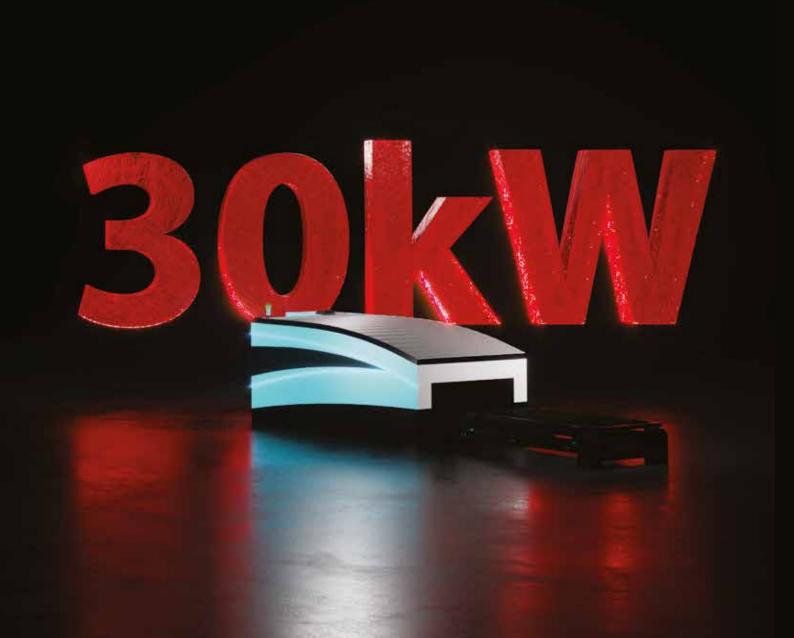


## FIBER LASER CUTTING SYSTEMS









www.eaglelasers.com



- 2 PIONEERS
- 4 BETTER CUTTING TECHNOLOGY
- 12 IDEAL MACHINE CONCEPT
- 2(1) TOWER OF POWER
- 22 THE FUTURE STARTS NOW!
- 26 RELIABILITY



EAGLE LASERS is a global leader and producer of fiber laser technology systems and automation solutions. The combination of higher laser power, unmatched acceleration, and state-of-the-art cutting technology allows our customers worldwide to reach top productivity, efficiency, and quality levels at considerably lower production costs.

In 2021 Eagle Lasers celebrated its 15th anniversary. Thanks to the partnership with IPG Photonics, the leader in developing and providing fiber laser sources, Eagle Lasers were the first to launch efficient, and award-winning **6kW**, **8kW**, **10kW**, **12kW**, **20kW**, machines and now the new **30kW** Laser Cutting System.

**Productivity Through Technology.** We are devoted to developing the ideal fiber laser system, the most productive machine with the fastest laser, highest acceleration, and fully automated material handling.

**Reliability Through Refinement.** Although we push the limits in terms of power and speed, we never compromise reliability. Eagle Lasers systems deliver 24/7 production maintaining full quality and accuracy.

The iNspire 1530 F30.0 is the fastest Eagle Lasers cutting system on the market today with a controlled **30kW** power source, 6G dynamic motion, the updated Eagle eVa cutting head capable of outstanding performances on focus length and precision, a super-light carbon fiber traverse, and the unmatched 9-second pallet changer.

Eagle Lasers' advantages significantly enhance profit and efficiency while reducing energy consumption and maintenance.

It's time to #iNspireTheWorld.

## **POWER YOUR FUTURE!**



## BETTER LASER CUTTING TECHNOLOGY

Eagle Lasers deliver the shortest overall project time from art to part. Project time is the sum of programming, material loading, cutting, and part retrieval, therefore, each aspect must be refined and optimized.

### Power you can rely on

- · Highest laser power in the industry
- Up to 30kW reliably delivered
- Patented cutting head technology built to take full advantage of the laser power
- Operational 24/7

