

CUSTOMER PROFILES

NEW TECHNOLOGY

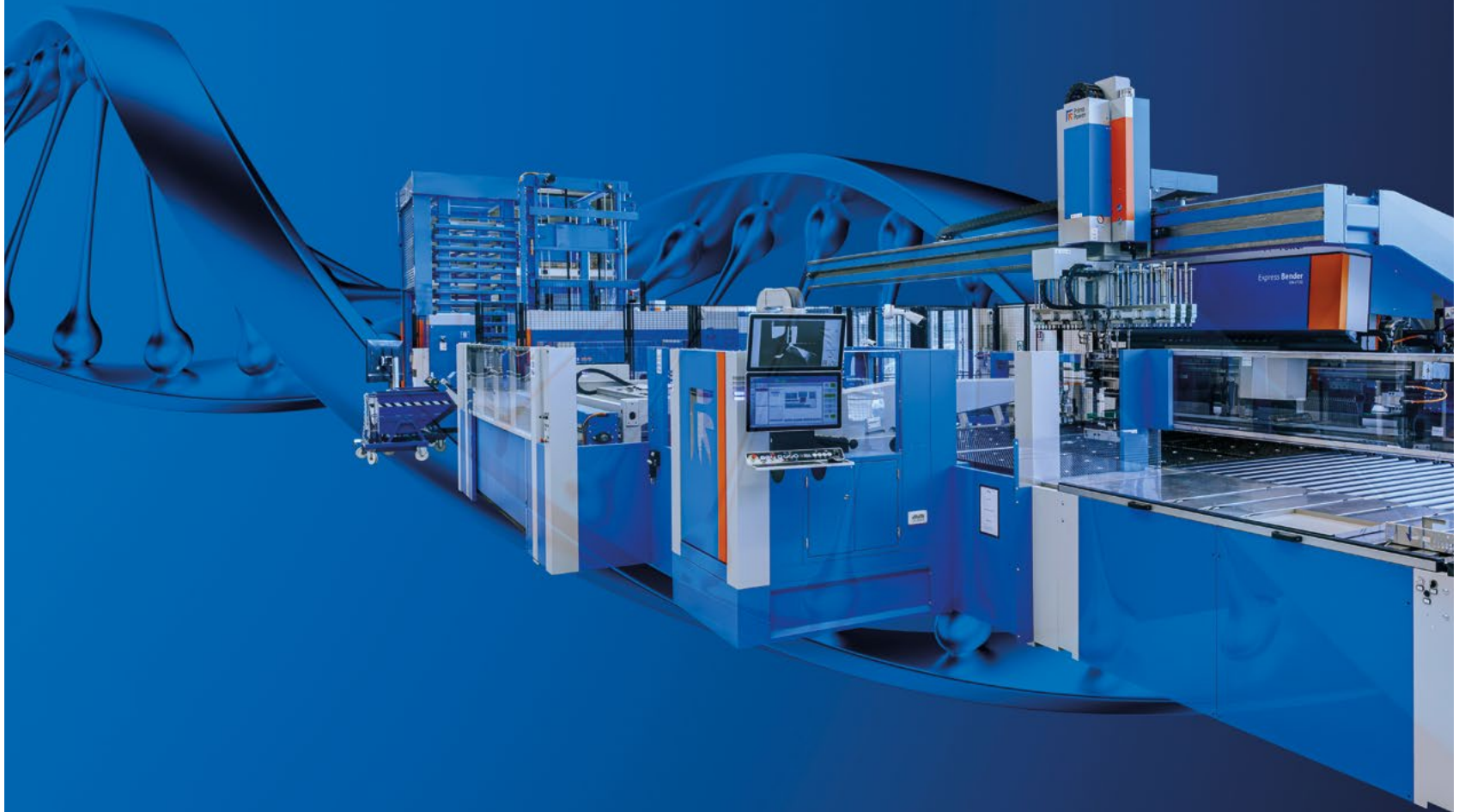
PRODUCTIVITY

FLEXIBILITY

POWER LINE

2023
ISSUE 02

VOLUME
#17



EVOLVE BY INTEGRATION

DRIVING GROWTH AND COMPETITIVE SUCCESS
IN TODAY'S SHEET METAL INDUSTRY



POWER LINE is a publication of **Prima Power**,
a brand of Prima Industrie Group.



