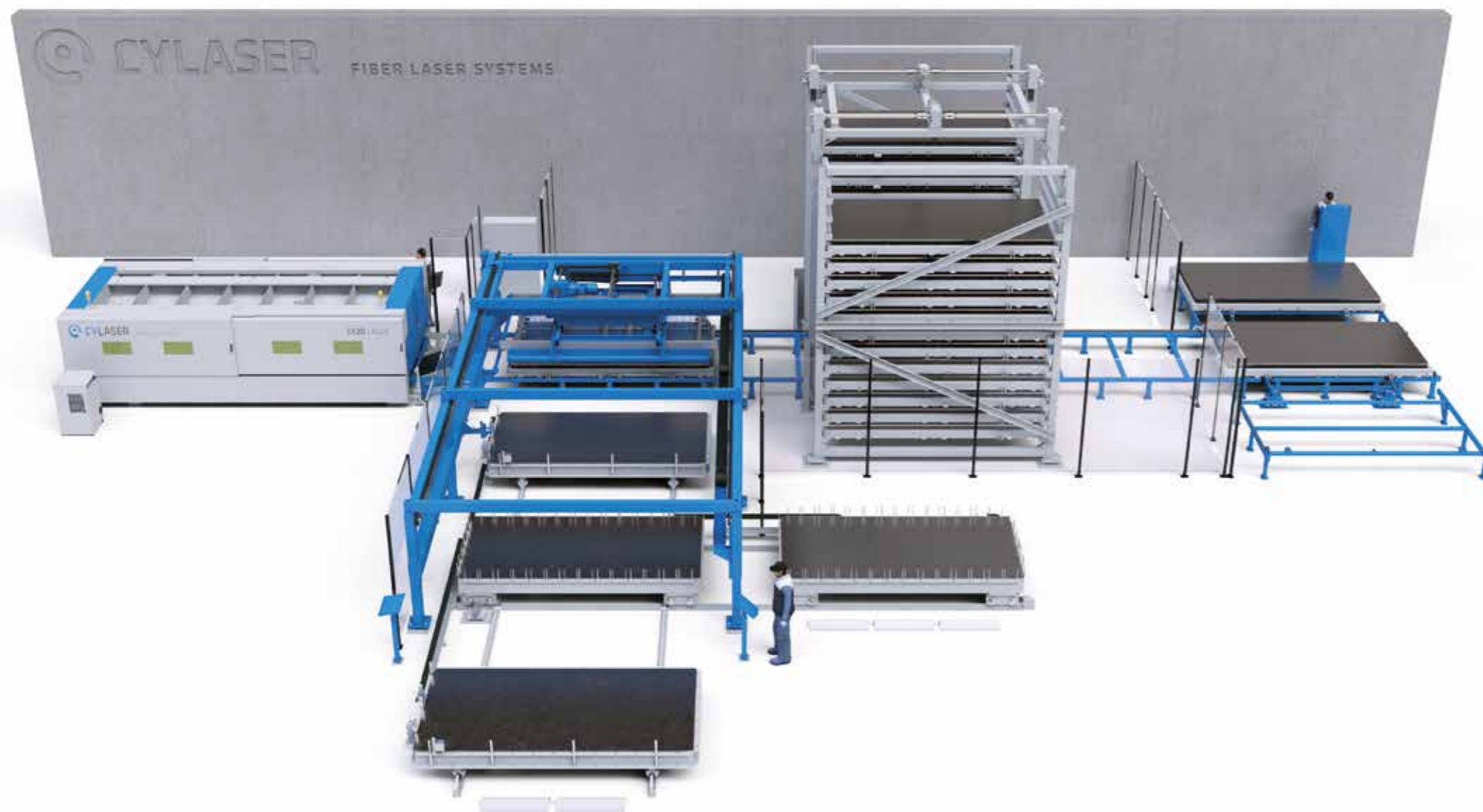
Cutting capacity



Generator model		10K	20K	30K	40K	50K	60K	80K	100K
Nominal Power	kW	1	2	3	4	5	6	8	10
Power Requirement	kW	3	22	27	30	33	36	42	48
Total installation (*)	kW	19	6	9	12	15	18	24	30
Frequency	nm	1.074	1.074	1.074	1.074	1.074	1.074	1.074	1.074

(*) fiber laser generator, exhaust filter, chiller, 2d machine.