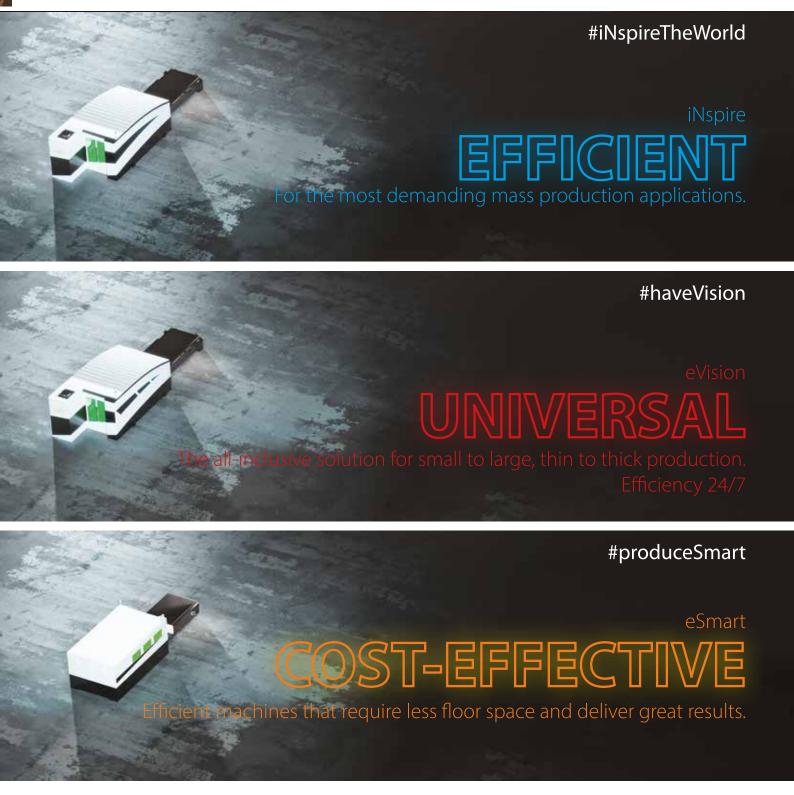
### **Designed for efficiency**

- Designed from the ground up for maximum power and speed
- 6G acceleration (the highest on the market)
- Strong base with lightweight moveable traverse
- Compact structure that saves floor space
- Most productive machines available

### Best practices for material handling

- 9-second pallet exchange
- Conveyor built into the machine structure
- Designed for full automation

## DISCOVER OUR SERIES OF FIBER LASER CUTTING MACHINES





### **Benefits:**

- Made for 24/7 automation
- Wider range of material thickness
- Highest efficiency and precision
- · Unmatched dynamic acceleration and fast pallet changer
- Lowest maintenance on the market

- · Reduced energy consumption
- Intelligent construction and design
- Lowest cost per part
- Highest throughput quality and burr-free
- Best performance and reliability on the market

The iNspire series presents state-of-the-art machines with extremely precise, and exceptionally fast solutions for the most demanding mass production applications where speed, power, and reliability are a must.

With cutting speeds up to 150 m/min, top positioning speed of 350 m/min, dynamic acceleration up to 6G, and fiber laser power from 1 to 30kW, they are the fastest and most efficient laser machines in the world.



MACHINE MODEL	[um]	1530	2040	2060	2560	2580	3080	25120	30120	25160	30160
X-AXIS	[mm]	3060	4060	6060	6060	8070	8070	12090	12090	16110	16110
Y-AXIS	[mm]	1540	2040	2040	2540	2598	3098	2598	3098	2598	3098
Z-AXIS	[mm]	100	100	100	100	150	150	150	150	150	150
MAX. SHEET WEIGHT	[kg]	1000	1600	2400	3000	9600	11520	14400	17280	19200	23040
MACHINE MODEL	[um]	1530	2040	2060	2560	2580	3080	25120	30120	25160	30160

MACHINE MODEL	[um]	1530	2040	2060	2560	2580	3080	25120	30120	25160	30160
LENGTH	[mm]	10000	11200	14000	14000	22550	22550	31330	31330	41000	42000
WIDTH	[mm]	3080	4100	4100	4750	4500	5000	4500	5770	4600	5900
HEIGHT	[mm]	3060	3060	3060	3060	2700	2700	2750	2850	2800	2900
WEIGHT	[t]	18	22	36	39	66	72	144	177	287	395

## **EFFICIENCY**Fiber laser cutting systems

### **BASE DATA**

Cutting speed: max 150 m/min
Positioning: 180 m/min

Acceleration: **3G** 

Laser sources: from 1 to 30kW

### **STANDARD EQUIPMENT**

- Fiber laser source
- Linear motors on all axes
- Advanced body structure made of composite material
- Rigid steel traverse bridge
- eVa cutting head
- Superfast pallet changer without hydraulics

## UNIVERSAL

### **Benefits:**

- Made for 24/7 automation
- Flexible range of material thickness
- Best efficiency and precision
- Intelligent design to minimize footprint on floor space
- Lowest maintenance on the market

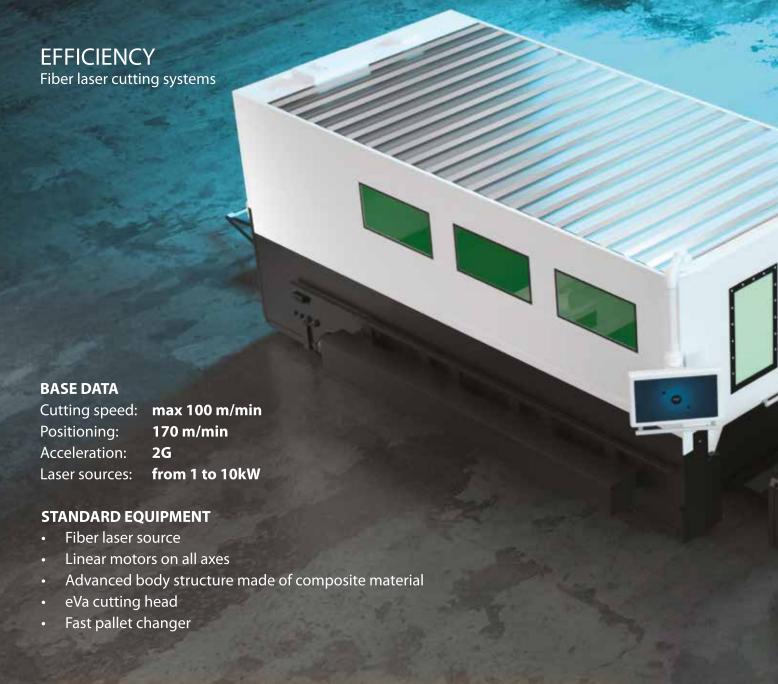
- Reduced energy consumption
- Intelligent construction made to last
- Lowest cost per part
- Best throughput quality
- · Best performance and reliability on the market