A PROMISE OF PROGRESS

THE STORY BEHIND OUR NEW TAGLINE **EVOLVE BY INTEGRATION**

A brand tagline is much more than a slogan. Launching our new motto meant reflecting deeply on the essence of our company, delving into the true values of our relationship with customers, capturing the core significance of what we do. **Evolve by integration** strengthens **our purpose**, confirms **our vocation** – and embraces **our history, present, and future**.

- It recalls **our roots**, Prima Industrie Group's vision (**PR**ogress **I**n **M**anufacturing **A**utomation, the acronym of PRIMA): our continuous commitment to support our customers' advance with a wide knowledge of systems and machinery and to grow by integrating technological excellences.
- It reflects what we are **today**, a brand with a strong client-focused approach providing businesses of all sizes with **targeted dynamic technologies that level up our customers' production processes**. But mostly, it tells our **unique expertise to integrate our technologies into customers' processes** to enhance production performances and flexibility.
- It is open to the **future**, to the evolution that all manufacturers must undertake to step up their business, optimizing and automating processes, improving profitability and sustainability. Our solutions **accelerate progress with their performance** and **support growth with their easy scalability**, integrating technologies and automation modules following the changing production needs over time.

Two pillars that allow us to live up to our promise are **Knowledge and Dynamism**. They are an integral part of our DNA and continue to be core values for our brand.

This issue of Power Line tells the story and the promise behind our branding and its meaning for our people. But mostly, it tells how our customers experience it and embody it with their growth, their evolution by integration.

Giovanni Negri
CEO Prima Industrie

Matteo Benedetto
Chief Product & Strategy Officer

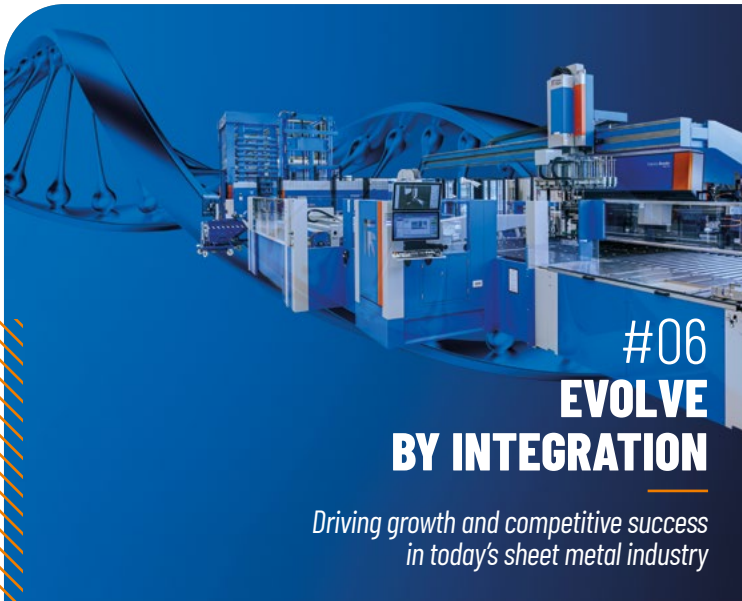
Enrico Garino
Chief Marketing & Transformation Officer