CYLASER 4.0 Evolved automation

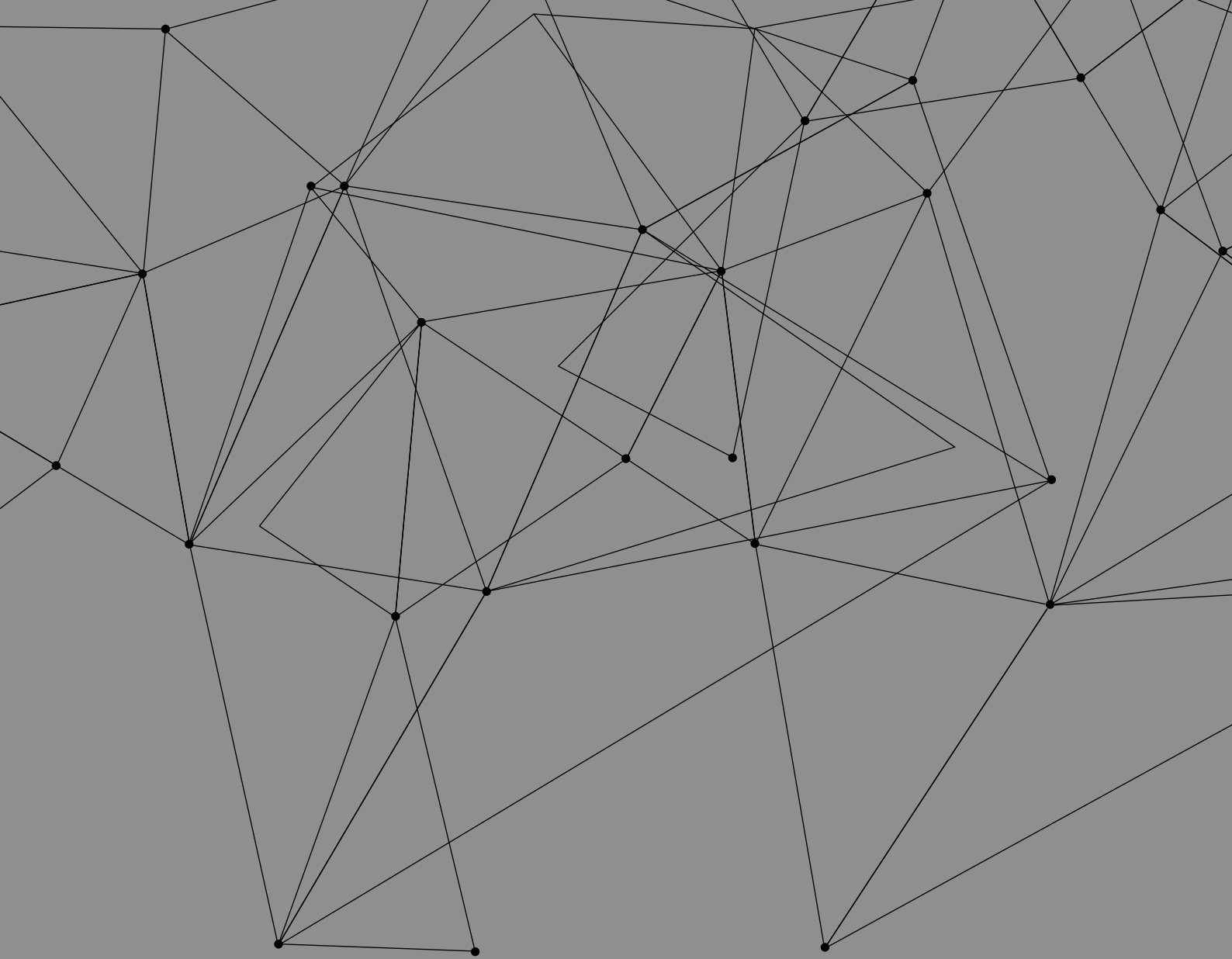


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