

WINGS

#2 / 2023-2024

OPTIMIZATION AS A PHILOSOPHY



**What Power and Attributes to Evaluate
Before Choosing a Machine**

Customer Success Story
Synergies in Metal: **Gantech's Journey
with Eagle's Fiber Laser Technology**





EVOLUTION IS REVOLUTION

Evolution is solving challenges.
Revolution is doing it differently.
We changed the way we cut.

FLOVIN



World Premiere at  **EURO BLECH 2024**, Hall 13, Stand F242.

eaglelasers.com

EAGLE: SHAPING THE FUTURE

The coming of age of our company is a symbolic moment that not only makes us reflect on our achievements but also provides an opportunity to consider our future goals. Over the last 18 years, we have consistently pursued innovation and introduced new solutions, ensuring our machines remain the best and fastest on the market. At the beginning of our journey, we did not expect such significant success. Initially, we dreamed of building one laser cutting system, which we thought would be our main business. However, our ambitions grew with our success. After achieving this goal, we aimed to produce one laser per quarter, then one machine per week, and now we aspire to have ready-made machines leaving our facility every day. Our past success, combined with our ability to continually evolve and adapt to changing market conditions, gives us confidence that we can achieve these goals.



JANUSZ MARCIN EJMA
EAGLE CEO



With pride and gratitude, Eagle Lasers celebrates its 18th anniversary. This special moment prompts us to reflect on the path we've traveled and rejoice in our achievements, made possible by our hard work.

Over these 18 years, our company has undergone many transformations. The growth of our team and our continuous market expansion are a tangible testament to the quality of our product; they represent the trust in Eagle and the success stories of every customer, business partner, and employee.

Looking to the future, we approach new challenges with enthusiasm and optimism. We are ready to continue our mission of providing innovative solutions that meet our customers' expectations and align with the dynamically changing market.

LIDIA WOŹNICA
EAGLE COO



T rue success is not just about reaching the peak but about the journey to get there. Our team has achieved a lot in recent years, but I believe our best days are still ahead. While we can look back with pride, the most exciting part is what awaits us in the future.

From the very beginning, we have emphasized innovation and continuous development. It is this approach that has brought us to where we are today.

Our commitment to seeking new solutions and technologies has allowed us not only to survive but also to thrive in the market. Our determination to pursue technical excellence enables us to face the future with optimism and confidence, ready to meet the challenges of the ever-evolving world of technology.

TOMASZ WOŹNICA
EAGLE CTO

8

CONQUERING MEDIA

- ISMR: The High-Fives of Fiber Laser
- STAL: Eagle's Vision for Industry 5.0 Elevating Manufacturing Through Human-Centered Design
- Lamiera: The Five Elements
- Rivista Di Meccanica Oggi: The Benefits of Investing in High Power
- MM Magazyn Przemysłowy: Eagle Lasers is on Tour Once Again!
- Stal: The Success of Polish Technology in Global Markets

22

EAGLE IN A NUTSHELL - PRESS RELEASES

- Eagle Lasers unveiled the New iNspire 2.0 at Blechexpo 2023 in Stuttgart, Germany
- Eagle Lasers Successful Global Annual Summit in Turin, Italy
- Eagle CEO Marcin Ejma Featured in Forbes Poland
- Employee of the Year: Marcin Masternak

28

SUCCESS IN THE SPOTLIGHT - EAGLE CLIENTS

- VOSSE
- GMB
- GANTECH

36

WE'VE BEEN FLYING HIGH

- What Power and Attributes to Evaluate Before Choosing a Machine
- Reliability and Automation as Drivers for the Iberian Market
- Fiber Laser Technology and Automation Trends in the UK Market
- Eagle Laser – Disrupting Plasma and Punch
- Get to Know Peter Kramer as He Takes Leadership of Eagle Scandinavia
- Ivo Pasqualini: Selling Sheet Metal Fiber Cutting Machines
- How to Improve Efficiency in Your Shop
- The Future of Laser Cutting Technology in the DACH Region: A Projection for the Next 3-5 Years

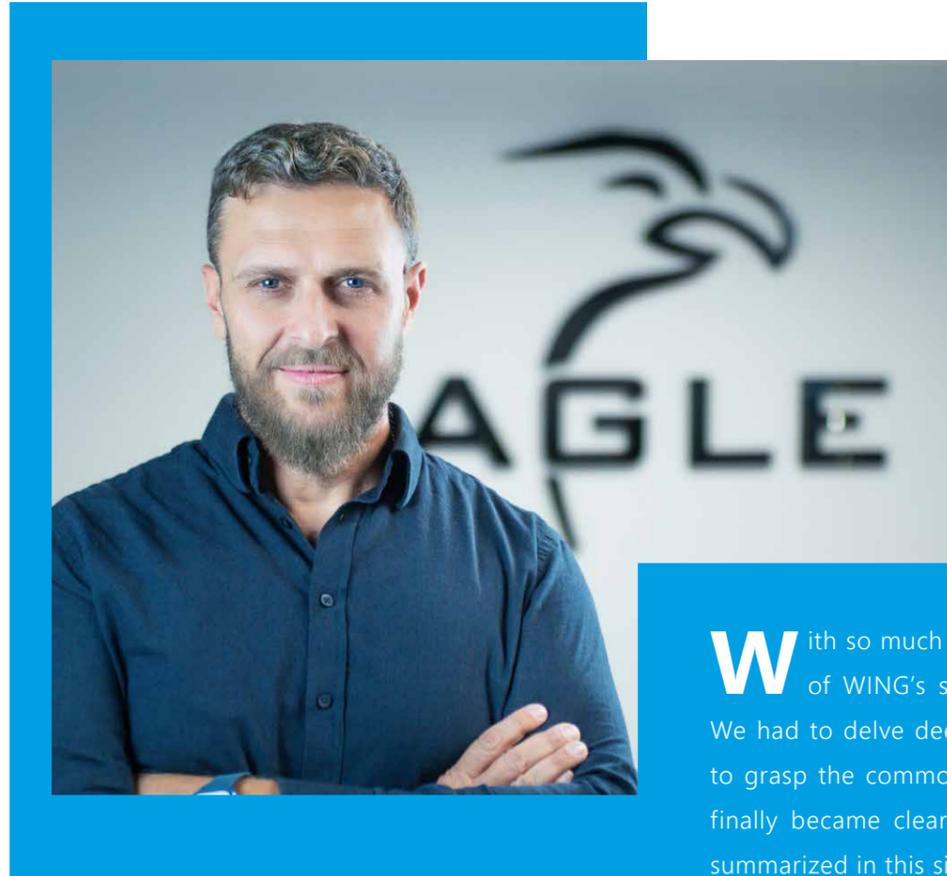
59

EAGLE LASERS - EAGLE TEAM

- Joanna Hałas
- Sławomir Duda
- Magdalen Klimaszewska
- Marek Czarnecki

68

EAGLE LASERS - CONTACT DETAILS



With so much to share, capturing the essence of WING's second issue was no easy task. We had to delve deep into the core of its contents to grasp the common thread of every story until it finally became clear. Our collective efforts can be summarized in this single word: **optimization**.

Optimization, as a philosophy, involves taking an integrated approach to maximize efficiency, sustainability, and quality. This encompasses both technological advancements and human contributions, which together create a lasting competitive advantage.

Optimization is at our core. It's who we are and stands as a beacon that motivates us to make a meaningful impact.

We hope you enjoy the reading journey!

CAMILLO BRENA
Marketing Director

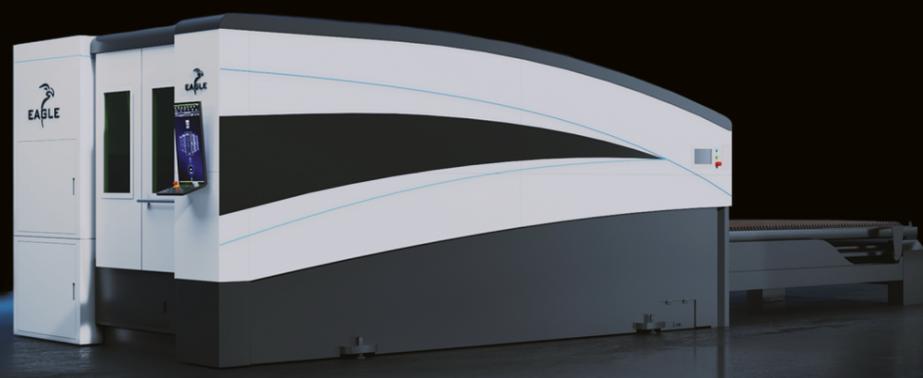


Can the Best get Even Better?
Of course!

New

iNspire 2.0

Powers up to **40kW**, acceleration up to **6G**.
 The highest performing fiber laser system,
 now even stronger.



Faster. More flexibe. More efficient.



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CONQUERING MEDIA

- ISMR: The High-Fives of Fiber Laser 9
- STAL: Eagle's Vision for Industry 5.0 Elevating Manufacturing Through Human-Centered Design 11
- Lamiera: The Five Elements 13
- Rivista Di Meccanica Oggi: The benefits of investing in high power 15
- MM Magazyn przemysłowy: Eagle Lasers is on tour once again! 17
- STAL: The Success of Polish Technology in Global Markets 19

CONQUERING MEDIA

ISMR

THE HIGH-FIVES OF FIBER LASER

Eagle's High-Five concept takes center stage in a four-page article published on ISMR. Camillo Brena speaks at length about the quest to attain high performance, usability, reliability, productivity and profits.

In today's industrial landscape, where efficiency and productivity are paramount, fiber laser technology has emerged as a game-changer. Its widespread adoption is fueled by technological advancements, enhanced reliability, reduced space requirements, simplified operation, and lower energy consumption compared to its predecessors.

Undoubtedly, companies that embrace fiber laser technology stand to gain significant advantages. However, making an informed decision about adopting a fiber laser cutting system in 2023 requires careful consideration of several key aspects. These considerations are not limited to specific industries and can be applied broadly to all metal cutting companies.

In this article, we will explore the five main aspects to contemplate when evaluating fiber laser systems before making a purchase.

"The first aspect to consider is High Performance", says Camillo Brena, Marketing Director at Eagle. "The interplay between laser power, motion dynamics, and automation is pivotal for achieving optimal productivity and efficiency in laser-based applications. It is only through their

collaborative action that we will achieve the highly sought-after peak performance."

The laser industry is currently experiencing a remarkable surge in power levels, with machines now capable of outputting up to 40 kilowatts (kW) of laser power. This exponential increase is expected to continue escalating in the foreseeable future. Traditionally, material thickness has served as a reliable indicator of the required laser power; the thicker the material, the more power needed to cut through it effectively. However, the landscape has evolved beyond this simplistic metric.

"While the allure of these impressive power figures remains undeniable, it is essential to recognize that 'brute force' alone is not enough. Without precise control and proper application, it could yield counterproductive results," continues Brena.

The integration of power with dynamics, precision, and automation is the key to unlocking the full potential of laser technology. For instance, investing in a high-wattage laser machine without addressing its motion dynamics can lead to suboptimal productivity.

According to Brena: "A laser system must be capable of precise and rapid movements to fully exploit its power potential. Conversely, a machine with remarkable speed but a slow material exchange process will waste that speed and won't reach its maximum productivity."

With the pressure to deliver orders faster, better, and at a lower cost, manufacturers must consider a broader spectrum of factors, including production volume, growth rate, and market demands. Due to the increasingly varied nature of order types and sizes, adaptability is gaining considerable importance and is seen as an investment in future competitiveness, as it allows manufacturers to cater to diverse customer needs and market trends.



Scan to read full article

CONQUERING MEDIA

STAL

EAGLE'S VISION FOR INDUSTRY 5.0

ELEVATING MANUFACTURING THROUGH HUMAN-CENTERED DESIGN

Eagle had a significant presence at BLECHEXPO 2023, where it showcased the enhanced iteration of the flagship iNspire 30 kW fiber laser cutter.

In response to the growing challenge of attracting and retaining highly skilled talent in the industry, manufacturing is increasingly channelling its technological advancements towards the creation of cyber-physical collaborative systems.

Bartosz Krzewina, Sales Director at Eagle, explains, "One of Eagle's core machine design philosophies is centered on optimizing the human experience. By adopting the operator's perspective, we've identified opportunities to improve various aspects and significantly reduce cycle times. This approach has been the driving force behind our extensive project to overhaul both the control panel and human-machine interface (HMI)."

Eagle, a Polish manufacturer, has placed a strong emphasis on ergonomics and user-friendliness. Krzewina states, "We've introduced a new 24-inch Full HD vertical screen that enhances work vision, readability, and access to essential functions. Furthermore, our intelligent touchscreen can recognize specific hand gestures, enabling shortcut commands for operators."

Precision takes center stage with dedicated panel buttons for head movement along the x, y, and z axes, allowing for simultaneous operation. Another notable addition is the step potentiometer, providing accuracy down to 5 units. Context-illuminated buttons change colors according to the machine's status and are active only during the corresponding mode, thus reducing errors and enhancing operational security. The operator login now uses a Personal RFID Card that can also be integrated with specific customer safety systems for extra security. Finally, the upgraded HMI

"We've introduced a new 24-inch Full HD vertical screen that enhances work vision, readability, and access to essential functions. Furthermore, our intelligent touchscreen can recognize specific hand gestures, enabling shortcut commands for operators."
- Bartosz Krzewina, Sales Director at Eagle

seamlessly integrates with MyESP, Eagle's Service Portal, which allows the operator to dispatch service requests directly from the machine.

Krzewina reveals, "We're thrilled to introduce 'Eagle Eye,' our new remote fault detection system. This marks a significant advance in process safety, offering swift error diagnosis and correction. Safety is paramount in sheet metal manufacturing, not only does it prevent machine downtime but also avoids valuable material from being wasted due to unnoticed errors."

Bartosz also shared insights into Eagle's sustainability efforts. "The path towards sustainability is no longer a choice but a necessity. Our R&D efforts are dedicated to reducing environmental impact through energy efficiency and regeneration. We're currently developing a new

braking system that enables energy recycling, aligning with our commitment to more eco-friendly operations."

Visitors to BLECHEXPO had the opportunity to explore the Eagle iNspire with all aforementioned features and top-of-the-line parameters such as 30kW power, acceleration up to 6G and 9-second pallet exchange plus the latest version of the eVa cutting head. Also exhibited at Eagle's booth was the CraneMasterStoreCrossExtended automation system, alongside the eTower115. The latter is a modular solution designed to maximize productivity in reduced floor space that can expand through additional loading and unloading points.

In the picture: Jarosław Golebiewski (Research and Development Employee) operating the iNspire (Black Edition) cutting machine at BlechEXPO 2023.



CONQUERING MEDIA

LAMIERA

THE FIVE ELEMENTS

Typology and thermal properties of materials, nature and prerogatives of the process gases used; focal length from the head and speed, are the main factors to be taken into consideration when preparing to cut a metal sheet: technology is a support, as long as you know how to make use of it.

In the world of laser cutting, setting the right parameters is crucial for achieving precision and efficiency, particularly when dealing with varying material thicknesses and machine power levels. In this article for the Italian magazine Lamiera, Gregorio Rocca, Technical After Sales Manager at Eagle Italia, highlights the five fundamental elements necessary for optimization: material type and thermal properties, process gas, focal length, cutting speed, and laser power. These elements must be carefully calibrated to ensure high-quality cuts, especially when external factors like sheet vibrations or variations in alloy quality come into play.