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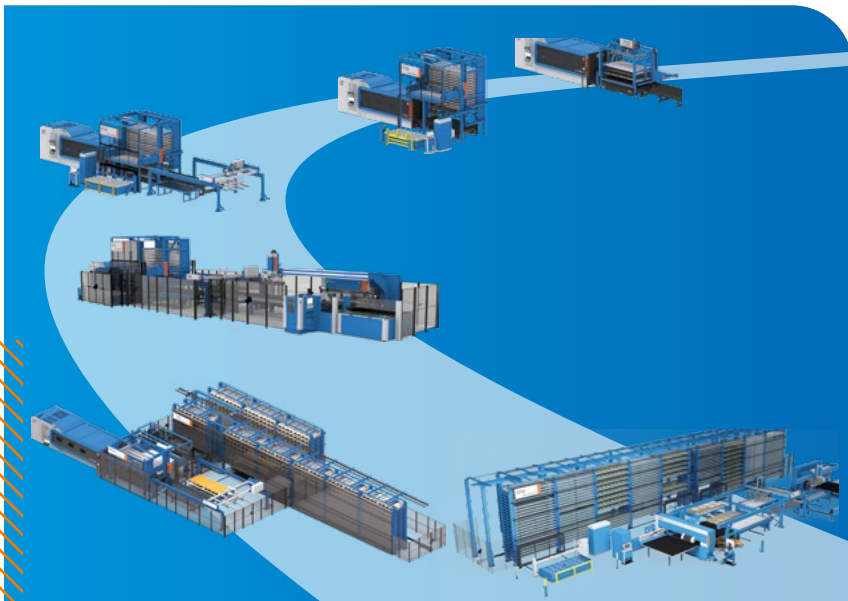
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EVOLVE BY INTEGRATION

DRIVING GROWTH AND COMPETITIVE SUCCESS
IN TODAY'S SHEET METAL INDUSTRY

In the dynamic industrial landscape, **manufacturing represents a fundamental pillar of innovation and progress.** A sector that has been marked by transformative trends that continue to shape its future.

Operating in a highly competitive market, manufacturers have been compelled to increasingly adopt strategies to streamline processes, reduce lead times, and optimize resources in order to deliver products that meet the challenging demands of their customers.

The pursuit of enhanced efficiency, accuracy, and dynamism has driven the industry to a paradigm shift, transitioning from traditional labor-intensive methods to state-of-the-art automation and robotics. The push towards digital control and precision has transformed the landscape, redefining the concept of speed and quality in production.

In this context, **one key factor has emerged as a game-changer: system integration** - a strategic blend of smart machines for different processes combined together providing real-time data analysis, enabling data-driven decision making to evaluate efficiency and productivity of business worldwide.

Interconnected networks of hardware and software have enabled manufacturers to **streamline operations, revolutionize workflows, adopt predictive maintenance, remotely control activities, and explore new growth opportunities.** Through system integration, manufacturers can focus on current market demands while flexibly adapting to the continuous changes in the industry.

THE ADDED VALUE OF INTERCONNECTED SYSTEMS

Integration, at its core, is the art of combining and interconnecting disparate elements into a unified whole. It translates into a powerful business strategy, enabling companies to take direct ownership and control over multiple workflow stages, minimizing uncertainties and potential delays.

Seamless integration of automated manufacturing systems unlocks a number of advantages, optimizing each stage of the production process. It ensures greater efficiency, resulting in **significant cost and time savings, reduced waste, and improved resource allocation.**

Leveraging automation, integration also contributes to increased productivity and ensures a significant improvement in product quality, speed and accuracy, as optimized processes ensure precision and consistency in every operation.

Furthermore, by connecting production machinery across different areas, **companies can gain the agility and flexibility to quickly adapt to changing market trends.** Finally, the use of advanced analytics leads to **better decision-making**, ensuring manufacturers the ability to make informed choices and adopt effective strategies.



As we have seen, system integration is undoubtedly a cornerstone of successful manufacturing operations: it provides enterprises with the tools they need to remain at the forefront of progress and efficiency.

PRIMA POWER AT THE FRONTLINE OF INTEGRATED SOLUTIONS

Sheet metal manufacturers today face the tough challenge of adapting to dynamic market requirements. In this context, traditional manufacturing models are giving way to agile and interconnected ecosystems. Stability, reliability, and cost reduction, hallmarks of past models, are now combined with **dynamic, agile, and interconnected approaches that empower manufacturers to thrive in an era of constant evolution.**

Companies operating in the sector should be aware of the importance of selecting partners with the expertise to seamlessly integrate consistent solutions into their processes. Prima Power's

comprehensive and easily integrable product range, coupled with over 40 years of industry knowledge and focus on clients' needs, allows us to consistently deliver the most suitable solutions.

Connecting different technologies at different levels, **Prima Power's solutions unify multiple stages into a seamless process**, leveraging flexibility, modularity, and the automation of material and information flow. This approach allows us to enhance productivity, reduce working times through precise production planning, and empowers customers with invaluable data for complete control and traceability of the entire manufacturing process.