The eVision laser cutting machines are universal and provide the best results for any production. Whether you are running large or small production batches, cut thin or thick sheets, this series will deliver optimum results 24/7.

With a top cutting speed of 150 m/min, positioning speed of 180 m/min, acceleration up to 3G, and fiber laser power from 1 to 30 kW, the eVision systems are ready to take your shop's production to the next level.



MACHINE MODEL	[um]	1530	2040	2060	2560	2580	3080	25120	25160	30120	30160
X-AXIS	[mm]	3060	4060	6060	6060	8070	8070	12090	16110	12090	16110
Y-AXIS	[mm]	1540	2040	2040	2540	2598	3098	2598	2598	3098	3098
Z-AXIS	[mm]	100	100	100	100	150	150	150	150	150	150
MAX. SHEET WEIGHT	[kg]	1000	1600	2400	3000	9600	11520	14400	19200	17280	23040
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MACHINE MODEL	[um]	1530	2040	2060	2560	2580	3080	25120	25160	30120	30160
LENGTH	[mm]	10000	11200	14000	14000	22550	22550	31330	41000	31330	42000
WIDTH	[mm]	3080	4100	4100	4750	4500	5000	4500	4600	5770	5900
HEIGHT	[mm]	3060	3060	3060	3060	2700	2700	2750	2800	2850	2900
WEIGHT	[t]	18	22	36	39	66	72	144	287	177	395



## COST EFFECTIVE

### **Benefits:**

- Made for 24/7 automation
- Flexible range of material thickness
- Cost-efficient technology
- Intelligent design to minimize footprint on floor space
- Reduced maintenance and services required

- Reduced energy consumption
- Easy to operate
- Easy and fast turnaround
- Flexible configurations and options to fit any budget
- Best performance and reliability on the market

The eSmart series presents the most cost-effective machines, designed with efficiency and reliability at the core. It requires little floor space but deliver great results.

With cutting speeds of up to 100 m/min, acceleration up to 2G, and fiber laser power of 1 to 10kW, the eSmart series provides precision, efficiency, and value.

## eSmart **MAXIMUM SPEEDS AXIS PARAMETERS** 100 [m/min] 0,03 maximum cutting speed repetitiveness [mm] parallel to the X, Y, Z axes [m/min] 120 cutting precision [mm] 0,1 simultaneously 0,001 [m/min] 170 min. programmable leap [mm] **SPECIFICATIONS**

MACHINE MODEL	[um]	1530	2040		
X-AXIS	[mm]	3060	4070		
Y-AXIS	[mm]	1540	2098		
Z-AXIS	[mm]	100	100		
MAX. SHEET WEIGHT	[kg]	1000	3200		
MACHINE MODEL	[um]	1530	2040		
LENGTH	[mm]	10000	11570		
WIDTH	[mm]	3080	3016		
HEIGHT	[mm]	3060	2240		
WEIGHT	[kg]	18100	22100		

## INNOVATION Ideal Machine Concept

## INNOVATION STARTS FROM INTUITION.

The ideal laser machine is powerful, fast, and reliable. This means it can produce more in less time, with less maintenance and less energy consumption.

At Eagle, we reinvented technology through constant research and innovation, which led us to create a better work environment with intelligent, ergonomic design on each part. We select only the highest quality materials for all our components which then work interconnectedly to achieve the best performance.

Our goal is to provide our clients with the highest efficiency, faster turnaround, lower cost per part, and maximum flexibility in processes, materials, and thicknesses. All this through state-of-the-art machines that are ready to operate at full accuracy 24/7.

We made our vision a reality.