As laser power increases, the ability to adapt and fine-tune these parameters becomes even more critical. Gregorio likens this process to driving at high speeds—just as a driver must know when to slow down for a sharp turn, a laser operator must adjust parameters dynamically to maintain cutting quality. A common challenge in this process is the formation of melted material droplets on the cut edges, which occurs when cutting speeds exceed 8-10 meters per minute. To prevent this, operators need to precisely modulate power, frequency, and speed, particularly when working with thicker materials at higher power levels.

Eagle's CNC/interfaces are equipped with advanced features designed to optimize cutting parameters and enhance overall efficiency. One such feature is the Piercing Control System (PCS), which addresses the delicate piercing phase. PCS swiftly transitions from piercing to cutting, minimizing the risk of damaging the worktable and maintaining material stability. Another feature, the Cutting Control System (CCS), monitors the cutting process, detecting interruptions and repeating operations if necessary to ensure flawless results.

The Cutting Control System (CCS), monitors the cutting process, detecting interruptions and repeating operations if necessary to ensure flawless results.

In addition to these systems, Eagle's MyEMIX technology offers significant improvements in cut quality by mixing nitrogen and oxygen to reduce slag and burr formation. This technology is particularly effective on thicker carbon steel sheets, where it dramatically decreases burr size, enhancing the smoothness of the cut edges.

Looking to the future, the introduction of 30 kW laser machines marks a significant milestone in the industry, though their adoption is still growing. Innovations are increasingly focused on enhancing machine dynamics, sorting, and automation to support continuous 24/7 operations. One ongoing development is a new version of the Cutting Control System, designed to automatically adjust cutting parameters to achieve the best possible results.

As the sheet metal processing market evolves, manufacturers are facing demands for greater flexibility, with machines required to handle diverse materials and quickly transition between different programs. Additionally, sustainability is becoming a key consideration, driving the development of energy-saving features like Eagle's brake energy saver, which will regenerate energy during machine slowdowns, contributing to lower emissions and reducing resource consumption.

This combination of advanced technology and sustainability-focused innovations is setting new standards in the laser cutting industry, ensuring precision, efficiency, and environmental responsibility.



Scan to read full article (Italian)



CONQUERING MEDIA

RIVISTA DI MECCANICA OGGI

THE BENEFITS OF INVESTING IN HIGH POWER

Rivista Meccanica Oggi explores the advantages of investing in high-power fiber laser cutting and emphasizes the crucial role of motion dynamics for maximizing the returns on this investment.

Technology for fiber laser cutting is constantly evolving. This constant search for the next frontier is part of the DNA of companies like EAGLE, one of the first to believe in power. Power alone, however, is not the only evolutionary asset of this technology.

The perfect laser-cutting machine combines: power, speed and reliability, generating more output in less time and requiring less maintenance and energy. Power, speed and reliability must be thought of as a single organism and not as independent entities, otherwise there is a risk of forgoing many of their benefits. They need to "think" interconnectedly, as an intelligent and dynamic network, synchronized for better performance.

When Eagle Lasers was born in 2006, its goal was to ensure unparalleled efficiency. The concept of the "ideal machine" has always guided the company's development. But what does "ideal" mean and how does it translate into profit for those who would invest in fiber laser cutting solutions?



The benefits of high-power lasers.

Around the world, more and more companies are discovering the benefits of high powers. Eagle Lasers is a pioneer in this area, having first introduced lasers from 6kW, to 15kW, later 20kW and finally 30kW.

Laser power is organically proportional to productivity. Studies conducted by various companies have shown how it is a harbinger of numerous benefits and greater efficiency. However, it is not just a matter of "muscle", the cutting system must be designed to take full advantage of all its benefits by incorporating several advanced components, such as special optics, efficient cooling systems, and a proper fume extraction and vacuum system, to ensure a safe and clean working environment. The same applies to the choice of assisting gas used.

One such study led Eagle to evaluate on its machines the practical effects of different powers associated with the use of oxygen and nitrogen. Cutting 12mm-thick mild steel and using oxygen as the assist gas we see that the benefits stall reached 10 kW, while if we use nitrogen the progression is vertical, reaching +400% at 30 kW. In this study a market value was assigned to the piece produced of €2.50 so that costs and profits could be calculated. Taking into account all production expenses (gas, electricity, labor, etc.), the profit per piece increases by 500% between 4 kW and 30 kW (from €0.33 to €1.95).

A machine as fast as a jet.

The flagship of the Eagle fleet, the 30kW iNspire model, supports cutting up to 150 m/min, maximum positioning speed of 350 m/min, and dynamic acceleration up to 6G (Air Force pilots are trained to withstand linear acceleration up to 9G). This is a machine that represents a real quantum leap in the field of metalworking.

Acceleration and motion parameters are optimized to ensure reduced cycle times, enabling faster production and greater overall efficiency. High acceleration and deceleration allow for easy cornering, minimizing scrap and increasing throughput. A 10 kW laser can cut 5mm material at about 15 m/min, five times faster than CO₂ lasers. A 20 kW laser can go to 27 m/min and a 30 kW laser to 40 m/min.



CONQUERING MEDIA

MM MAGAZYN PRZEMYSŁOWY

EAGLE LASERS IS ON TOUR ONCE AGAIN!

After the success of last year's iNspire the World Metal Tour, Eagle Lasers embarked on another tour with its 30kW laser cutting machine. Like a rock star, the machine takes center stage worldwide, showcasing not only its laser cutting power but also its above-average efficiency.

Metal Tour 2023

Italy, Finland, Germany, and Spain were just a few of the countries visited during last year's iNspire laser cutting tour by Eagle. This year, the manufacturer from Wałcz, located in the West Pomeranian Voivodeship (editor's note), has decided to take once again its flagship iNspire machine on the road. This time, in addition to revisiting Germany, Italy, and Spain, the cutter will also tour Portugal and the USA.



In the picture (from the left): Marcin Czajor (Head of Sales for Poland), Marcin Bartosiak (Product Quality Management), Damian Kowalski (Sales Specialist), Jacek Baran (Key Account Manager), Magdalena Klimaszewska (Event Manager)

Star on stage

What's behind this rock concept? As Magdalena Klimaszewska, Marketing Leader at Eagle, explains: "The iNspire laser cutting machine is our flagship product, the star of our portfolio. When we were brainstorming the concept for this campaign, we immediately associated the high-power 30kW iNspire with a rock star taking center stage. After all, it's a metal-cutting machine, and sparks fly when it performs! The events included in the tour comprise both industry fairs and open days organized by subsidiaries of Eagle or its official distributors. During these events, visitors have the opportunity to participate in live cutting demonstrations, engage in meetings with laser industry experts, explore the secrets of Eagle's fiber technology, and obtain detailed information about the company's offerings."

Polish premiere

"The first stop of this year's Metal Tour was the STOM-LASER fair in Kielce. During this event, the Polish premiere of the iNspire 30kW laser cutting machine took place, which had previously debuted on the international stage during the BlechExpo trade fair in Stuttgart. Eagle appeared in Kielce after a long hiatus and captured the attention of this year's visitors. The interest in our machine exceeded our wildest expectations, with many people visiting our stand during all four fair days, engaging in interesting conversations, and exchanging experiences. We would like to express our gratitude to our guests for

the warm reception of the 30-kilowatt iNspire machine. We received many positive remarks regarding both the quality and speed of the cutting process, which is particularly gratifying as these comments come from our Polish audience," says Klimaszewska. "Adding to our delight was the honor of receiving the Fair Gold Medal for the iNspire laser cutting machine, as well as an award for the design of our exhibition stand."

The route is in full swing

After the success in Kielce, the Polish manufacturer's machine continued its journey, making a stop in Barcelona, where Open Days were held at Supraform - the official representative of Eagle in Spain. Next, the iNspire cutting machine traveled to sunny Italy, showcasing its cutting capabilities to the Italian audience during the Lamiera trade fair in Milan. What's next? The Metal Tour includes a few more stops. In May, the machine will be displayed for the German audience during Open Days at the company's showroom near Stuttgart. Portugal and the Exponor trade fair in Porto, Fabtech Chicago in the USA, and Germany again at the BlechExpo trade fair are also on the list. However, the company does not rule out the possibility of adding new, additional locations throughout the year where it will be possible to see their most powerful laser-cutting machine.

Scan to find out more about
Eagle Metal Tour 2023

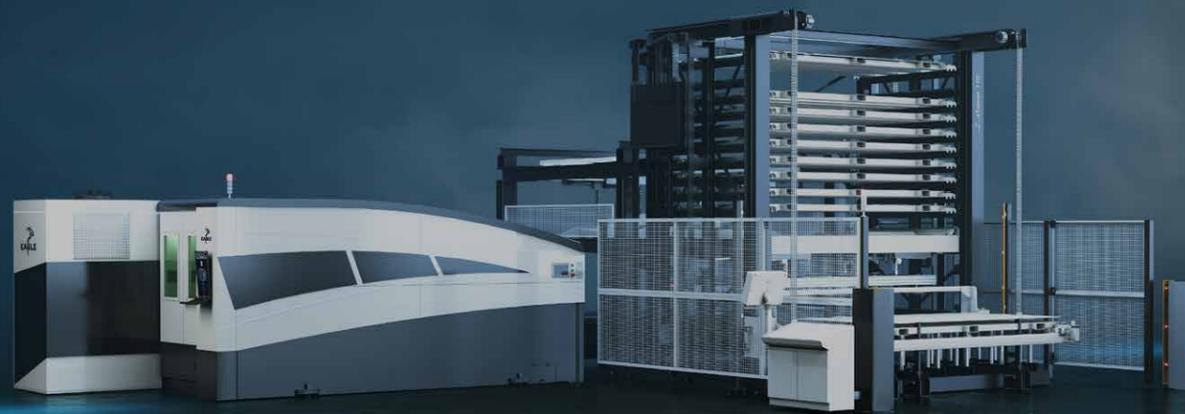


STAL

THE SUCCESS OF POLISH TECHNOLOGY IN GLOBAL MARKETS

In the face of rapid technological advancements in the laser cutting industry, Marcin Ejma, founder and CEO of Eagle Lasers, shares his unique insights on the transformations, innovations, and key trends shaping the future of this dynamic sector.

In the photo: Eagle eVision with Crane Master Extended Tower Store



The last 18 years of Eagle Lasers' presence on the market have witnessed significant changes, not only within the Polish market but also across the global industry. How has the laser cutter production industry evolved during this time?

First and foremost, it is worth emphasizing that the development of the laser cutting industry has always been characterized by a dynamic pace. One of the key milestones in this development was the replacement of existing CO2 and plasma cutting technologies with fiber lasers. Previous technologies had numerous limitations and drawbacks, many of which fiber technology addresses, solving them to a significant extent, approximately 70-80%. A fiber laser, even with the same power as a CO2 laser, consistently achieves higher speeds and consumes fewer gases, irrespective of the type and thickness of the sheet metal being processed. They are more efficient and utilize up to 70% less energy. We were among the first globally to recognize the potential of this new technology and its applicability in laser cutting machines. Undoubtedly, the adoption of fiber technology has revolutionized the laser cutting industry.

The work of the R&D department has a generally positive impact on innovation and the Polish economy. Can companies count on adequate support in the field of research and development activities?

Yes, but I would not say that the scope of this support is adequate for the real contribution that this sector makes to the economy. Since the beginning of 2016, it has been possible to take advantage of R&D relief and deduct part of the expenses incurred for these activities from the tax base. Additionally, companies can rely on EU funds in the form of partial coverage of research and development costs from the Smart Growth Operational Program (Program Operacyjny Inteligentny Rozwój - PO IR).

The scale of support that a Polish high-tech company can count on is incomparable to that in the West. In 2022, Poland allocated €69.4 per inhabitant for research and development, while the EU average is €262.7. Therefore, Polish companies, compared to Western ones, are often in a more difficult situation. This problem does not concern us; we have been on the market long enough, and our financial situation is stable. Last year's financial turnover, which amounted to approximately PLN 330 million, gives us a sense of investment security. However, for young, emerging companies, this may constitute a barrier.



Scan to read the full article (Polish)



How does a Polish company compete with Western brands? Has the perception of Polish brands changed in recent years?

We are currently seeing a gradual change. One of the main challenges was to overcome prejudices and stereotypes regarding the Polish brands in comparison to renowned Western brands, such as Swiss, German or Japanese, which have long been associated with quality and reliability.

Previous expectations were that Polish products should be cheaper than their Western counterparts. Nevertheless, in the American market, for example, our company has achieved great success. For them, the product must come from Europe and not China or Asia. However, we had to devote a large part of our work to educating the clients and convincing them that a Polish company can compete and outperform its foreign competitors in terms of quality.



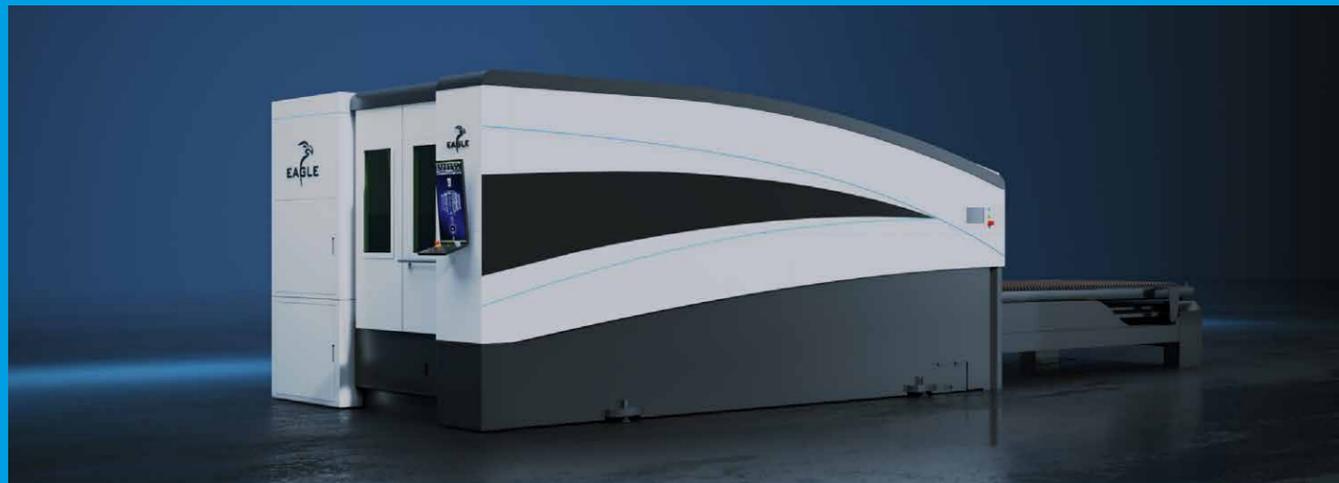
Eagle Lasers: innovating for a 5.0 future

EAGLE IN A NUTSHELL - PRESS RELEASES

- Eagle Lasers Unveiled the New iNspire 2.0 at Blechexpo 2023 in Stuttgart, Germany 24
- Eagle Lasers' Successful Global Annual Summit in Turin, Italy 25
- Eagle CEO Marcin Ejma Featured in Forbes Poland 26
- Employee of the Year: Marcin Masternak 27

EAGLE IN A NUTSHELL

EAGLE LASERS UNVEILED THE NEW INSPIRE 2.0 AT BLECHEXPO 2023 IN STUTTGART, GERMANY



As the grand finale of the iNspire The World Metal Tour, Eagle introduced an upgraded version of its top-of-the-line fiber laser cutter at this year's most anticipated sheet-metal cutting event: BlechExpo. The industry's leading trade show took place from November 7th to 10th at Messe Stuttgart and received over 40,000 visitors from around the globe.

Since its inception, the iNspire has embodied the pinnacle of innovation, featuring peak parameters and unparalleled cutting speed. However, innovation can always reach new heights, and the iNspire keeps pushing boundaries.