Leveraging a heritage rooted in the technological combination of distinct entities, Prima Power embodies integration at its core. Our brand is ahead of integrated solutions, leading the way to manufacturing evolution together with our customers.

WHAT IMPACT DOES PRIMA POWER'S RANGE OF INTEGRATED SOLUTIONS HAVE ON CUSTOMER GROWTH AND EVOLUTION?

Today evolution is imperative to stay competitive and profitable. To make this continuous growth possible, companies must rely on flexible and scalable production tools and on partners with long-standing experience in the field of technology and system integration. Even when they **start with a standalone machine**, we're prepared to **adapt to their changing requirements** as production demands increase. This allows customers to invest according to their current needs while paving the way for their future evolution.

For us, these are the two pillars of evolution: **dynamism and knowledge**. This is how we help our customers advance and stay ahead of the curve in their markets.

We have a long history of driving progress through dynamic and flexible systems, leveraging our unique knowledge of automated solutions and process integration.

Since our start in 1977 we have been providing solutions to automate production processes, with our first FMS dating back to 1990. Our deep experience allows us to **simplify even the most complex process challenges** by combining different work stages into a single, profitable and flexible integrated solution.

Our **full and modular range of high-performing solutions** covers all sheet metal processing technologies: from 2D laser processing to 3D laser cutting, drilling and welding, from punching to combined punching-shearing and punching-laser, from manual to automatic to robotized bending, from automations and storages



Matteo Benedetto
Prima Power Chief Product & Strategy Officer

to FMS of any size, up to factory-wide solutions. All connected through a single software ecosystem managing the entire production and information flow.

What's truly remarkable is our ability to **combine all technologies into modular and scalable solutions targeted to our customers' needs**, evolving with them over time.

HOW DOES PRIMA POWER'S CLIENT-CENTERED APPROACH RELATE TO THE BRAND'S NEW TAGLINE, "EVOLVE BY INTEGRATION"?



Enrico Garino
Prima Power Chief Marketing & Transformation Officer

Within our new tagline, three key elements reflect Prima Power's commitment to its clients:

■ **Specialized Consulting Approach:** the term "Integration" in our new tagline implies that Prima Power not only offers dynamic and flexible machines but also integrates solutions to meet clients' specific needs. This reflects our specialized consulting approach throughout the customer journey. We work closely with clients to understand their unique requirements and provide the combination accordingly. Our technology seamlessly integrates into their processes for maximum efficiency and effectiveness.

■ **Highly-Flexible Machines:** the term "Evolve" conveys adaptability and growth, which aligns with our highly-flexible machines and solutions at Prima Power. Designed to evolve along with our clients' changing needs, these machines offer full configurability to cater to different applications, making them a perfect fit for clients seeking adaptable solutions.

■ **Superior Speed Performance:** an essential factor for efficiency. By offering machines with superior speed performance, Prima Power demonstrates its commitment to helping clients in enhancing productivity. This reflects the brand's promise to ensure that clients can swiftly and efficiently achieve their goals, a key aspect of our client-centered approach.

Prima Power's "Evolve by Integration" tagline not only highlights the company's commitment to adapting and integrating its solutions but also emphasizes the importance of specialized consulting and superior machine performance to meet the unique needs of each customer.

THE MAIN BENEFITS OF INTEGRATED SYSTEMS

- **Greater efficiency** with streamlined operations
- **Higher productivity** by leveraging automation
- **Improved product quality** through optimized processes
- **Increased flexibility** to adapt to market demands
- **Better decision-making** with advanced analytics

WHAT “EVOLVE BY INTEGRATION” MEANS FOR US?