BODY CONSTRUCTION: FOR RELIABILITY:

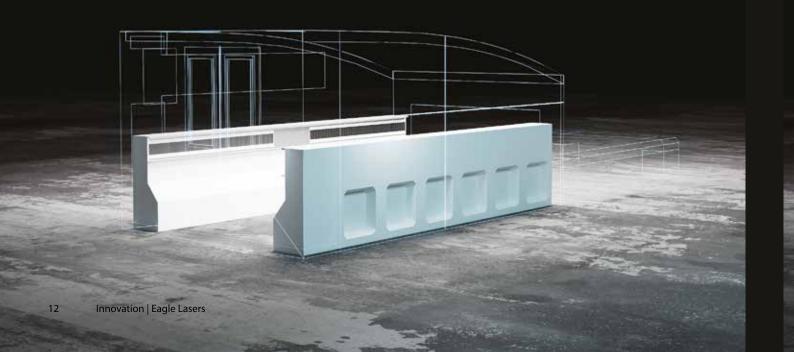
100 x higher vibration damping factor than steel

10 x lower temperature coefficient

Made for high dynamics

Highest stability

• Built through a green process



### LINEAR MOTORS ON ALL AXES:

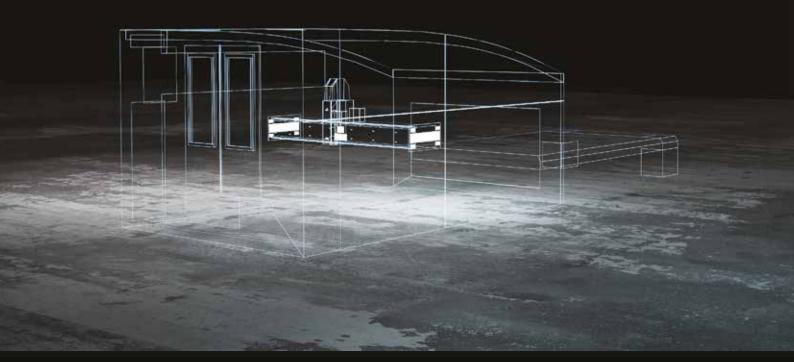
Highest acceleration FOR SPEED ·

Made for precision with 100% stability

- High performances with no frictions
- No maintenance required

Reliable 24/7

Top accuracy at high speed and power

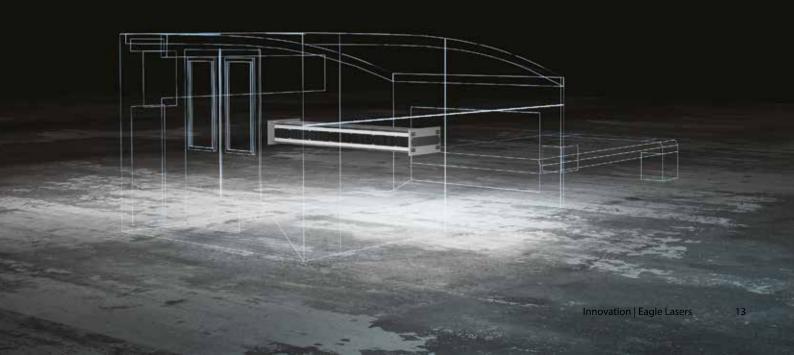


**CARBON FIBER TRAVERSE:** FOR ACCURACY: Highest stiffness and strength for great accuracy Lightweight construction for the highest speed

Temperature resistance

Long-lasting and hard-wearing material

Damping vibration for stability



ENCODERS: FOR RAPIDITY:

Immediate start in less than 15 seconds

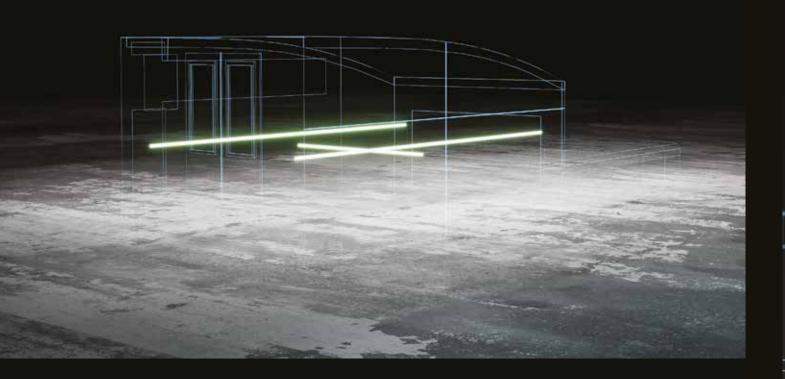
Built for speed and acceleration

100% Control of the dynamic motion

Great accuracy down to 1 nanometer

High reliability

• Wear-free and contactless



PALLET CHANGER: FOR DYNAMICS:

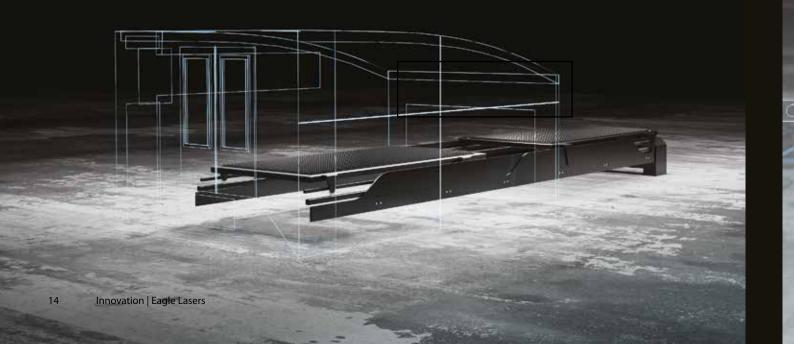
9-second pallet exchange

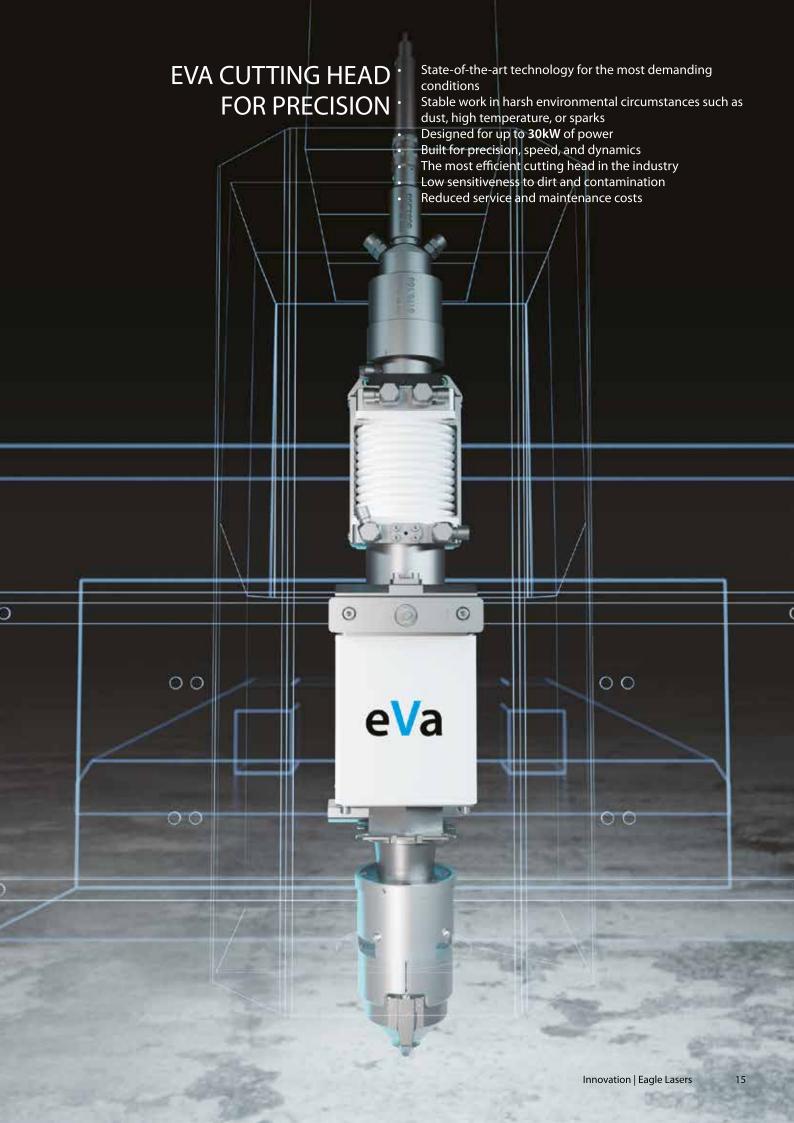
Made for productivity adding hours of work a week

Safe and easy 3-side access

Ergonomic design

• Designed for full automation





FIBER LASER SOURCE: FOR POWER ·

IPG Photonics for low energy consumption

Flexible workflow for thin to thick material

Higher accuracy

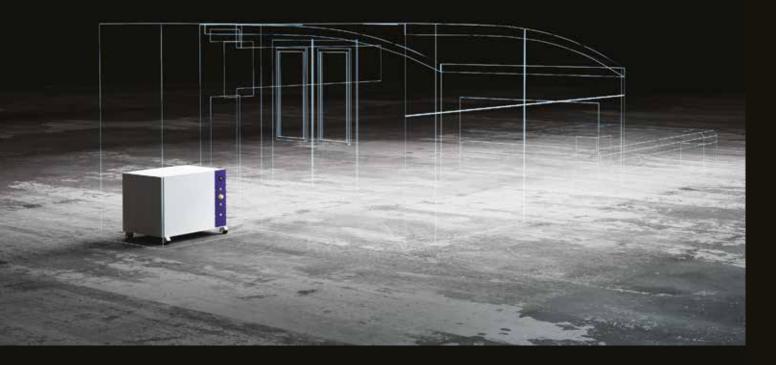
Power under control with lightning speed

Reduced cost per part with the highest quality

Reduced operating costs

Higher productivity

50% more efficient



MULTI-CHAMBER EXTRACTION:

Enhanced security and safety for the operator

Less risk of contamination

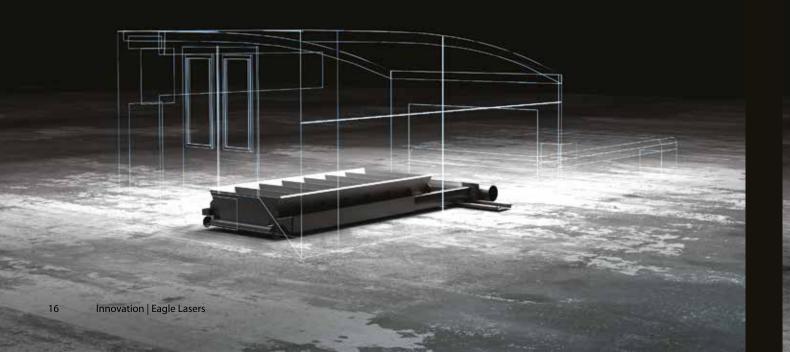
SYSTEM:

Complete control and easy maintenance

Improved extraction efficiency

**FOR SECURITY** 

Fully integrated with the Eagle Lasers control system



### **CONVEYOR BELT TRANSPORTER:**

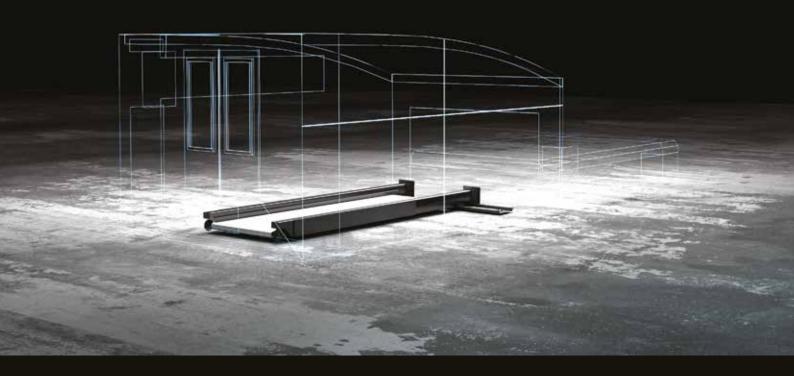
Better quality of cut parts

Greater machine throughput and faster cycle times

FOR QUALITY: Higher quality with no micro joints

Higher efficiency

Reduced downtime operations



Intelligent compact design

Reduced floor space

DESIGN : FOR ERGONOMICS :

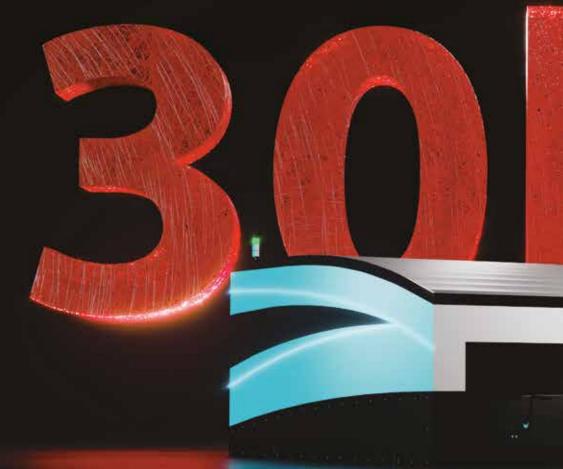
Ready for automation

Easy access for maintenance

Built with the highest quality components on the market



# **POWERYO**



### **ENHANCED EFFICIENCY**

Today we deliver the fastest and most reliable fiber laser cutting system on the market. With controlled 30kW power, decreased production time, less energy consumption, and, lower cost per part, we provide a new level of productivity and efficiency.

## ON THE MARKET

Your profit is of crucial value. Let the numbers speak for themselves and see how your cost per part decreases to a minimum by increasing efficiency and productivity.

## HIGHEST RETURN ON INVESTMENT

We are changing the industry by providing continuous innovations. Through a system with the highest power and efficiency we have set a new standard in productivity and cost-effectiveness.

# UR FUTURE



### **REDUCED PIERCING TIME**

Our engineers work every day to improve our technologies. In the 30kW machine, piercing time has been reduced to a minimum in order to ensure the highest effectiveness and uninterrupted operation.

## EXCELLENT CUTTING QUALITY

Our goal is to empower our customers and provide them with high-class standards. Because innovation is in our DNA, we constantly improve and perfect all aspects of our cutting technology.

## BEST CUTTING HEAD IN THE INDUSTRY

Our patented eVa cutting head, built for high powers, can cut different types of materials and thicknesses with the same accuracy. Its unique construction lowers operating costs and allows the machine to run smoothly throughout the whole production shift.