"The New iNspire 2.0 has user experience at its core. It's faster and more ergonomic for the user and features a series of new technologies such as Eagle Eye, the latest version of our patented eVa cutting head, and an all-new operating panel. Our innovations have been carefully designed to increase productivity and speed up workflow

through improved usability, reliability, and performance, which inevitably result in increased profits," commented Camillo Brena, Marketing Director at Eagle Lasers.

Alongside the New iNspire 2.0 fiber laser cutter, Eagle showcased its proprietary automation solutions: the CraneMaster and eTower loading/unloading and storage systems designed for seamless integration with the laser cutter. These flexible systems optimize material handling through modular, space-saving configurations, allowing for 24/7 productivity, even during night shifts and weekends.

"The advantage of having automation and a machine by the same manufacturer is that we guarantee the perfect match. What the machine can cut, the automation can handle in terms of sheet size, material type, volume, and speed," adds Brena.

EAGLE IN A NUTSHELL

EAGLE LASERS' SUCCESSFUL GLOBAL ANNUAL SUMMIT IN TURIN, ITALY



The event united representatives from around the world, including members from the Italian, German, and Scandinavian subsidiaries, alongside distributors from Australia, Belgium, Bulgaria, Canada, Denmark, Finland, Hungary, Spain, the UK, and the US.

Why Turin? The location wasn't chosen at random, it marked the opening of Eagle Italy's new headquarters, set to host a cutting-edge technology center, featuring the flagship iNspire 30kW 2.0, complete with the latest innovations and automation technology.

Andrea Porta, CEO of Eagle Italy, expressed his excitement, stating, "We are thrilled to open the Italian technology center and, in the near future, showcase the iNspire 30kW 2.0 to the public. We thought it would be fitting to celebrate this milestone with our global family."

The summit served as a platform for reviewing the previous year's achievements and outlining the company's ambitious plans for the future during a two-day event.

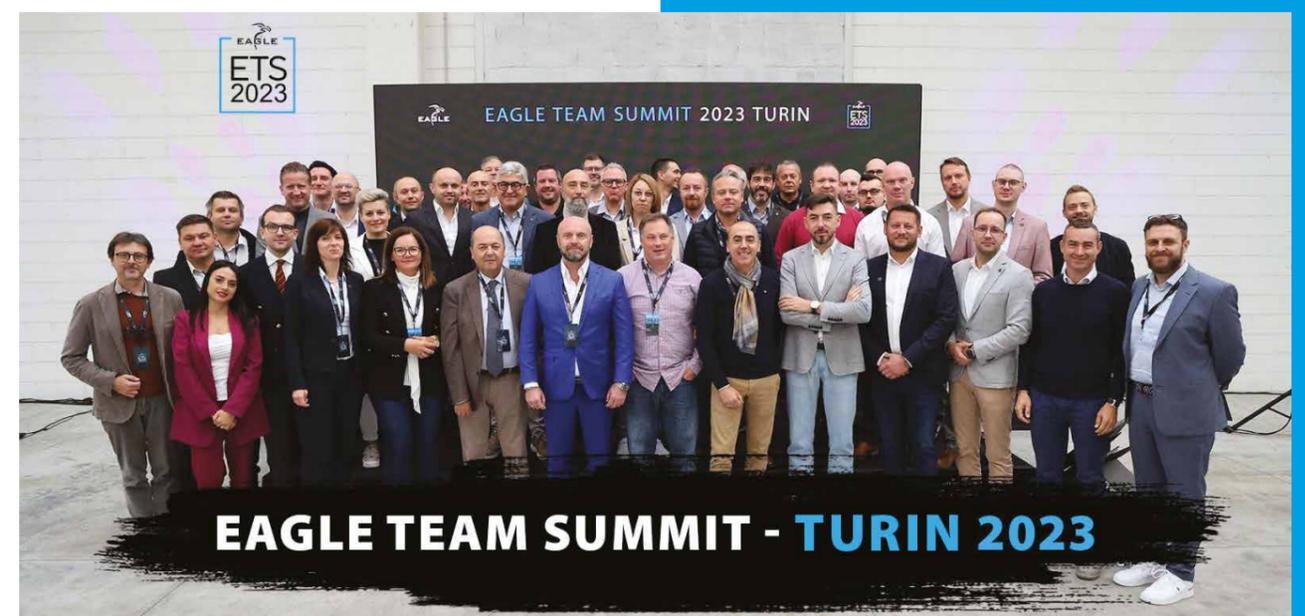
Presentations, round tables, open panels and one-on-one meetings revolved around advancing sheet metal cutting technology with a focus on speed, automation,

and adaptability. The aim is to further optimize machines for continuous 24/7 production with remote supervision.

A significant highlight was the introduction of Eagle Eye, an advanced monitoring system for real-time fault detection during the cutting process, already integrated into the iNspire 2.0, set to debut at the Blechexpo 2023 in Stuttgart. Additionally, a redesigned control panel with enhanced features was unveiled.

CEO Marcin Ejma teased an upcoming product that is set to be a 'game changer' in the sheet metal cutting sector in 2024/25, with further details kept confidential.

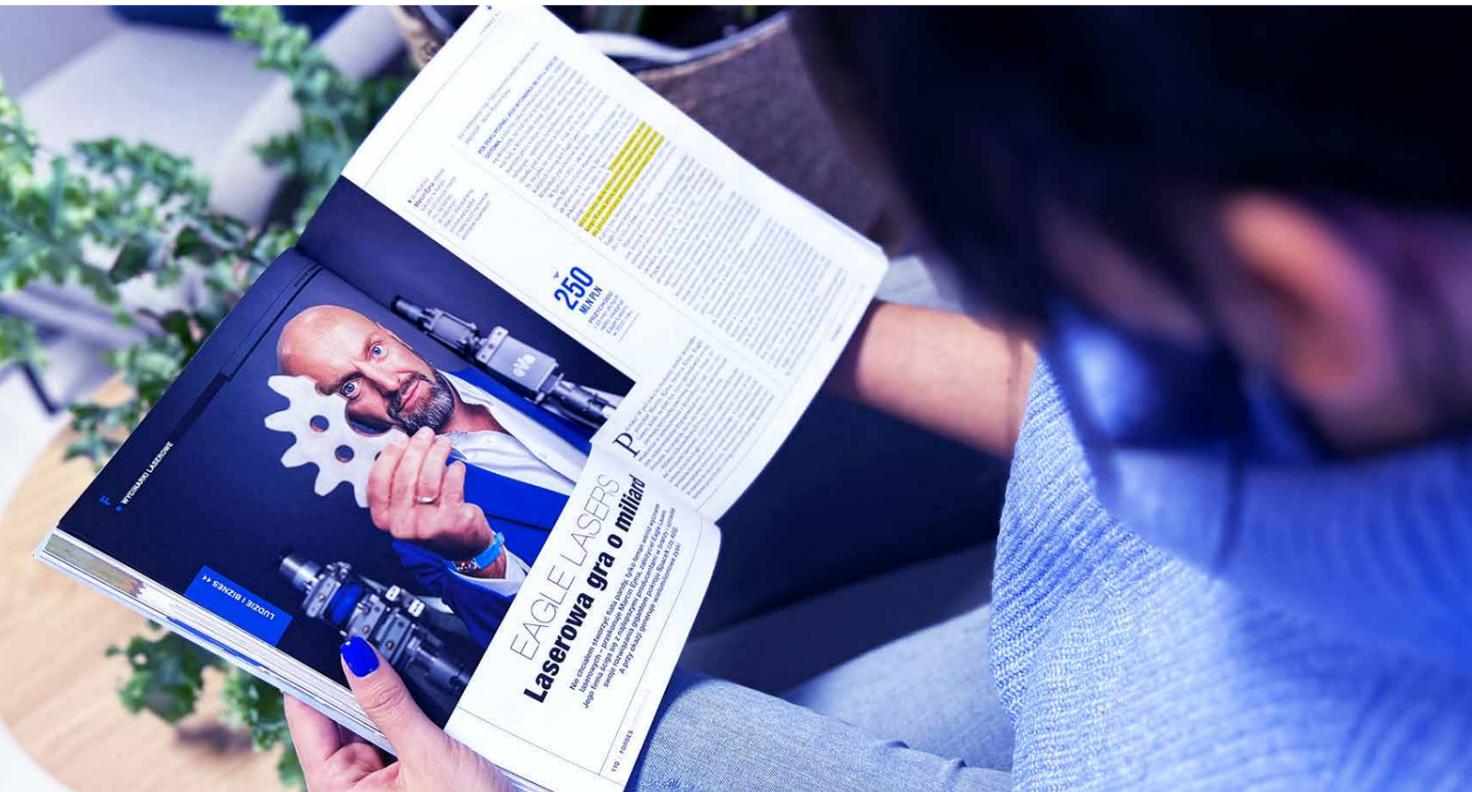
"The opportunity to meet in person allows for a level of connection and understanding that can't always be replicated virtually", says Ejma. **"And the added bonus of hosting our summit in such a beautiful city made it a memorable experience that I hope will be cherished by all the Eagle family."**



EAGLE TEAM SUMMIT - TURIN 2023

EAGLE IN A NUTSHELL

EAGLE CEO MARCIN EJMA FEATURED IN FORBES POLAND



In an interview titled 'Eagle Lasers: A Billion-dollar Laser Game,' Marcin Ejma took us back to the inception of his remarkable career. Initially a mechanical engineering graduate, he worked as a waiter in London and later gained experience at his father's company, where he learned the fundamentals of entrepreneurship. In 2006, Marcin established Eagle Lasers. However, as the article notes, "Rome wasn't built in a day," and neither was Eagle. The company started by trading spare parts and selling used and new machines. Nevertheless, this wasn't enough for Ejma. After two years, he decided to manufacture his laser cutters. Studying the trades of the game, the world of components, power sources and software, he chose the perfect timing to launch his own product. It was the dawn of the fiber laser era and Eagle grasped the benefits from the get-go, designing the entire machine to exploit this technology.

Seventeen years have passed. Today, Eagle not only produces fiber laser cutting machines but also offers automated material handling solutions. The company has established branches in Germany, Scandinavia, and

Italy, exporting products to 27 countries through its official distributors, and competing with the world's top-tier fiber laser fabricators.

"Our core argument should be the efficiency of our machines. That's why we decided not to be the cheapest manufacturer but the best," said Ejma.

Eagle's continuous expansion and its established reputation are a reflection of Marcin's vision. He doesn't need to convince anyone about the quality of his products. This is best evidenced by his client list, which includes, among others, SpaceX, ABB, and Mubea, the world's largest manufacturer of automotive components.

"I find fulfillment as an entrepreneur, I enjoy conquering mountains," Marcin told Forbes. **"As long as I can do this, I intend to keep pushing forward."**

EAGLE IN A NUTSHELL

EMPLOYEE OF THE YEAR: MARCIN MASTERNAK



Marcin Masternak,
Key Project Director

During our annual Christmas Eve celebration, amid festive spirits, Eagle's Board of Directors proudly announced **Marcin Masternak** as the Employee of the Year. Marcin, our esteemed Key Project Director, has been an integral part of the Eagle family since 2011, showcasing 13 years of unwavering dedication and commitment to our company's growth. His exceptional efficiency and leadership earned him this well-deserved recognition.

Marcin Masternak received this recognition thanks to his team's exceptional performance. Their work in numerical machining and programmable control systems is globally recognized for aligning with the latest trends and technologies, earning accolades from our customers.

Marcin's standout qualities extend beyond his professionalism in the field. His remarkable personal culture and exceptional team management skills distinguish him. His ability to motivate and inspire colleagues is a cornerstone of the CNC/PLC department's success.

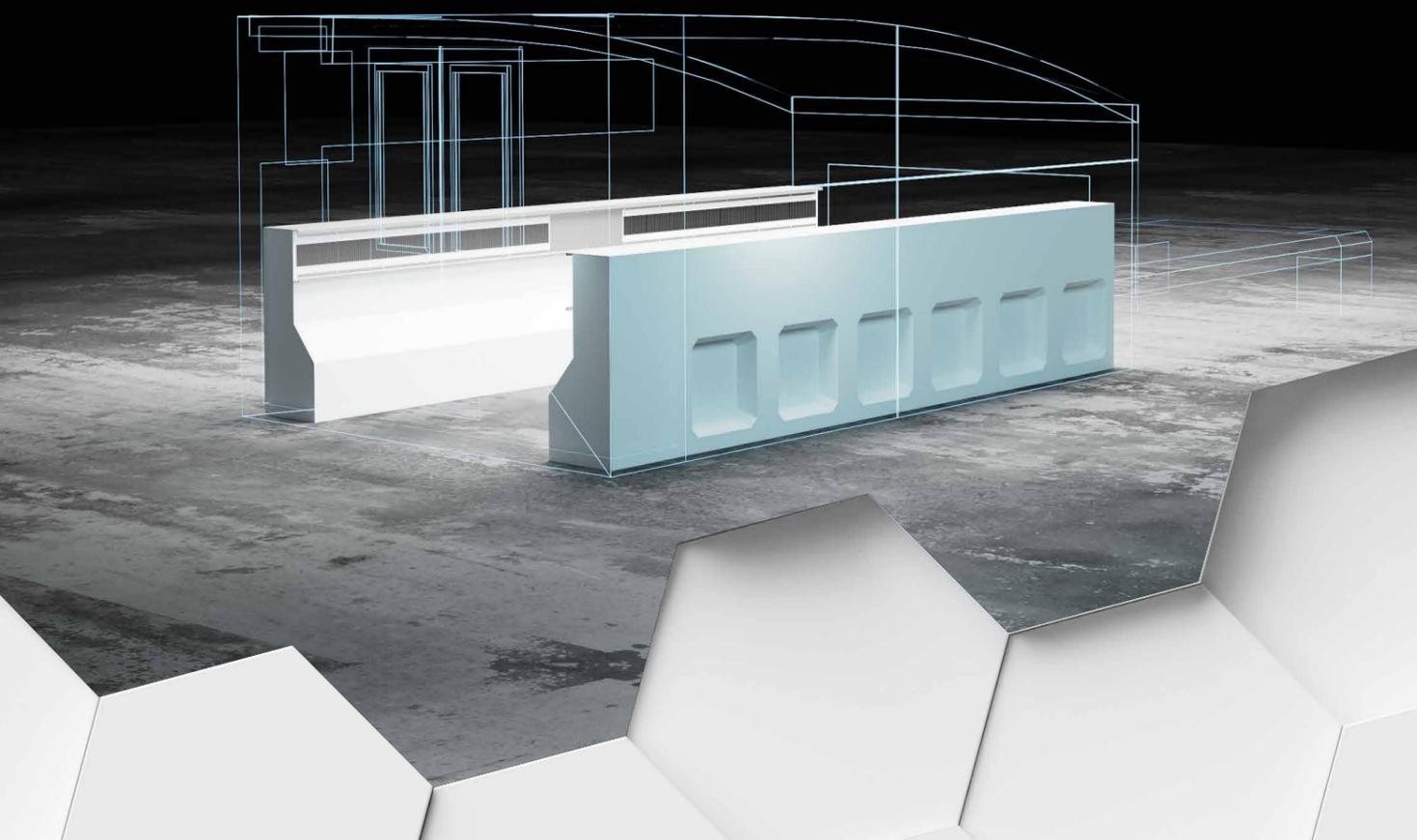
In addition to Marcin Masternak's recognition as Employee of the Year, we also honored other outstanding employees for their achievements in 2023.

Rafał Wilczynski, our Research & Development and Quality Control Manager at the time (today Production Director), received acknowledgment for optimizing quality control processes and establishing key departments.