IN AN ERA OF INCREASING COMPETITION, WHERE INNOVATION AND RAPID ADAPTATION TO EVOLVING MARKET TRENDS PLAY A CRUCIAL ROLE, PRIMA POWER HAS DEFINED A NEW TAGLINE TO SUMMARIZE ITS DISTINCTIVE PROMISE: **EVOLVE BY INTEGRATION**. THIS NEW MOTTO REFLECTS OUR COMMITMENT TO STAYING AHEAD AND EMPOWERING CUSTOMERS IN A CHANGING WORLD. WE INTERVIEWED OUR PEOPLE TO GAIN INSIGHTS INTO WHAT **EVOLVE BY INTEGRATION** MEANS TO THEM. HERE YOU WILL FIND SOME OF THEIR RESPONSES, WHICH PROVIDE UNIQUE INSIGHTS INTO HOW OUR BRAND STRATEGY RESONATES WITH THE INDIVIDUALS MAKING PRIMA POWER’S SUCCESS POSSIBLE.



GIULIO AMORE

Prima Power
Product Manager 2D Laser

I see “Evolve by Integration” as a **journey towards technological progress, achieved by combining diverse elements into a cohesive whole**, resulting in advanced systems. For Prima Power, this represents the culmination of a challenging journey, requiring the blend of various technologies, software, and hardware to deliver comprehensive solutions to our customers.



ARIANNA BATTISTA

Prima Power
Process Excellence

It means growing through collaboration. It involves leveraging and integrating the diverse talents among individuals, innovative tools, and efficient technologies. **It’s about combining strengths to evolve together.**



LUCA BIANCHINI

Prima Power
Product Management and Sales Support
for Laser, Bending and Robotic Cells

It carries several meanings. From a people perspective, it involves **uniting the diverse cultures and practices of our employees and customers** to enhance our products, working environment, and brand. Technologically, it relates to the **integration of diverse technologies and software** within fully automated production lines, creating value for both our customers and our company.



FRED COOKE

Prima Power
System Sales AMERICAS

To me, “Evolve by Integration” means **streamlining processes to remove the need for manual connections**. CAD transitions to CAM, orders progress to nesting, programs transfer to machines, materials flow into machining, and parts move from blanking to bending. When I’m no longer responsible for these transitions, it means that the process has evolved by integration.



STEFANO GECCHELE

Prima Power
Head of Product Unit Bending

“Evolution” embodies our historical strength and forward vision, while “Integration” encompasses both people and machines, representing the synergy of Prima Industrie and Finn Power, enhancing the Prima Power brand’s value.

This concept drives our company’s evolution through inter-company collaboration and cross-departmental integration. The benefits also extend to our customers by enhancing their operations with integrated machines and software. Furthermore, it fosters deeper and more integrated partnerships with our suppliers.



PEI JIN

Prima Power
Country Manager China

Integration is a means to enhance performance. It makes evolution possible leveraging a wide range of combined cutting-edge technologies. **Innovation is the primary force behind progress and evolution.**



ANTTI KUUSISAARI

Prima Power
System Sales

To me, it means that something is progressing further and better when integrated. It represents **a path to continuous improvement and advancement through integration.**



PIIA PAJUVIRTA

Prima Power
Marketing and Communication North Europe Region

To me, this phrase conveys a dual message. Firstly, it emphasizes the value of smartly integrating our machines, enabling customers to enhance production and business with our technologies. This reflects our commitment to offering a wide range of solutions that integrate with each other and third-party devices, demonstrating **our partnership with customers on their journey towards improvement.** Secondly, it recalls the integration of the two brands, Prima Industrie and Finn Power, the foundation upon which Prima Power was established and continues to evolve over time.



MARKO PIIRTO

Prima Power
Product Manager Punch/Shear/Combi

“Evolve by Integration” depends on one’s perspective. It can mean adding value to processes by simplifying production flow, but also developing processes through increased efficiency and automation. **It’s about evolving by finding the right integration strategy.**



MASSIMO SINOPOLI

Prima Power
Countries Manager Central Europe

“Evolve by Integration” is about **embracing diversity in all aspects of life and incorporating it into our growth.** By integrating different people, we evolve our DNA; by integrating different perspectives, we evolve in a broader vision; by integrating different technologies, we evolve into unified systems.