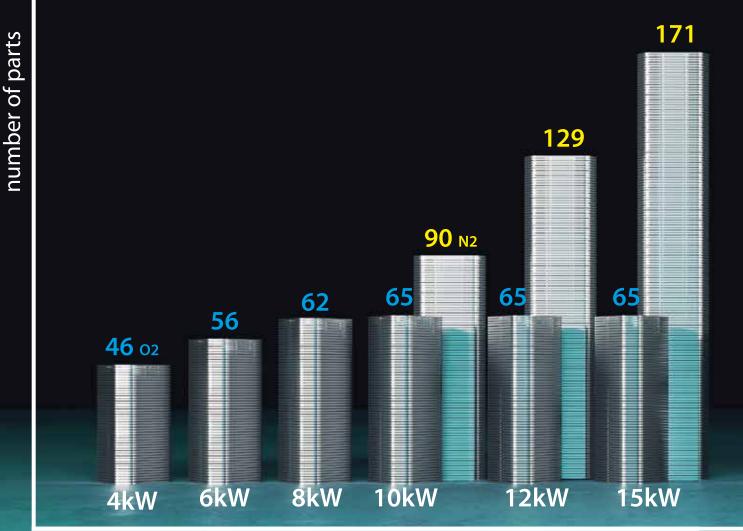


**MATERIAL SHEET THICKNESS** 

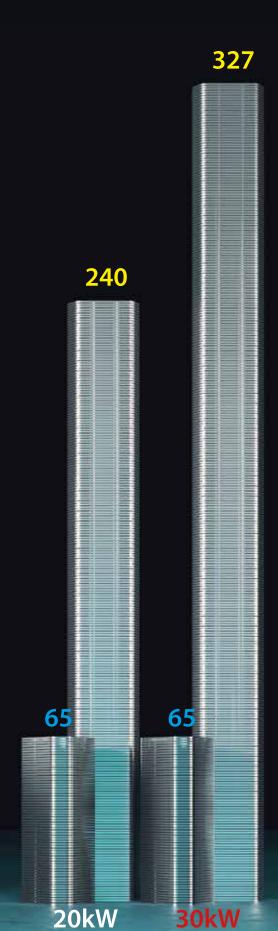
**CUTTING LENGTH** 

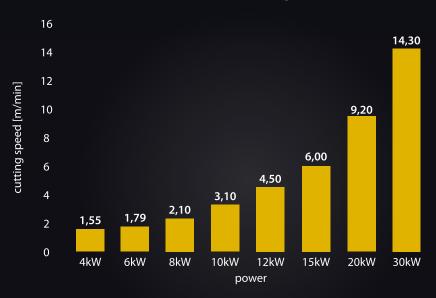
**MILD STEEL 12MM** 210mm X 287mm

1975mm



### Production cutting speed





#### Profit per part ■ Profit per part [EUR] ■ All cost per Part [EUR] 2,50€ 0,33 0,61 0,64 1,13 1,48 1,65 1,82 1,95 2,00€ 1,50€ 1,00€ 0,50€ 1,37 0,68 2,17 1,89 1,86 1,02 0,85 0,55 0,00€ 4kW 6kW 8kW 10kW 12kW 15kW 20kW 30kW power



### THE FUTURE STARTS NOW

Technology

## THE FUTURE STARTS NOW!

The benefits of Industry 4.0 are clear: increased efficiency, more safety and precision, and decreased costs, energy consumption, and waste.

Industry 4.0 translates to intelligent automation and smart networking of machines and processes through information and communication technology. By building this intelligence into the assets that we design and produce, we capture and leverage industry 4.0 data to monitor, analyze, optimize and maintain it throughout the lifecycle from design to decommissioning. THISallows us to achieve the balancing act between profitability, asset health, and efficiency. At Eagle Lasers, we believe in enhancing productivity through efficiency, creating a better and safer environment for our clients, reducing CO2 emissions and energy consumption because the **future starts now!** 



#### eSoft

eSoft is CAD/CAM software especially dedicated for sheet metal processing machines. Its features and intuitiveness allow for effortless operations on laser, plasma, or waterjet cutting machines. With eSoft, programming has never been easier, not to mention its quick cost estimation, real-time production control and planning ability. By choosing eSoft, be sure that you are getting the best possible performance and productivity.



#### eRis

Ergonomic, fast and easy to use, the eRis is an award-winning HMI (human machine interface) standard in all Eagle fiber laser cutting machines. A whole new level of usability and human interaction, with revolutionary design and great new functionalities thanks to the machine integrated touch screen.



#### eRs Cloud

The eRs Cloud is a modern reporting system that allows unlimited possibilities to optimize your productivity by creating a direct report of the activities and practices of the laser cutting machine. Optimize your productivity, make your own best practice.



### **Drop&Cut**

The patented Drop&Cut module makes efficient use of material remnants, even when they are irregularly shaped or presents several of holes and gaps. In addition, Drop&Cut allows you to quickly produce one part right at the machine, using the touch screen without the need to create a new NC file. For a fast turnaround, as simple as drop and cut!