Jacek Baran, our Regional Sales Manager (today: Key Account Manager), was commended for his stellar sales performance and professionalism, significantly contributing to our market success.

Piotr Malinowski, Head of the Assembly Department, was recognized for his exceptional work commitment and organizational skills, which are integral to our assembly efficiency.

Congratulations to all awardees! We deeply appreciate your dedication and eagerly anticipate many more years of fruitful collaboration and success at Eagle.



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Machine beds made from mineral casting stand for maximum precision. We achieve this with our holistic all-round service for precision grinding. In the RAMPF Precision Grinding Center, our experienced experts produce ultra-precise machine beds and components on two high-precision machines in a fully climate-controlled environment.



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SUCCESS IN THE SPOTLIGHT - EAGLE CLIENTS



Scan to discover all our Customer Success Stories!

- **VOSSE:** Unlocking Autonomy and Growth: The Impact of Laser Cutting Technology in Metalworking 29
- **GMB:** Leading the Way in Sheet Metal Processing with Cutting-Edge Technology 31
- **GANTCH:** Synergies in Metal: Gantech's Journey with Eagle's Fiber Laser Technology 33

SUCCESS IN THE SPOTLIGHT

UNLOCKING AUTONOMY AND GROWTH: THE IMPACT OF LASER CUTTING TECHNOLOGY IN METALWORKING

VOSSE: A History of Excellence

Vosse's story begins with the deep-rooted legacy of the Wandtke Group, founded over three decades ago by Mieczysław Wandtke. Following his father's steps, Kamil Wandtke took over the already successful business and established Vosse.

Since then, the company has constantly evolved by investing in new technological solutions to offer a wide range of steel products based on certified quality management systems.

With more than 30 years of experience, 1,800m² of production space, and over 300 clients, Vosse provides steel structures for the construction and automotive industries to meet the highest level of quality required by its customers around the world.

A Quest to Gain Process Autonomy

As Vosse's scope of services widened, the need for greater control and efficiency became evident. Up to two years ago, the company had been outsourcing laser-cutting processes, which led to extended deadlines, increased transport expenses, and more complex logistics.

"It was simple maths; we calculated our annual expenses and contrasted them with those of leasing a laser. Continuing as a cooperative business became impractical. It was high time we bought a laser cutting system." comments Robert Gołębiowski, CEO at Vosse.

In the photo: 6kW Eagle eVision 1530

Having the laser-cutting machine in-house has significantly impacted Vosse's operations. Not only does it provide them with greater control but it also prevents the common time lags associated with external suppliers and allows the company to better adapt to seasonal fluctuations.

"Production is a living organism. It's constantly changing, and when relying on external sources, those changes often meant new orders. That was a huge problem for us", adds Gołębiowski, who also mentions there's a perception factor to be acknowledged when acquiring a new machine:

"A company looks much different having a fiber laser cutting machine in its ranks. It's a modern machine park and this can be decisive for some customers."

Choosing the Right Manufacturer

When the decision to purchase a fiber laser cutter was settled, the time came to choose one suited to the company's needs and requisites.

Vosse evaluated several top-tier manufacturers by visiting trade shows and carefully analyzing machine features but, above all, by performing cutting tests with different devices using the exact same materials and parameters.

When the test was executed at Eagle's headquarters, the cut sample proved superior, and the answer was clear. In Gołębiowski's words:



Watch the full story on Vosse in partnership with Eagle Lasers.

"We made the final decision based on the tests performed at Eagle's headquarters in Wałcz. Additionally, as a Polish company, they aligned with our objective of supporting local businesses."

As for the machine model, one of the primary considerations was the range of sheets the machine could handle. To determine this, they examined their project history and anticipated the type and size of materials to be processed. The highest volume of sheets Vosse processes is 1.5m x 3m; hence they opted for a 6kW Eagle eVision 1530.

The Key to Expansion

Having Eagle's eVision in-house has been a game-changer for Vosse these past two years. By cutting the middleman, they drastically reduced transport costs and logistics issues and were able to start producing what have become some of their most in-demand orders.

"With this modern machine park, our company has transformed, allowing us to operate independently and expand our potential. We have completed new projects involving cutting aluminum scaffoldings; we started producing a variety of smaller steel parts and, thanks to the fiber laser machine, we are now also manufacturing building façade," comments Gołębiowski

Currently, the Eagle eVision operates in two shifts, and Vosse doesn't rule out the possibility of including a third in case the workload keeps growing.

Exceeding Expectations

Even when improved delivery time is considered their eVision's key advantage, performance, usability, and service have been major assets for Vosse.

"The quality and speed exceeded our expectations. The machine is also very user-friendly, and the employees new to fiber laser technology quickly grasped how to operate it. The support provided by Eagle's service team was also commendable, not to mention the organization of the whole process, which was outstanding from the very beginning," says Gołębiowski.

Plans for the Future

Vosse has a clear roadmap for the future. They will expand their production area with a new hall to house all CNC machines and implement a paint shop that will allow them to provide customers with end-to-end, in-house manufactured products.

Product-wise, they will continue to amplify their portfolio by producing their own line of pole cranes, and this might just be the beginning.

The decision to invest in laser cutting technology has transformed Vosse's metalworking operations, enabling faster turnaround times, significant savings, and a broader range of manufactured products.

"At the moment, we don't run laser cutting services, we only use the machine for our production, and it's still heavily loaded. It's satisfying and shows what an accurate purchase this was," adds Gołębiowski.

With a focus on continuous growth and innovation, Vosse remains a leading force in the metalworking industry, leveraging the power of laser cutting expertise to deliver exceptional results.

If growth continues at this pace, they might need a second machine, and as Gołębiowski tells us, their positive experience with the eVision will make that choice an easy one:

"For me, this machine works sensationally well. We haven't had any issues with it, so if I were to consider buying a second laser cutter, it would be Eagle."



ROBERT GOŁĘBIOWSKI
CEO at Vosse

SUCCESS IN THE SPOTLIGHT

LEADING THE WAY IN SHEET METAL PROCESSING WITH CUTTING-EDGE TECHNOLOGY

GMB SRL: Pioneering Sheet Metal Processing Since 1954

Located in the town of Paruzzaro, Italy, by the beautiful Lake Maggiore, GMB SRL has established itself as a leader in the sheet metal processing sector since 1954. Specializing in laser cutting, sheet metal bending, and welding, GMB has accumulated extensive expertise and a reputation for excellence in the industry.

Driven by a commitment to innovation, GMB recently made a significant leap forward by purchasing an Eagle iNspire 20 kW fiber laser cutting machine. This acquisition marks a milestone in the company's journey, unlocking new possibilities and pushing the boundaries of sheet metal cutting capabilities.

Within the GMB production office, meticulous attention is given to every detail. Real-time data is displayed on screens, allowing for comprehensive monitoring of machinery performance, power consumption, and employee efficiency. This level of control and analysis ensures that estimated deadlines are met and maintains the standards that define the GMB brand.

Unraveling the Distinctive Features of the Eagle Machine

"GMB has always strived to acquire machines at the highest technological level because this choice has consistently yielded excellent results" - says **Maurizio Giustina, CEO of GMB SRL**. "What sets the Eagle apart from others in the market? Let me explain. First of all Eagle's cutting head incorporates advanced technical solutions that surpass those offered by other manufacturers. Additionally, the linear motors enable it to achieve remarkable accelerations of up to 6G, positioning speeds of 350 meters, and cutting speeds of up to 150 meters."

With a sprawling covered area of 10,000 square meters, GMB operates a team of around fifty skilled employees, including both direct and indirect staff members.

Their annual sheet metal consumption amounts to approximately 2,500 tons, ranging from 0.5 millimeters to higher thicknesses.

"With our new high-powered machine, we can even handle up to 30 millimeters, although that's not our immediate goal" - goes on Giustina. "The high power of the Eagle machine translates into unparalleled cutting speeds, resulting in significantly reduced production times compared to other machines available today. Furthermore, this high-powered laser cutter enables us to cut even thicker materials using nitrogen. Previously, we were limited to 8 millimeters, but now we can efficiently cut materials up to 20 millimeters. This means that if the cut piece needs to be painted, doing so over an oxygen-cut surface with a mill scale causes the paint to easily peel off. So, if someone wants an effective paint job, they need to perform a sandblasting treatment or some other similar process to remove it."

In the photo: 20kW Eagle iNspire 1530



In the photo: G.M.B S.R.L Headquarters

Meeting Diverse Customer Requirements

Recognizing the importance of reliability and seamless support, GMB prioritized the selection of machinery with reliable assistance. With operations spanning two to three shifts, any downtime would severely impact productivity.

"I am delighted to share that the support we have received from Eagle has been exceptional, ensuring that our machine remains operational and productive".

As the journey unfolds, GMB remains committed to providing unrivaled solutions and meeting the ever-evolving needs of its customers.

"The flexibility provided by this system enables us to meet the requirements of our customers in various materials and thicknesses. That's why they increasingly rely on our company," concludes Giustina.

The future holds limitless possibilities for GMB SRL, as they continue to shape the industry landscape with their innovative approach.



Watch the full story on why GMB has invested in the Eagle fiber laser cutting systems.

MAURIZIO GIUSTINA
CEO at GMB



SUCCESS IN THE SPOTLIGHT

SYNERGIES IN METAL: GANTECH'S JOURNEY WITH EAGLE'S FIBER LASER TECHNOLOGY

Danish Flexibility at its Best

Gantech is a Danish company specializing in the production of parts and total solutions in steel and metal. A subcontractor for a number of industries and active since 1982, the company acquired its current name and ownership in 2004, expanding its premises to a covered area of 8000 m². in the township of Ribe.

As a subcontractor, Gantech is synonymous with flexibility and diversity, producing an ample range of items based on specific requests. Its capabilities cover a wide gamut of metals including mild steel, stainless steel, aluminum, and copper, on thicknesses usually ranging from 0.5 to 40 mm. By providing laser cutting services, as well as processes like deburring, bending, and welding, they ensure precise fabrication according to their clients' specifications.

Bigger, Better, Faster, Stronger

In 2018, Gantech made a strategic decision to transition from CO₂ to fiber laser technology. The switch was prompted by a need for increased speed and cost-effectiveness. Four years later in 2022, and after experiencing the clear advantages of fiber lasers, the time came to upgrade to a new machine, capable of higher performances that would allow them to accommodate a wider variety of orders.

"Facing limited options in Denmark for the availability of lasers with a working field larger than 4 meters, we seized the opportunity to invest in a machine with both a larger working area and a higher wattage. This proactive approach aligns with our commitment to staying ahead of industry demands," said Martin Wollesen, Sales Director at Gantech.

During our quest for the right manufacturer, he continues, our primary concerns were centered around finding a machine that could deliver high speeds and provide us with a big enough cutting table. After extensive research, we discovered that Eagle offered the perfect combination of both. Witnessing an Eagle machine in action solidified our decision, as its overall performance and table exchange speed were impressive.

Gantech opted for an iNspire 2060 fiber laser cutting machine, Eagle's top-of-the-line series, with a 6x2-meter cutting table and 20kW capacity.

The Eagle machine's advantage lies in its swift production turnaround, crucial for our diverse material processing needs. Its flexibility allows us to promptly respond to urgent customer requests, facilitating quick changes in production, adds Wollesen.

"Looking ahead, our confidence in Eagle remains strong, and we would choose Eagle for our next machine as well. I would recommend Eagle to anyone seeking top-notch performances."

- admits Martin Wollesen, Sales Director at Gantech.

Ease of Use and Trust in the Future

"The intuitiveness of Eagle's human-machine interface and its ergonomic design also paid dividends. Our operator, with only six months of laser experience on the previous machine, found the Eagle's learning curve surprisingly easy", continues Wollesen. "The simplicity of the machine's operation and programming played a significant role in his fast adaptation."

The collaboration between Eagle and Gantech is just two years old but looking forward to an extended synergy. "I might not recommend Eagle to my competitors!", admits Martin Wollesen with an earthly laugh. "But to everyone else, yes, without a doubt! Looking ahead, our confidence in Eagle remains strong, and we would choose Eagle for our next machine as well. I would recommend Eagle to anyone seeking top-notch performances."



In the photo: 15kW Eagle iNspire 2060



Watch the full story
on Gantech's Journey.



MARTIN WOLLESEN
Gantech Sales Manager



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WE'VE BEEN FLYING HIGH

- What Power and Attributes to Evaluate Before Choosing a Machine 37
- Reliability and Automation as Drivers for the Iberian Market 39
- Fiber Laser Technology and Automation Trends in the UK Market 41
- Eagle Laser – Disrupting Plasma and Punch 43
- Greater productivity and efficiency with digitized pneumatics 46
- Get to Know Peter Kramer as He Takes Leadership of Eagle Scandinavia 49
- Ivo Pasqualini: Selling Sheet Metal Fiber Cutting Machines 51
- How to Improve Efficiency in Your Shop 55
- The Future of Laser Cutting Technology in the DACH Region: A Projection for the Next 3-5 Years 57

WE'VE BEEN FLYING HIGH

WHAT POWER AND ATTRIBUTES TO EVALUATE BEFORE CHOOSING A MACHINE



What trends do you see in your market or region regarding fiber laser technology and automation systems?

The prevailing trend revolves around automation. A high-power fiber laser is increasingly replacing one, two, or even three CO2 machines. This transition is driven by the need to optimize time spent on emptying pallets or tables. Investing in a high-power fiber laser is essential for maintaining machine efficiency and minimizing downtime for manual tasks. Moreover, this shift towards automation enables the potential for overnight production runs.

What machine parameters are most common in your market? (power, speed, machine size)

Power is a crucial factor as it enables faster cutting speeds and increased output within a shorter timeframe. Additionally, higher power capabilities open up new

RONNI BOHNENSACK
Service Manager of Eagle Scandinavia

“Investing in a high-power fiber laser is essential for maintaining machine efficiency and minimizing downtime for manual tasks.”

possibilities for cutting various materials and thicknesses that were previously challenging. For instance, the high-power Eagle machine effortlessly cuts materials like mild steel S355 J2+N, delivering excellent results.

What are the advantages of Eagle versus its competitors?

Eagle stands out for its superior control over high-power machines compared to competitors. We boast a high dynamic range coupled with formidable power, creating a perfect synergy. Additionally, our machines are characterized by low running costs, further enhancing their appeal in the market.

What are the 3 most important attributes a client should evaluate before choosing a fiber laser cutter?

Onsite Production Analysis: Conducting an onsite analysis of the customer's production environment is essential. This involves understanding the specific parts and materials that need to be cut, as well as assessing the customer's production volume and requirements.

Material Compatibility and Cutting Capability: It's crucial to ensure that the fiber laser cutter is capable of cutting the materials required by the customer. This includes assessing the machine's ability to handle various types of materials and thicknesses with precision and efficiency.

Tonnage and Workload Analysis: Analyzing the tonnage and workload of the customer's operations is vital. This helps determine whether the chosen fiber laser cutter can meet the production demands and maintain optimal performance over time.

What do you predict for the future of laser-cutting technology in your region?

We already have the machine of the future!



WE'VE BEEN FLYING HIGH

RELIABILITY AND AUTOMATION AS DRIVERS FOR THE IBERIAN MARKET

What trends do you see in your market or region regarding fiber laser technology and automation systems?

Since I began 30 years ago, I've been puzzled by the reluctance of many customers to invest in loading/unloading solutions for punching machines. Back then, only a handful of companies had lasers, but a punching machine became essential on every metal shop floor.