LUCA SPADINA

Prima Power
Product Manager Bending

It signifies that **growth and evolution occur through synergy among technologies, products, and software, aiming for excellence through harmonious integration.**

INTEGRATED SOLUTIONS THAT GROW WITH EVOLVING NEEDS

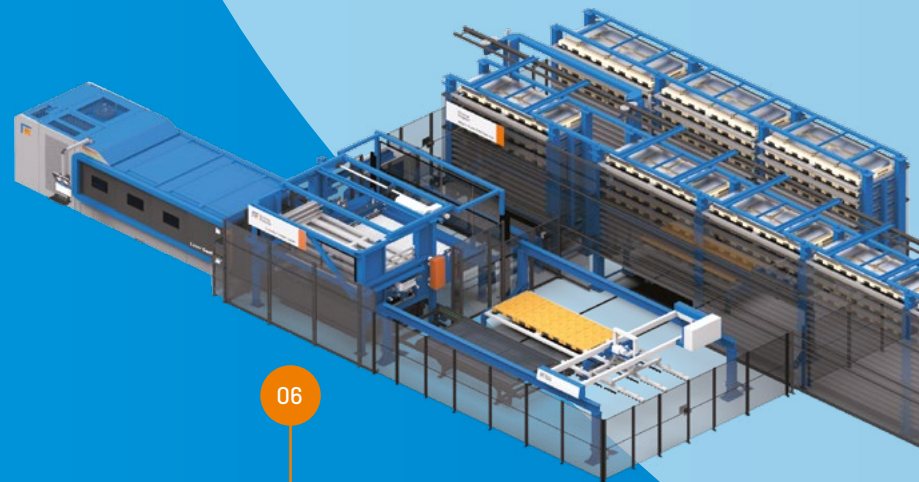
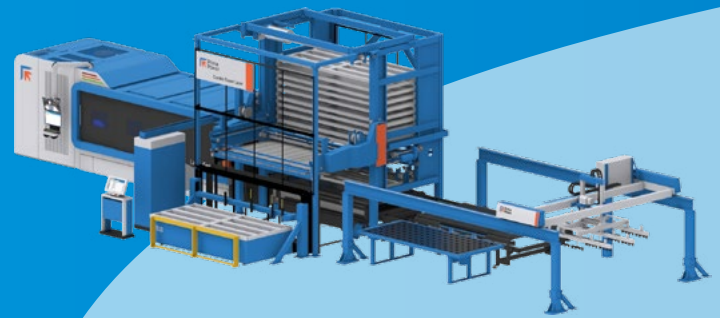
Prima Power's modular solutions consist of **machinery and automation "building blocks,"** allowing customers to **easily and gradually scale up their production capacity.** When market demands require increased capacity, customers can simply add more modules within their processes. This flexibility is made possible by **our wide range of products and our exclusive expertise** in integrated automated manufacturing solutions.

Our solutions are easily customizable, designed to fit individual needs starting from a wide base of standard building blocks that can be **seamlessly integrated and optimized to work together with the highest efficiency.** This approach enables us to support customers in implementing automation across different production phases, fostering **sustainable growth aligned to their organic business evolution.**

BENEFITS OF MODULAR AND SCALABLE SOLUTIONS

- **Easy customization** to meet specific customer demands and future upgrades
- **Investment flexibility:** scale up when needed
- **Faster time-to-factory** and quicker installation
- **Single-source accountability** for the whole system
- **Higher efficiency** and cost savings thanks to a native scalability

Scan the QRCode to watch our video "From single machine to automated factory"



For 24/7 unmanned operations, the Night Train FMS is the answer. It automates the material and information systems of an entire factory and combines individual manufacturing stages into a single, flexible process.

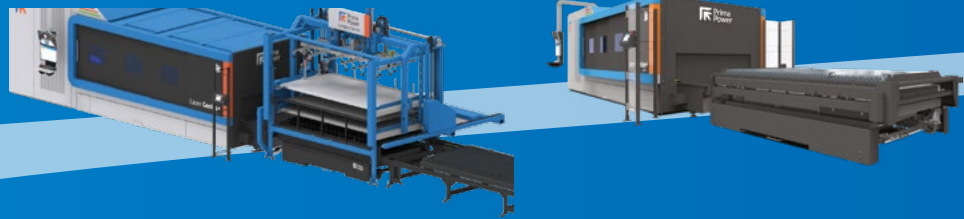
We can always offer the optimal storage solution for every application and system size, from single towers solutions up to fully automated warehouses.