### **Drop2Cut**

Drop2Cut is made to minimize waste and downtime. The Drop2Cut option offers an identical functionality to that of the Drop&Cut but for the cabinet pallet outside. Thanks to a second video camera that visualizes the external pallet, it is possible to simultaneously cut a given program inside the machine while the operator uses Drop2Cut to place and program on the pallet outside the machine.



### **MixLine**

MixLine significantly increases the quality and speed of the cutting technology. A peripheral device developed by Eagle Lasers engineers automatically changes the cutting technology between three gases (oxygen, nitrogen, and oxygen/nitrogen mixture). The results are increased throughput, speed, and reduced burr.



### **CatLine**

CatLine allows the highest quality cutting on thick stainless and aluminum sheets and exceptionally quick burns on all thick sheets. It also improves quality and accuracy on piercing, and cutting small contours for high thicknesses in any position. CatLine enables a 20% increase of thickness with the same laser power, improves thick sheet cycle time by up to 50%, delivers high-quality edge up to 40% and 80% less burr on aluminum and stainless steel. Top level accuracy for consistent results.



### **FastLine**

FastLine is made for fast cutting of thin and medium sheets up to approximately 6mm. It includes the **FlyCut** function that keeps constant cutting speed while piercing, thus reducing part cycle times on repetitive patterns for thicknesses up to 6mm. The **FastLine** function improves cutting and piercing efficiency of thin and medium sheets (up to 12 mm) by 30%.

### **PRODUCTIVITY**

### **Automation**

### eTower 1

A single storage tower equipped with a loading station and universal shelves that can be used for raw material as well as for cut parts and remnants. Thanks to its compact construction it optimizes storage space and stock control.

### **TECHNICAL DATA**

type	no. of towers	no. of shelves	sheet dimensions [m]
eTower 110	1	10	1,5 x 3; 2 x 4; 2 x 6
eTower 115	1	15	1,5 x 3; 2x4; 2x6
eTower 120	1	20	1,5 x 3; 2 x 4; 2 x 6

### LoadingUnit

The LoadingUnit system automatically loads metal sheets onto the pallet changer. It is fully automated and integrated into the machine, and significantly optimizes the material handling process while reducing operation time and production costs.

### **TECHNICAL DATA**

cycle time	from 55s
max. sheet size	1,25m x 2,5m; 1,5m x 3m; 2m x 4m
max. sheet	25mm

### eTower 2

It is a two-tower warehouse system that can be equipped with a different number of shelves in accordance to customers' requirements. It optimizes intralogistics processes regarding storage and material preparation and reassures high storage density.

### **TECHNICAL DATA**

type	towers	shelves	sheet dimensions [m]
eTower 110	1	10	1,5 x 3; 2 x 4; 2 x 6
eTower 115	1	15	1,5 x 3; 2x4; 2x6
eTower 120	1	20	1,5 x 3; 2 x 4; 2 x 6

### CraneMaster

Its functionality includes the loading and unloading of material and cut parts. Thanks to the highly efficient cycle time of the process and simultaneous loading and unloading, it ensures a secure sheet supply and upgrades cost-effectiveness.

### **TECHNICAL DATA**

cycle time	from 65s
max. sheet size	1,25m x 2,5m; 1,5m x 3m; 2m x 4m; 2m x 6m
max. sheet	25mm



## **ORIGINAL SPARE PARTS**

### **ORIGINAL SPARE PARTS – ALWAYS ON TIME**

We provide our customers with the most efficient laser cutting systems and we know how important it is to maintain the continuity of the production process. To ensure this, our spare parts warehouse is always well-stocked and prepared for unforeseen situations. You can rely on our qualified staff to help you choose the correct part and make sure that it will be delivered quickly so that your Eagle laser cutter can run at peak performance with the least interruptions.





## **TECHNICAL SUPPORT**

### **TECHNICAL SUPPORT – YOUR RELIABLE PARTNER**

At Eagle Lasers, your productivity is our priority. We are committed to providing comprehensive service and support to maximize your machine's effectiveness.

Our experts ensure that you select the suitable Eagle laser machine and options to meet your specific needs. Upon delivery, we provide fast installation and commissioning, and by training your personnel we guarantee that you realize the full potential and capabilities of your Eagle laser. Thanks to the design, components, and construction, our systems require minimal maintenance. Your staff may perform 99% of maintenance procedures without having to call a service technician.

Eagle Lasers offers full service, online diagnostics and remote assistance for common minor issues.

### **WARRANTY SYSTEM**

### **WARRANTY SYSTEM - SAFETY & FULL MACHINE EFFICIENCY**

At Eagle Lasers, we provide you with the highest possible safety when using your laser cutter. We deliver full warranty support and an unlimited number of working hours for all the machine components, including laser source, cutting head with optics, and optical fiber. You cut, and we guarantee complete machine efficiency!

#### **CHOOSE YOUR OPTIMAL PACKAGE**

We know that every company is different and has individual needs, which is why we prepared five warranty packages, designed for each type of enterprise. You can select the most suitable one for your requirements.