Three decades later, it's illogical to purchase any cutting machine without automation. Machine downtime is prohibitively expensive in today's fiercely competitive landscape. Even in countries with lower labor costs, automation investments are prioritized to enhance competitiveness. Typically, bending or welding follows the machining process for a metal part. The proliferation of automated press brakes and welding robots is outpacing growth in other sheet metal machines. Following the pandemic, there has been an extraordinary surge in interest in automated solutions across the board.

What machine parameters are most common in your market?

Since I entered the laser business, approximately 85-90% of machines were 3x1.5m Co2 models with 3-4 kW. Over the past 15 years, larger sizes like 4x2 and 6x2

meters have become increasingly common, with power also increasing to 6-8 kW. With the advent of laser fiber technology, power levels have soared to unprecedented heights, and the dynamics of movement have made our laser machines among the fastest in the world. Now, I don't see any limit to laser power, making automation more crucial than ever before.

What are the advantages of Eagle versus its competitors?

As previously mentioned, our combination of power and dynamics is unparalleled. Just as you can have 1,000 horsepower in a truck or a Formula 1 car, our laser power is integrated into the optimal solution. This includes the stability provided by composite material body, linear motors, absolute encoders, the option for a carbon fiber traverse, and our unique eVa cutting head. Year after year, eVa continues to demonstrate its superiority over other laser heads on the market by a significant margin, setting us apart from our competitors.

What are the 3 most important attributes a client should evaluate before choosing a fiber laser cutter?

Reliability, productivity, and ROI are key considerations for any machine investment. No one wants a machine that requires extensive maintenance to keep up productivity and accuracy. The goal is to maximize production efficiently and cost-effectively. That's why the Eagle laser is the ideal choice for all buyers. We offer an extensive range of sizes, powers, and speeds, matching any competitor, along with the broadest array of automation options available in the market. With an Eagle laser, you can achieve optimal results with minimal hassle, ensuring a solid return on investment.

What do you predict for the future of laser-cutting technology in your region?

We understand that establishing Eagle as a major player in our market will take time, especially as we introduce a new brand into an industry where others have been present for 30 years. However, we are confident that we can be game-changers in this space. With our experience and dedication, we are prepared to support our customers every step of the way, building solid relationships that will last for years to come.



OSKAR SANTIUSTE
General Manager at SUPRAFORM, S.L.

"Following the pandemic, there has been an extraordinary surge in interest in automated solutions across the board."



In the photo: Eagle iNspire 2.0 with Crane Master Store Extended Cross

WE'VE BEEN FLYING HIGH

FIBER LASER TECHNOLOGY AND AUTOMATION TRENDS IN THE UK MARKET

INTERVIEW WITH KEVIN HUDSON

What trends do you see in your market or region regarding fiber laser technology and automation systems?

Fiber technology has seen remarkable advancements over the past decade. Initially recognized primarily for its ability to cut thin sheet metal, it has evolved significantly since its introduction to the market. Today, its capabilities and technological advancements have outpaced those of CO₂ lasers, rendering the old slogan obsolete.

What machine parameters are most common in your market? (power, speed, machine size)

In the UK, a 6kW power output has become the new minimum requirement for most companies. However, to remain competitive in the marketplace, customers typically require a minimum of 10kW.

What are the advantages of Eagle versus its competitors?

Eagle has established itself as the most reliable option in the marketplace. This reputation is attributed to the exceptional build quality of the machine and the advanced technology it incorporates. The eVa cutting head, in particular, stands out as a formidable component. Unlike our competitors' cutting heads, which often struggle to accommodate the power of their machines, the eVa cutting head delivers consistent performance and precision, setting us apart in the industry.

What are the 3 most important attributes a client should evaluate before choosing a fiber laser cutter?

Build Quality: Assessing the build quality of the machine is crucial to ensure durability, reliability, and long-term performance. A sturdy and well-built fiber laser cutter will deliver consistent results and withstand the rigors of

continuous operation.

Service Support and Backup: Consideration of the level of service support and backup provided by the manufacturer or supplier is essential. This includes the availability of technical assistance, spare parts, and maintenance services to minimize downtime and ensure the smooth operation of the equipment.

Affordability of Technology Offered: While considering the features and capabilities of the fiber laser cutter, clients should also evaluate the affordability of the technology on offer. Finding a balance between cost and performance ensures that the investment provides value for money and meets the client's budgetary constraints.

What do you predict for the future of laser-cutting technology in your region?

The future looks promising for Eagle here in the UK. With the interest rate dropping, we're seeing a significant increase in enquiries.



KEVIN HUDSON
Director at PW Machine Services - EAGLE Distributor



"The eVa cutting head delivers consistent performance and precision, setting us apart in the industry."

WE'VE BEEN FLYING HIGH

EAGLE LASER – DISRUPTING PLASMA AND PUNCH

The Eagle iNspire fiber laser has unique and industry-leading capabilities, including its ability to handle ultrahigh laser power exceeding 10kW, the fastest acceleration, and the quickest pallet changer. These features position the Eagle as the most productive fiber laser available today, pushing the boundaries of what this technology can achieve.

When a manufacturer needs to fabricate a part or component from flat metal, they are faced with several machinery options. Historically, for sheet metal with numerous holes and intricate patterns, the preferred process was often a CNC punch press, while thicker plates were typically cut using plasma or oxy-acetylene torches. However, with the advanced capabilities of Eagle Laser technology, today fiber laser has become the preferred process for most of these applications.

Eagle Laser vs Punch

While it's true that fiber lasers like the Eagle can't replicate certain functions of a punch, such as creating 3D elements like louvers or inserting grommets, they excel at cutting flat patterns — a capability historically associated with punches. However, fiber lasers used to be not as efficient at processing intricate parts. Here's a quick list highlighting how the Eagle, the most productive laser available today, outperforms punches for many common applications.

Hole production:

The Eagle's impressive rate of 9 holes per second surpasses many cluster punches. Moreover, it's not limited to just holes; other geometries can be rapidly produced as well. The Eagle's MyEFAST and MyEFLY sheet metal technologies, along with its extended nozzle life, contribute to its exceptional productivity, particularly when combined with up to 6G acceleration.

Thanks to its up to 6G acceleration capability, the Eagle laser can effectively harness 20 or 30kW power even on significantly thinner materials.



CHIP BURNHAM
Author of *MarketMD Your Manufacturing Business*, co-founder of Fairmont Concepts and Fairmont Machinery

Fast "Art to Part":

The time it takes to transition from a DXF file to a finished part on an Eagle Laser is remarkably short, a crucial capability for fabricators.

No tooling required with a laser:

While punches rely heavily on tooling, the Eagle laser eliminates this need. Punch programmers must consider a vast array of tooling options when fabricating a part, whereas, on the Eagle, programmers simply draw the pattern and select the appropriate cutting parameters and ordering sequence.

Rapid job changes:

Eagle laser cutters can switch jobs seamlessly, requiring only a change of material and program. This ease of transition contrasts with punching, which can be challenging unless dealing with highly repetitive parts or employing a sophisticated system with extensive automatic tool-changing capabilities.

Little or no taper:

When utilizing the appropriate power for the thickness being cut, lasers effectively eliminate the "Christmas Tree Effect" commonly seen on the edges of thicker sheet metal with punching. This effect, characterized by taper and subtle stepping marks on punched edges, is significantly reduced or eliminated with laser cutting.

High-speed cutting of long line and arc elements:

The punch nibbles at these geometries.

High-speed etching:

The up to 6G acceleration on the Eagle laser enables quick etching of part numbers and construction lines that are very valuable to fabricators.

Faster material handling:

With a 9-second pallet exchange and 6 to 16 seconds to locate the sheet within the machine, you are almost always cutting metal.

Eagle Laser vs Plasma

Plasma cutting is effective up to a certain thickness, beyond which oxy-acetylene torch cutting is typically employed. While plasma cutting produces a rough and less precise cut compared to lasers, oxy-acetylene cutting is even rougher by plasma standards. Many CNC machines equipped with plasma capabilities also incorporate oxy-acetylene cutting processes. Let's focus on plasma cutting, as it is more prevalent and tends to handle plate thicknesses similar to those handled by ultrahigh-power Eagle lasers.

Plasma machines in fabrication shops are typically large to accommodate the size of the plates being cut, and their operation involves cutting at one end of the table while labor removes parts and skeleton from the other end. These machines are driven by rack and pinion and are considered crude cutting devices. Their motion systems are slow and basic, often lacking bellows protection as precision is not the primary goal. Additionally, speed and acceleration are not optimized, as plasma machines slow down and speed up when negotiating corners.

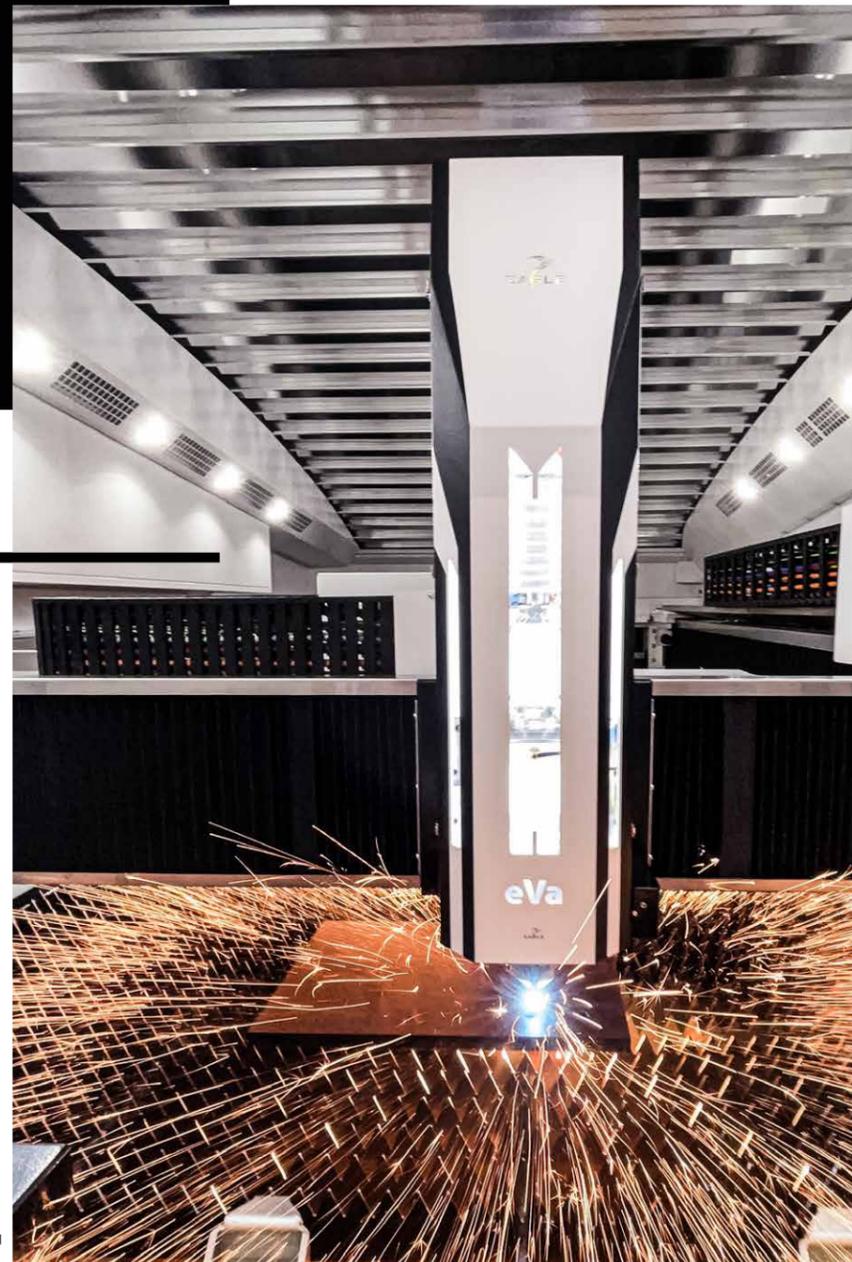
While some plasma machines offer slightly improved precision with helical rack and pinion systems, finished part accuracy remains subpar, traverse speed is slow, and acceleration is more akin to a large aircraft than a nimble hummingbird. Despite these limitations, plasma machines are significantly less expensive to purchase than lasers, and most plasma-cut parts are eventually welded to other parts. Here's a quick list highlighting how Eagle outperforms plasma cutting for many common applications.

Faster cutting speeds:

When comparing 20 and 30kW Eagle lasers to 240 to 280 amp hi-def plasma systems, the difference in cutting speeds is significant. For example, when cutting $\frac{3}{4}$ " mild steel, plasma typically operates at around 45 inches per minute (ipm), whereas the Eagle laser achieves cutting speeds ranging from 130 to 240 ipm.

Lower cost per part:

Although the laser costs more than a plasma, laser processing speed is faster and the operating cost is equal to a normal amp plasma and less than a 400 amp plasma.



Eagle's efficient utilization of power on thinner plates:

Thanks to its up to 6G acceleration capability, the Eagle laser can effectively harness 20 or 30kW power even on significantly thinner materials. This ability ensures that ultrahigh power is not wasted, as the laser head can move swiftly enough to match the cutting speed of the material.

More accurate and repeatable parts:

Eagle laser cuts parts to much tighter tolerance and better repeatability.

Little to no taper and burr:

With the MyEMIX assist gas mixing technology, the Eagle laser delivers exceptional results, exhibiting almost no taper or burr on materials up to 0.8 inches thick with 20kW power and 1.1 inches thick with 30kW power. This high precision allows most parts to be used immediately off the machine without additional finishing unless a rounded edge is required to prevent paint chipping during subsequent powder coating processes.

High-speed etching:

Eagle lasers with up to 6G acceleration can etch part numbers and notes quickly on the plates with little cost impact.

Fewer consumable issues:

Plasma nozzle life is contingent upon the number of "starts" or pierces, with each start causing erosion of both the plate material and the nozzle itself. In contrast, Eagle lasers do not encounter this issue, and piercing, even through a very thick plate, is nearly instantaneous.

Thin material processing:

Unlike plasma, the Eagle's versatility allows the cutting of thin plates at extremely high rates.

Fewer secondary operations:

Better parts mean fewer rejects, less milling to remove taper, and less (or no) grinding to remove the burr.

Less jigging:

Because the Eagle laser cut parts are so accurate, they fit together like a puzzle and reduce the amount of jigging needed when welding.

Large envelope:

Eagle is one of the only laser manufacturers offering standard-product machines up to a 10 x 40-foot cutting envelope. Most plasma shops use plates of 6x12 feet or 8x20 feet (2560).

Material handling automation:

Eagle's productivity is significantly boosted by the swift table swapping feature, allowing for quick removal of cut plates and insertion of fresh ones. Additionally, the large envelope CraneMaster unloading and loading automation streamlines operations by eliminating the need to handle individual large plates manually. This reduces handling requirements, increases throughput, decreases labor needs, and enhances safety in the fabrication shop.

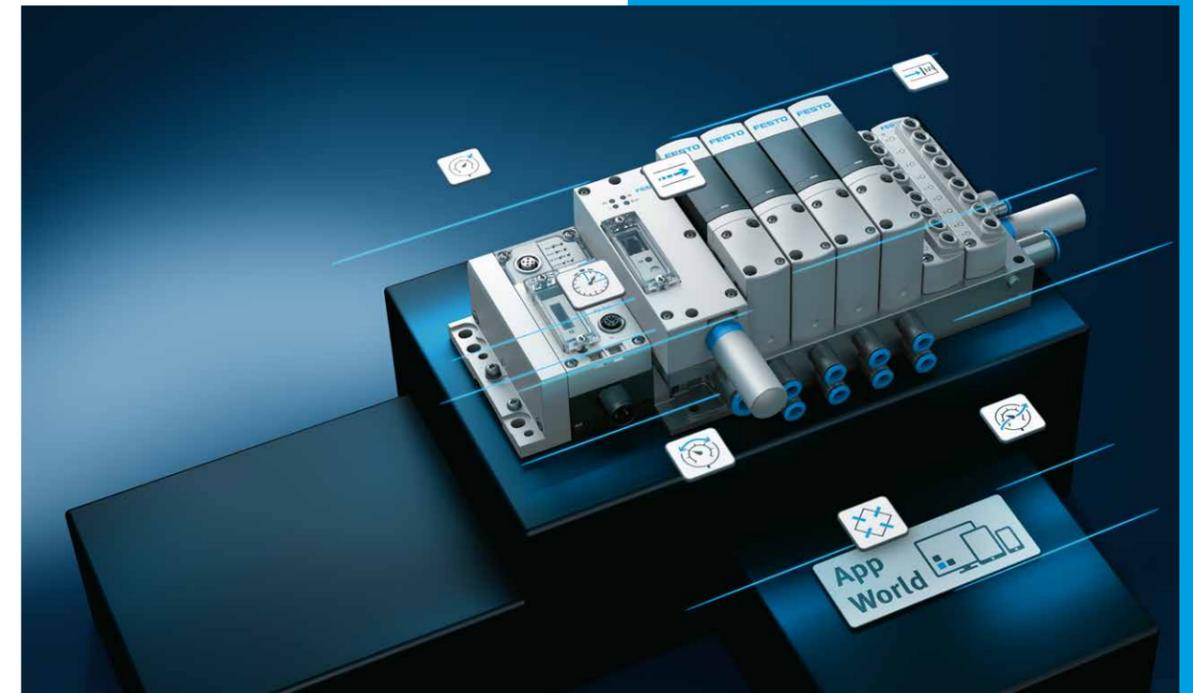
Eagle lasers are uniquely positioned to handle more tasks traditionally assigned to punches and plasma cutters. In each scenario, they extend the thickness range that fabricators can work with, allowing for thicker materials typically cut by punches and thinner materials typically cut by plasma cutters.

This high precision allows most parts to be used immediately off the machine without additional finishing unless a rounded edge is required to prevent paint chipping during subsequent powder coating processes.

WE'VE BEEN FLYING HIGH

GREATER PRODUCTIVITY AND EFFICIENCY WITH DIGITIZED PNEUMATICS

FESTO



Festo's Journey with Eagle

Festo, a leading supplier of pneumatic products and solutions, began its collaboration with Eagle over 12 years ago. At that time, Eagle was already focused on constructing laser cutting machines. Both the engineering and production departments were particularly interested in solutions for distributing and using compressed air for operations involving the lifting and stacking of materials for laser cutting.

With his characteristic visionary approach, Eagle CEO Marcin Ejma always prioritized development and innovation. This shared focus on innovation quickly helped us find common ground regarding the components to be used in the machines.

Festo offered CPX-MPA valve terminals with built-in proportional valves, which expanded the supply zones

and provided the capability to control valves and actuators with different pressure settings.

As technology advanced, so did Eagle's machines and automation systems, requiring new and innovative solutions. One such solution was the VTEM valve terminals, currently used in the construction of Eagle warehouse systems. The VTEM valves are arguably the most advanced on the market, offering a vast array of functionalities that minimize the need for additional components such as pressure sensors or regulators.

Our cooperation with Eagle continues to unfold successfully, and we are proud to collaborate with a Polish company that has achieved such international success, competing among laser industry leaders.

Highly Flexible Pick & Place with Digitized Pneumatics

Quickly activated Motion Apps are revolutionizing pneumatics by increasing flexibility and energy efficiency while accelerating production processes. The Festo VTEM combines digitalization and pneumatics, providing enormous benefits for material handling technology and opening the door to pneumatic positioning.

The Festo Motion Terminal VTEM is shifting pneumatics towards Industry 4.0 through apps that can replace over 50 individual components. Just as the smartphone revolutionized the mobile communication market over a decade ago, the Festo Motion Terminal is set to revolutionize automation technology.

This innovative function integration, combined with software, simplifies the entire value chain, as only one piece of hardware is now required. This means users can execute different tasks with just one valve and operate 16 pressure regulation channels with eight valves.

By significantly reducing the amount of work required from engineering to format change-overs, the Festo Motion Terminal VTEM is, according to experts, a true revolution in automation technology.

Simplifying Pick & Place Applications

With the Motion Terminal VTEM, users can perform all functions in their pick-and-place applications within a single system. There is no longer a need for components like shock absorbers or flow control valves. Since Motion Apps take over many tasks and replace complicated mechanical structures, the design process becomes much easier. Additionally, process data can be read out at any time, allowing users to respond quickly to deviations and ensure consistent quality.

Positioning Using Pneumatics

The Positioning app offers handling experts flexibility when positioning workpieces of different sizes. They can optimize the end-to-end motions for every possible workpiece by precisely defining variables such as motion speed and impact energy at the end position.

With the Positioning app, pneumatic actuators can be freely positioned along the entire working stroke, and cylinder movement can be controlled using limit values for speed, acceleration, and jerk parameters. Gentle positioning is possible for selected series with strokes of up to 300 mm by specifying the limit values.

Pressure and Vacuum Control

Using the "Proportional pressure regulation" app ensures safe transport with a vacuum, as the vacuum level is simply adapted to the weight to be moved. This enables plant manufacturers to increase the energy efficiency of their applications. Changeover times or manual format changes are a thing of the past, as users simply switch over to the parameters they need. The virtually vibration-free travel into the end position with the "Soft Stop" app minimizes wear and shortens cycle times.

Software Instead of Hardware

Thanks to the fast activation of new functions via Motion Apps, machine developers can create a basic machine type using the Festo Motion Terminal and then select the relevant Motion Apps to equip it with different functions and features depending on customer requirements. The ability to copy and transfer parameter sets simplifies planning and saves time. Assigning functions via software also prevents tampering and protects know-how, as it is not possible to determine from the outside which functions the valves are executing. Maintenance is also simplified, as leaks are automatically monitored, making long lists of spare and wearing parts obsolete. With the "Leakage diagnostics" motion app, malfunctions can be detected and pinpointed to a specific actuator via diagnostic cycles and defined threshold values, enabling predictive maintenance.

Get digital. Now!

With the Festo Motion Terminal

FESTO



**You rely on maximum flexibility.
You are looking for intelligent and intuitive solutions.
We are making pneumatics go digital.**

**→ WE ARE THE ENGINEERS
OF PRODUCTIVITY.**

VTEM is the first valve to be controlled by apps and offers the functionality of 50 individual components thanks to the advantages of electrics and pneumatics combined.

→ www.festo.com/motionterminal

WE'VE BEEN FLYING HIGH

GET TO KNOW PETER KRAMER AS HE TAKES LEADERSHIP OF EAGLE SCANDINAVIA

Peter Kramer, an industry veteran with 27 years of experience in service, sales, and management, has been appointed as the new Managing Director of Eagle Scandinavia. Previously serving as Country Manager for DMG MORI Denmark, Kramer brings a wealth of knowledge and expertise to his new role.

In a recent interview conducted at his office in Hobro, Denmark, Kramer shared insights into his journey in the fiber laser sector and his perspective on the present and future of laser cutting technology.



PETER KRAMER
Managing Director EAGLE Scandinavia

Can you share the story of how you entered the fiber laser sector and ultimately joined Eagle?

Since childhood, I've had a keen interest in machines, mechanics, and electronics. I used to enjoy disassembling things, although I didn't always have the expertise to put them back together. As I grew older, I decided to pursue a career as an electrician to learn more about electrical systems. During my apprenticeship, I discovered that I also enjoyed being on the move and interacting with customers. This led me to work as a service technician for a company that specialized in woodworking machinery in Denmark. I spent 13 years there.

Following that, I transitioned to Bystronic, where I spent 14 years. Initially, I started as a field service engineer, and after two years, I shifted to sales. In my final four years with Bystronic, I held the position of Sales Director for Scandinavia.

What unique features set Eagle apart from others in the industry?

Its exceptional product quality and reliability. The company has a mechanically robust product that has continuously impressed me over the years. The power and cutting capabilities of their fiber lasers have consistently increased and delivered outstanding results. Their dynamics, motion and acceleration, are market-leading. One key feature that stands out is the eVa cutting head, which I consider to be outstanding. Its performance and precision are truly remarkable.

How would you describe the Scandinavian market for fiber lasers and what sets it apart from other regions?

The Scandinavian fiber laser market is characterized as mature, with a focus on processing materials up to 50

"One key feature that stands out is the eVa cutting head, which I consider to be outstanding. Its performance and precision are truly remarkable."

millimeters thick, which is thicker on average compared to the rest of Europe.

Companies typically use oxy cut for thicker materials. The cutting quality with oxy machines can vary, sometimes resulting in non-straight cuts. In such cases, water jet machines are often utilized, where high-pressure water mixed with abrasive is used for cutting. However, fiber lasers have distinct advantages in this market. They cut much faster, are less expensive to operate, and offer extremely close cutting quality and precision. With our advanced fiber laser technology, there is great potential for us to make a difference. This technology can bring significant advantages and direct impact to the market.

What advancements or innovations do you see on the horizon for fiber lasers and what are the areas that you think require more urgent attention?

Looking ahead, I envision advancements and innovations in the automation of fiber lasers. Reliable and efficient automation systems will play a crucial role, especially considering the decreasing interest of young people in joining the industry. To make working in the industry more appealing to younger generations, one area that requires attention and in which Eagle excels is enhancing the Human-Machine Interface (HMI) on the machines. The operator panel should resemble the intuitive interface of modern smartphones like the iPhone. It is vital to invest in the software, the visual aesthetics, and the ease of operation. This way, young talents entering the industry will find it exciting and won't feel like they are dealing with outdated systems from the past, such as those old DOS interfaces they have never encountered.

Do you think that we can transition to 5.0 in a positive way with automation and AI?

Transitioning to Industry 5.0 with automation and AI poses significant challenges due to the complex variables involved in the manufacturing process. It will likely take many years to fully understand and implement AI in such operations. The behaviour of a sheet during cutting, the application of heat, and the various possible outcomes make it difficult for AI to comprehend and predict. Achieving a sorted stack of parts after cutting is a considerable challenge, as existing sorting systems are far from perfect. Thus, nothing

currently matches the capabilities of the human eye, brain, and hands in adapting to the specific circumstances of each part.

So what about sustainability? Does it factor among potential clients requests?

Absolutely! There is a growing emphasis on sustainability across industries, and clients actively consider it when making purchasing decisions. Even steel suppliers are transitioning to manufacturing CO2-neutral steel sheets, highlighting the need for sustainable solutions throughout the supply chain. Fiber lasers have higher energy efficiency, converting a larger percentage of energy into the laser beam, minimizing energy waste and significantly speeding up cycle times. Studies demonstrate that, compared to CO2 laser cutting, fiber laser machines can save up to 70% more electricity. Additionally, they have a longer lifespan, with less frequent replacement and reduced waste generation. All this leads to reduced power consumption and lower carbon emissions. Sustainability has become a prominent concern, and companies must address it to meet the expectations and demands of their clients.

How can we ensure a positive experience through the entire sales and support process?

First and foremost, it is vital to deliver as promised. This means being transparent and realistic about what can be achieved and not making overpromises to customers. Aligning the expectations set during the sales process with what can be realistically delivered is crucial.

What does leadership and sales mean to you?

To me, leadership means empowering people to perform at their best. I believe in giving my team the freedom to work within a clear framework and setting clear expectations. I am not a fan of micromanagement or excessive boundaries. Instead, I encourage open communication and support. I want my team members to feel comfortable approaching me when they need assistance or when they face challenges. Nobody is perfect, and I always emphasize that mistakes are opportunities for learning and growth. When someone makes a mistake, I encourage them to share it with the team so that we can all learn from it and avoid repeating it in the future.

I strongly believe in the power of a cohesive team. I foster an environment where team members support and collaborate with each other. Rather than relying solely on me for support, I encourage team members to reach out to their colleagues for assistance. I trust in their abilities and believe that the collective intelligence and strengths of the team surpass those of any individual.

WE'VE BEEN FLYING HIGH

IVO PASQUALINI: SELLING SHEET METAL FIBER CUTTING MACHINES

I wonder, after so many years, what motivates me to continue doing this work with such enthusiasm and passion. The answer remains always and only one.

My name is Ivo Pasqualini, I was born between tortellini and lasagna, between Ferrari and Ducati, in the land where Maserati turned a tractor into a 1,000-horsepower jewel, where ideas often become something magical and successful.

I am Sales Manager for Eagle Lasers Italy and, answering my question, I must admit that what still gives me so much energy is the pleasure of getting to know this incredible sector and its creative "biodiversity". Whenever I step into a customer's company, I'm compelled to ask the same question: "How can we transform this sheet metal?"

Everything originates from the raw material as it takes shape. My role is to guide the customer on the most efficient methods for cutting sheet metal and optimizing the production process for functionality and cost-effectiveness.

The next question I often pose to customers is, "Why invest in this machine?" Typically, the response I receive is, "Because I need it!" But why not consider outsourcing to a subcontractor instead? The fundamental reason why customers, across the board, purchase a laser machine is straightforward: to generate profit!

The benefits of having the machine in-house, such as reduced waiting times and the flexibility to cut various materials, can be summed up in two words: increased profitability. Depending on the company's structure, this translates into either reduced costs or increased revenue, ultimately leading to greater gains.



IVO PASQUALINI
Sales Manager at Eagle Italia

Once it's understood that the primary goal of purchasing a laser machine is to generate profit, the next logical question arises: **how much?** This is where things can become perplexing, as many customers often lack a clear method for selecting the right machine for their needs.

I hear people say:

"All machines are identical."

"They all cut in the same manner."

"I opt for the cheapest option."

"I choose my competitor's machine to avoid making a mistake."

"I've been advised that..."

"I don't need a 'Ferrari' to get the job done."

"I've stuck with this brand out of habit."

"The largest manufacturer must have the superior product."

"I've always purchased from my friend, who's also a seller."

In this environment, I find immense satisfaction in my work: guiding customers through a structured method rather than relying on gut instincts. By offering a simple, analytical approach, we can steer clear of the pitfalls of impulsive decisions.

To be candid, selling an EAGLE machine isn't particularly challenging; its quality speaks for itself. The real difficulty lies in dispelling preconceived notions. It's about conveying to the customer that if they truly aim to maximize profits, they must adhere to the method.

Step 1

The method we employ to assist our customers in selecting the right machine isn't overly complex; it simply requires a bit of patience to analyze available data.

Firstly, we differentiate between "impulsive" and "thoughtful" requests:

Impulsive requests might include:

- Needing to cut materials ranging from a few millimeters to 40 mm thick.
- Having pieces as long as 6 meters.

On the other hand, thoughtful demands might involve questions such as:

- What is the average thickness of the materials we need to cut?
- What is the maximum size of 90 percent of your production pieces?

By asking these straightforward questions, we can already begin to identify the appropriate machine size and select optimal laser powers.

Our overarching goal is to determine our productivity targets. Based on this, along with the available surface area, we can ascertain the extent to which we should pursue automation.

Step 2

At this juncture, the customer is often faced with multiple proposals, each offering different configurations and laser powers. They may wonder:

- Is the larger machine necessarily the best option?
- Should I opt for the higher power?

I once had a customer express their frustration, exclaiming, "Ivo, my head is spinning! I'm bombarded with information, but I can't discern which machine is truly the best fit for me. Am I left to flip a coin in the end?"

In that moment, we shared a mutual understanding, cultivated over months of discussions. From this challenge arose an opportunity to devise a strategy together. By consistently applying this method, we managed to systematically clarify which choice was the most suitable.

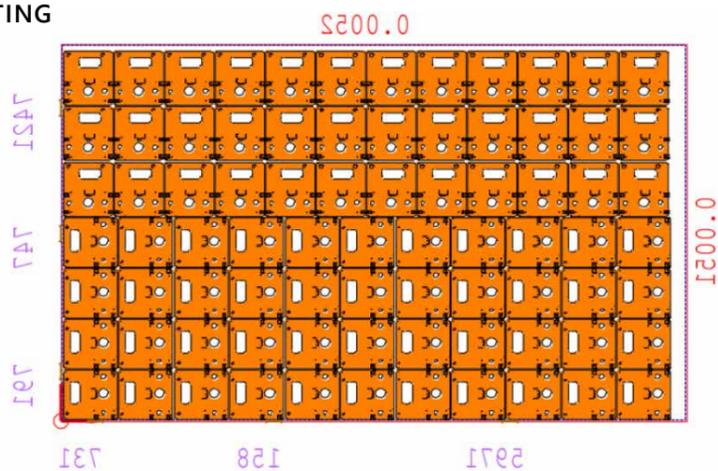
Step 3

Indeed, mathematics provides clear answers, free from subjective opinions. We conduct a study based on nestings that represent the largest volumes handled by the company, considering both thickness and throughput.

Upon analysis, it becomes evident that increasing power does not always yield significant benefits, particularly on thin sheets. For instance, when transitioning from 4kW to 8kW on a 1.5mm thickness, the productivity increase is only around 6 percent. This marginal improvement may not justify the increased investment, especially if it doesn't sufficiently lower part costs.

Instead, the acceleration of the machine becomes crucial on these thicknesses. A faster machine can reduce cycle times by two, three, or even four times compared to a slower one, which ultimately impacts productivity and cost-effectiveness.

NESTING



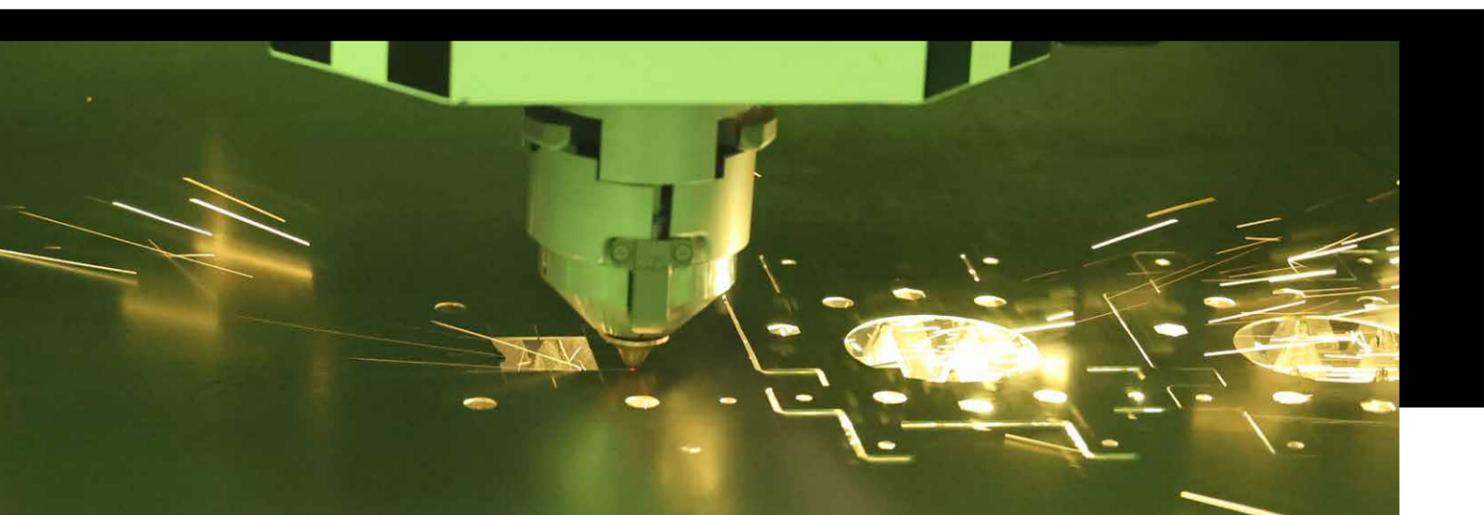
	iNspire 4kW	iNspire 6kW	iNspire 8kW
Nesting cutting time	00:16:26 [hh:mm:ss]	00:15:51 [hh:mm:ss]	00:15:37 [hh:mm:ss]
Travel time	00:00:15 [hh:mm:ss]	00:00:16 [hh:mm:ss]	00:00:16 [hh:mm:ss]

Conversely, when dealing with increased thicknesses, the impact of power becomes more pronounced. For instance, consider a 10mm thickness: upgrading from 10kW to 15kW leads to a significant 33% reduction in cycle time. Further, upgrading to 20kW from the initial 10kW results in a remarkable 51% reduction in cycle time.

NESTING



	iNspire 10kW	iNspire 15kW	iNspire 20kW
Nesting cutting time	00:27:35 [hh:mm:ss]	00:18:22 [hh:mm:ss]	00:13:52 [hh:mm:ss]
Travel time	00:00:23 [hh:mm:ss]	00:00:23 [hh:mm:ss]	00:00:23 [hh:mm:ss]



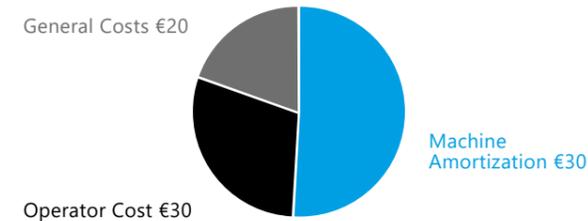
Step 4

Understanding the machine's productivity makes calculating the return on investment more straightforward. However, when confronted with high-performance numbers, another question arises, as a client friend once asked me: "But if I don't have such high production levels, what do I do with such a high-performance machine? Should I invest in it or opt for something more moderate?"

To address this, we reasoned together using the hourly cost of the machine as a reference. The hourly cost of a laser machine, regardless of its specifications, typically comprises three main components, which remain consistent for all users:

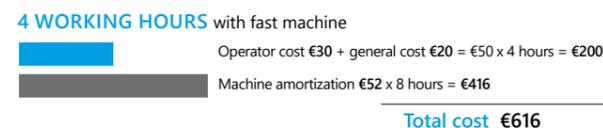
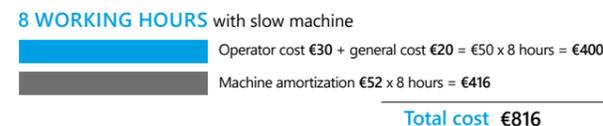
- Energy, maintenance, consumables and cutting gas €20 an hour
 - Operator cost €30 an hour
 - Machine amortization €52 an hour
- So, the total cost for this machine is €102 an hour**

Approximately 100 euros represents the hourly cost of operating a laser machine in production. However, upon closer examination of the breakdown, we uncover something intriguing: 50 percent of this cost accounts for depreciation, while the remaining portion encompasses overhead expenses and operator costs.



At this point we come back to the question, "Should I spend this money or settle for something more 'quiet'?" The answer is YES! Performance is always a winner and allows for lower production costs.

Let's look at this example where we compare, in a workday, two machines; one slow and one fast.



Over the course of eight working hours, the slow machine accrues operator costs and overhead costs, totaling €400 when multiplied by 8 hours. Additionally, it incurs €416 in depreciation over the same period. Thus, the total cost of a day's work for the slow machine amounts to €816.

If we apply the same calculations to the fast machine, which completes the work in just 4 hours instead of 8, the total cost amounts to €616. This is significantly lower than the cost for the slow machine. Moreover, with the fast machine completing the work in half the time, there are 4 additional hours available. If there is no more sheet metal to cut during these remaining hours, the operator can be redeployed to another cost center, further increasing the benefits to the company.

It's not uncommon for customers, including my friend, to be a bit mischievous. He remarked, "Yes, Ivo, you've convinced me that the high-performance machine is far more advantageous than a slower one. Even if it operates for only four hours instead of eight, I'd still double my output. But you're expensive, costing much more than your competitors. I'm not sure if it's worth it for me."

Facing this legitimate question, we revisited the calculations, this time comparing a "slow and affordable" machine valued at €300,000 against a "fast and expensive" machine valued at €500,000. Once more, the results leave no room for equivocal interpretation:



What changes from the previous table is the investment value, which drops from €500,000 to €300,000, and the hourly cost decreases from €51 to €31.25 euros.

In summary, we can confidently assert that investing in a high-performance machine is always advantageous, even if it operates for only four hours instead of eight and costs €200,000 more than a slower one.

At this juncture, the next question I posed to the customer was: "Given your market position and competitors, where do you aspire to be — in a league above or below?"



WE'VE BEEN FLYING HIGH

HOW TO IMPROVE EFFICIENCY IN YOUR SHOP

Achieving maximum efficiency is critical for any business in today's competitive environment and in manufacturing it's considered an integral part of producing a finished product. Manufacturing efficiency is attained when goods are produced with the least amount of resource wastage. KPIs (Key Performance Indicators) that identify a company's manufacturing efficiency include equipment effectiveness, material yield, and labor efficiency.

Below are a few ways metal shops can optimize production to improve the bottom line.

1. Conduct a Process Audit

Practicing process audits in an ever-changing list of operating conditions and expectations is a key step to maintaining quality while reducing costs. Processes need to be streamlined by making a checklist for each workspace. If non-conformance is recorded, the operations staff should immediately take corrective actions. Ensuring that each employee adheres to the checklist will help reduce unscheduled downtime.

Moreover, similar processes can be grouped to save time and improve quality. Workspaces are divided into cells with a standardized set of tasks. Machines and employees focus on a particular job hence improving consistency.

2. Manage Machine Failures

Managing equipment failures 'proactively' is vital for machinery and tool maintenance. Inspections and maintenance should be scheduled at regular intervals and in conformance with machinery manufacturers' guidelines. The Japanese concept of Kamishibai practiced by companies including Toyota, is also an effective audit process to take care of preventive maintenance. It goes without saying that preventive maintenance reduces costly repairs and machine downtime and increases equipment life and productivity.



ERIC ST. JAMES
PRESIDENT at PARAMOUNT MACHINERY INC

Additionally, you can avoid the risk of equipment failure by:

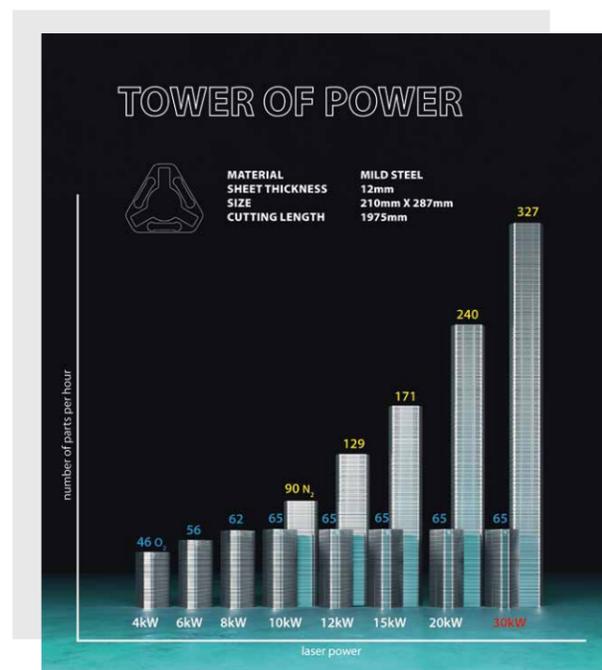
-  Regular machine inspection with a qualified team of technicians helps to yield a high ROI. However, to ensure productivity does not suffer, proper inspection scheduling should be followed.
-  Monitor equipment regularly. Continuous monitoring helps to find the root causes of machine stress.
-  Strike a balance between too much and too little maintenance.

3. Upgrade

If machinery is obsolete, consumes too much power or is inefficient, upgrading it to meet the desired production goal is of paramount importance. Stay ahead of the game by investing in the latest machine-tool technologies and Industry 4.0 compatibility.

Investing in advanced fiber lasers can help. It's amazing how quickly fiber laser technology has advanced. Today, we are marvelling at 20-30kW machines designed by Eagle. When it comes to fiber lasers, the relationship between cut speed and power is almost linear. Your cut speed doubles when increasing power from 4kW to 8kW, and the higher the power the greater the multiplier in speed. That bump in power can mean big things for metal fabrication.

The graphic below clearly shows the productivity gained with power increases.



Consider high-powered laser cutting systems, they can be a game changer for metal fabrication shops looking to boost productivity and cut costs. High-powered fiber lasers increase the production of high-quality cut parts. Technological advancements have helped to produce a highly focussed and uniform laser beam of light (wavelength between 1000 and 1100 nanometers) to cut through metal leading to a superior finish. This process also allows for very precise cuts on very thick pieces of metal too.

Long-term savings will offset the initial capital outlay. Energy-efficient equipment means lower costs and reducing the environmental impact giving bragging rights to the user in today's environmentally conscious society. High power also leads to lower costs per part produced.

4. Automate

The new age of automation in manufacturing includes advances in robotics and artificial intelligence.

Automated material handling and storage boosts productivity and reduces costs. It will allow you to fully exploit the machine's capabilities, improve workflow and reduce manufacturing lead time, lowering the cost per part, and increasing your profits.

Automation helps to reduce errors and improve speed and quality. Employees can focus more on value-added tasks providing increased job satisfaction and better employee retention.

Eagle, the industry's leading manufacturer of high-power fiber lasers have introduced powerful automation systems to optimize material handling and processing that significantly impacts production efficiency. Flexible configurations permit installations in almost any facility and once coupled with material storage, valuable floor space can be converted into more production areas.

5. Adopt Technology

Is the technology you are relying on optimal for your needs? Assess IT applications where adopting new technology can improve results and reduce errors. Make sure your critical IT systems are functioning with up-to-date operating systems and software.

Replacing obsolete desktops and software that hinder efficiency with new hardware and software solutions contributes towards optimizing production. CAD/CAM software applications improve the productivity of sheet metal punching machines and cutting systems. Adopting 2D and 3D nesting solutions for complex and intricate cuts saves raw materials and additional costs.

6. Train Employees

The new generation of skilled labour prefers to work with the latest technologies. Adopting new technology and equipment not only increases employee job satisfaction but also reduces churn for the employer. Ongoing training is a core requirement for achieving optimal goals and preventing basic mistakes.

Real efficiency is achieved by optimizing resources that cut loss of time, materials, and energy. With rising material costs and constant labor shortages, the adoption of new technologies and a thorough review of current practices will lead to efficiencies and improved profitability.

Can you do more? Sure, there are several other ways you can achieve your efficiency goals. The key is to not just dream about them but to implement them, see the results and take the next best action. Before you know it, you will have moved ahead of the competition and gained your customers' trust and confidence.

WE'VE BEEN FLYING HIGH

THE FUTURE OF LASER CUTTING TECHNOLOGY IN THE DACH REGION: A PROJECTION FOR THE NEXT 3-5 YEARS

In recent years, laser cutting technology has become a key component in the sheet metal processing industry. Currently, in the DACH region (Germany, Austria, and Switzerland), there are approximately 8000-9000 laser machines that handle a significant portion of the industry's workload. In this article, we will analyze the current market conditions in the DACH region and take a glimpse into the future to understand how market development is likely to evolve over the next 3-5 years.



The Current Market in the DACH Region

Quantitatively speaking, the current market in the DACH region can be described as stable and growing. Approximately 90% of the total workload is accomplished by the 6000 laser machines, while the remaining 10% comes from approximately 2000-3000 laser machines that are not regularly or consistently in use.

Qualitatively, most laser machines currently have a laser power of up to 10 kW, with about 50% of these machines utilizing CO2 laser sources. This technology has yielded positive results in the past, but a significant change is on the horizon.

The Future with Fiber Laser Technology

Fiber laser technology is poised to bring about substantial changes in the market situation within a relatively short span of 3-5 years, driven by two main factors:

Increased productivity through higher laser power:

Fiber laser machines have made significant advancements in recent years, offering higher laser power. This allows for faster and more efficient cutting of materials, resulting in increased productivity.

Automation of production:

Automation of production processes such as loading and unloading, as well as storage and sorting, is becoming increasingly important in the sheet metal processing industry. The integration of automation technologies enables a more efficient utilization of machines, significantly boosting their capacity.

Two Types of Users

With the rapid development of laser cutting technology, two primary types of users will emerge.

Productivity and automation-oriented companies:

These companies will invest in mass production or intensive and productive contract manufacturing. They will benefit from the advantages of fiber laser technology and automation, thereby strengthening their market position.

Flexibility-oriented companies:

Some companies will prioritize flexibility and may not use laser cutting technology as their primary production method. Instead, they will flexibly employ the technology and combine it with complementary technologies to maintain their market position.



Conclusion

Laser cutting technology in the DACH region is poised for exciting changes over the next 3-5 years. The introduction of fiber laser technology and increasing automation will reshape the market. Companies focusing on productivity and automation will thrive, while more flexible companies will find their niche. Those who fail to adapt may risk losing market share. It remains intriguing to observe how this emerging market will evolve.

What Does This Mean for Eagle Laser? Through our market positioning, we will primarily receive inquiries from demanding customers in productivity and automation-oriented companies. We will increasingly handle project-based inquiries with high expectations for productivity, reliability, delivery time, and service quality.



IVAN MELICHER
Senior Advisor at Eagle Deutschland GmbH

WITNESSES TO EAGLE'S SUCCESS - FOUR UNIQUE PERSPECTIVES

At Eagle, we believe our greatest asset is our people. Their commitment, knowledge, and passion drive our development and market innovation. Today, we're pleased to share the stories of four long-time employees who have witnessed Eagle's evolution firsthand. Through their diverse perspectives — as a salesperson, a customer service specialist, a marketing professional, and an assembler — we gain a deeper understanding of how Eagle has transformed over the years.

Our interviewees recount the beginnings of their careers at Eagle and pivotal moments in the company's development. Their stories illustrate how dynamically our company has adapted to new challenges and market trends. Each of these dedicated team members has played a vital role in building the strong, innovative brand that Eagle is today.

EAGLE LASERS - EAGLE TEAM



• Joanna Hałas	61
• Sławomir Duda	62
• Magdalen Klimaszewska	63
• Marek Czarnecki	64

JOANNA HAŁAS

Head of the Customer Service Department and Eagle Team member since 2016

With incredible grace and efficiency, she oversees all customer service activities, tending to our clients' needs. Her excellency has led her to build strong bonds with foreign distributors, agents and partners.

At what point in its development would you say Eagle was when you first joined the company?

I started working at Eagle in 2016 when there were a total of 67 employees and only 7 women. There were only a few departments; everyone knew each other, and the atmosphere in the company was very friendly. You could always count on the help of a colleague or friend from another department. We mainly operated in Poland, Finland, the Czech Republic, Germany, and Scandinavia. Our goal back then was to open more markets and expand our sales around the world.

Tell us what your career path was like at Eagle: its challenges and successes.

I was hired as a sales department assistant, and although initially, I was supposed to deal mainly with the Polish market, I was quickly thrown into the "deep end." The company was opening markets in more countries at a very fast pace, and within a year, I had several additional markets under my care. Within two years, sales expanded even more, so we hired a dozen more salespeople, distributors, and agents. It was a huge test for me! I always knew very well what my goals were in my professional life. Have I been able to achieve them? I will immodestly say - yes! After three years, I became a Department Coordinator, after four years a Department Leader, and after six years, I was already Head of the Department.



Do you remember your first days at work? Did any events or people particularly stick in your memory?

Sure, I remember! The beginnings are always the hardest, and support is much needed, which I received. There were people who supported me in my daily work from day one, and I could always count on their help. For example, Magda from the marketing department and Marek from sales. To this day, I am grateful to them for the way they welcomed me then. I also remember how I constantly pestered the current VP of Finance, Lidia Woznica, with my questions and visits to her office, and she never refused to help me.

What do you most value about working at Eagle?

First of all, I appreciate the friendly atmosphere, but also the employment stability and good working conditions. I am someone who gets bored quickly if I do the same thing over and over again – Eagle always makes it so you're never bored! I also value my team. It's a very cool team of friendly, talented young people. They approach their duties with full commitment and demonstrate a great deal of knowledge and willingness to help others on a daily basis. I very often watch their work from the sidelines and admire how they support each other.

Point out the three main ingredients responsible for Eagle's success.

Courage, perseverance, and innovation.

SŁAWOMIR DUDA

Machine Assembler and Eagle team member since 2012

part he ever assembled was a conveyor. It's hard to count the number of machines together. He is about to retire, but knows it will be hard to leave the team much he'll be missed.

Is the company like when you first joined it?

2012 so I've been working at Eagle for 12 years. When the company looked very different. There were only a few employees in the assembly department, a few in the office and a couple of people in the office. It was very different. The premises have gradually been adapted from those of the previous years. Successively, spaces were redesigned, new ones appeared, and areas were renovated and adapted for production. So, in this aspect, the beginnings were hard.

Do you remember your first days at work?

I remember. I was running around and arranging things. In fact, on the second day, the real work began. I remember the department leader at the time who brought me a folder with drawings and said: "Here. You'll assemble it." Page by page, I began to understand what I had to do. I had previously worked as an assembler, but this was something completely new to me! These were large machines, you know? So at the start, it was hard. We've all helped each other, the designers helped, we worked together.

How was it different 12 years ago?

I'm an old-timer, so I feel the difference when working with all the drawings on computers. With paper drawings, you did have to flip a lot, but I always had them at hand. Nowadays, to check something, you just walk away from the workstation, get to the



computer, and still find the right drawing. I don't get used to it, but the younger ones don't even feel it! Another difference is that having a larger team sometimes makes it harder to maintain order. But, on the other hand, we used to be the ones welding and threading, whereas now there are proper departments specialized for each task. A larger team allows for a division of labor where everyone specializes in their own trade. We have the opportunity to excel in our duties but still oversee the whole process of assembly and production.

What do you value most about working at Eagle?

I only have 1.5 years left to work before I retire. I just enjoy working here and can't complain. We have good working conditions, a well-set-up social room, the atmosphere is pleasant, and events and celebrations are constantly being organized. The boss has a very positive attitude towards people, and you can feel that he cares about the employees.

Three success factors?

Innovation, people, and care for the employee.

MAGDALENA KLIMASZEWSKA

Event Manager and Eagle Team member since 2011

Thanks to her marketing efforts, the world first heard and saw the Eagle brand. An indispensable master of event organization, Magda is also the author of our unique machine case and the designer of many corporate spaces at Eagle.

Do you remember what the company looked like when you were hired?

I started working at Eagle in 2011 when there were only fifteen people on the team. The company was just starting to grow. At that time, we were in the process of building our second laser cutting machine and planning our first trade show with the machine for 2012!

What was the atmosphere like?

We were a close-knit team, almost like a family, and we felt there were great opportunities ahead of us. Back then, there was no room for negative thinking - we treated every challenge as an opportunity. Nobody said, "It can't be done," "There is no time," or "Who will pay for it?" Everything was possible. We knew we wanted to conquer the world, and that hasn't changed.

How did your professional career at Eagle develop?

My first task with the company was to design a laser cutter housing. I proposed some drawings and a shape was selected, which is still in production today! After a few more graphic design orders, an unexpected twist of fate led me to organize the second trade fair booth in the company's history, in Poznan. It turned out I felt very comfortable moving between the worlds of design, marketing, and event organization, and so I stayed. Marcin Ejma has always understood that marketing is not only a tool to reach customers but also a way to build relationships with them and shape a positive perception of the brand. Therefore, as the company



grew, we started hiring new people for the marketing department, and I became its leader.

Do you remember your first days at work?

I associate my first day at work with the day I received my desk and became a full-time employee. It was a rather stressful period because I was supposed to organize a trade show without having the slightest idea how to. There was also no one in the company who could prepare me for it. It was one of the biggest challenges in my life at that time! But as I said at the beginning, we were like a family. I knew I could count on the support of the people I worked with, and somehow it all worked out. I really value this period because it taught me how to deal with unfamiliar situations and showed me the importance of cooperation and mutual support in a team.

What else do you value about working at Eagle?

First and foremost, the atmosphere, and this is felt by everyone who visits us. It's humane and unique, with a shared history so strong that it makes one's eyes watery. Now we're bigger, so it's a bit different, but in our department, we keep that essence of closeness and being like a family. I also value doing what I like and what I am good at. Every day is different and brings new tasks, but you can always count on support, both in the business and personal spheres.

If you had to name three main ingredients responsible for Eagle's success, what would they be?

Marcin Ejma, the people, and of course, our laser cutters.

MAREK CZARNECKI

Area Sales Manager and Eagle team member since 2014

successfully represents the Eagle brand on 3 continents. Thanks to his commitment and professionalism from day one, he keeps building 11 nurturing relationships with customers and tributors in 17 countries.

your 10 years at Eagle, the company has undergone numerous changes. What's your view on them?

It may sound a bit contradictory, but I have the feeling that the company, on one hand, has grown, developed, and changed a lot, and on the other hand, that it's still the same place I came to 10 years ago. And this is wonderful! Despite the fact that we now employ almost 400 people, 30 like when I first started, occupy a large office building with three halls, and are known literally all over the world, when I come to Walcz, I see the same smiling faces and see that amazing energy. At Eagle, we invariably follow the same values, always investing in the best - the best employees and the best cutting-edge technology, and this probably never change.

What do you recall your early days at Eagle?

When I started working at Eagle, I was the first person to work outside Walcz and the surrounding area. All the employees were very close-knit, knew each other, and shared many common experiences. However, joining the company, I immediately had the feeling that I belonged. What do I still remember from that period? My fascination with the Eagle product. Before I started working here, in my hometown, there was already talk about the company from Poland, its technology, and the fact that they produced it in Poland. I remember my boss saying that before I could start selling machines, it would be best if I learned to operate one myself. That was brilliant! When I had my first customer, I could demonstrate everything and had all the information I could collect on my own. In addition, the customer



saw that operating the machine couldn't be too difficult since it was carried out by a salesperson!

So you went from "machine operator" to Area Sales Manager?

(Laughs) You could say that! I was hired as a salesman for the eastern part of Poland. Then I was put in charge of sales for both Poland and abroad, and after two years, I was promoted to Area Sales Manager. In 2016, I took responsibility for all domestic and foreign sales, and in 2017, our sales team grew with more salespeople joining us. From 2021, I began to handle only the foreign market, which was divided between me and my colleague Marcin Drabik.

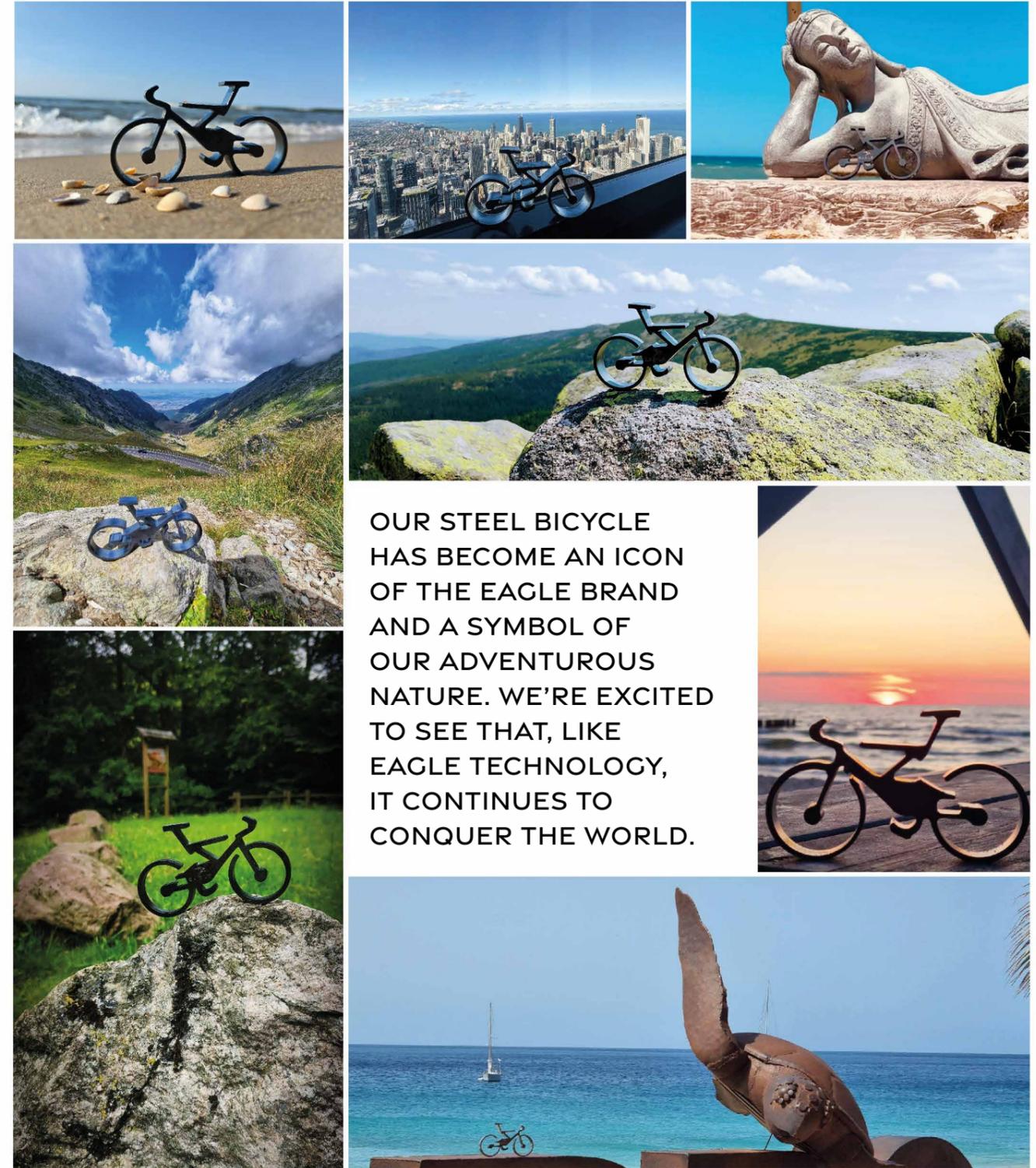
What do you value most about working at Eagle?

I value who I am today because of this company. The philosophy that Eagle has always followed - "The sky is not the limit" - has begun to resonate with me. I am changing with this company, growing, and seeing with my own eyes that what might seem impossible to achieve is within reach. What else do I appreciate about Eagle? When customers visit us, they are always impressed by the young and dynamic team and the family atmosphere that exists here. This is something that cannot be overlooked or missed.

Name the three elements of Eagle's success.

1. The people
2. The product
3. Our fresh and bold attitude

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