03



Our range of stand-alone machines is incredibly wide, ensuring they are a perfect match for your specific application needs. This marks the starting point for your journey into the evolution of dynamic and flexible solutions.

01



02

For arranging the material flow in unmanned mode, our loading, unloading, picking, sorting and stacking robots automate the handling of sheets and parts while providing intermediate buffering.

For automatic material loading and unloading needs, consider adding one of our entry-level compact automations.

05



To combine different processes, you can choose among our full and modular range of Flexible Manufacturing Systems for an efficient and integrated management of work stages, information flow and material handling.

Our systems are customized using a complete range of high-performance machine tools, integrated cells, automatic material handling solutions, and software. They can all be seamlessly connected to a Night Train, crafting a factory-wide solution.

07



BOOSTING PRODUCTION CAPACITY THROUGH AUTOMATION AND INTEGRATION

DRINGENBERG MINIMIZED LABOR AND ENHANCED THROUGHPUT WITH PRIMA POWER

THE LEADING GERMAN MANUFACTURER OPTIMIZED ITS PROCESSES AND ACHIEVED HIGHER FLEXIBILITY THANKS TO PRIMA POWER'S FULLY AUTOMATED AND INTEGRATED PSBB LINE

Dringenberg is one of the fastest growing companies in the sheet metal processing field, establishing itself as a leading German manufacturer of factory and vehicle equipment. This remarkable growth rests on an **intelligent production strategy that combines the highest quality with maximum flexibility**. Recently, the company made a strategic investment in a Prima Power PSBB line, strengthening its commitment to cutting-edge manufacturing.

STREAMLINING OPERATIONS: THE JOURNEY TO PRIMA POWER FOR PROCESS OPTIMIZATION

Dringenberg is the competence center for intelligent workshop and vehicle equipment within the Würth Group. Their offerings span workbenches, cabinets, shelving and mobile workshop equipment. Dringenberg places a strong focus on customized individual solutions, which pose major production challenges, especially for in-vehicle equipment. Given the large number of vehicle types and the special requirements of trade groups, cabinets dimensions, drawers configurations, and sliding compartments sizes vary almost infinitely.



*Heiko Stahl
Production manager at Dringenberg.*



The Prima Power PSBB flexible manufacturing system installed in the Obersulm-Sülzbach plant.

Since the punching-shearing and panel bending machines are fully automated and integrated in one line, we no longer need any additional material handling.

“Through a dedicated configurator, each customer can put together his own special furnishings,” explains Heiko Stahl, production manager at Dringenberg. “This makes mass pre-production almost impossible for our assembly warehouse. Nevertheless, **maximum speed is required**, because the assembly department usually needs the individual parts and assemblies just one day in advance.”

For weight reasons, mainly aluminum with a thickness between 0.8 and 2.0 mm is processed. As aesthetics plays a crucial role, the components must not show any scratches or streaks. The material is usually supplied with a film, which is removed manually after processing.

Until a few months ago, the material was punched by an employee on a punching machine and placed on a pallet. A stacker then transported it to the bending machine. Subsequently, another worker placed the punched sheets into the bending machine to obtain the desired shape. Finally, the foil was removed, preparing the element for assembly. The team led by Heiko Stahl wanted to improve this process and explored alternatives, swiftly coming across Prima Power.

COMPANY HIGHLIGHTS

DRINGENBERG GMBH BETRIEBSEINRICHTUNGEN

LOCATION: Obersulm-Sülzbach, Germany

FOUNDED: 1937

FIELD OF BUSINESS: factory and vehicle equipment manufacturer

PRIMA POWER MACHINERY

■ PSBB line (Punching-Shearing-Buffering-Bending)

■ 3 x EB panel bender

■ 2x EBe4 servo-electric panel bender



**REDUCING LABOR AND ENHANCING THROUGHPUT
WITH PRIMA POWER'S SERVO-ELECTRIC PSBB LINE**

Dringenberg opted for Prima Power, a leading supplier of laser and sheet metal machinery with the most comprehensive product range in the industry: 2D and 3D laser machines, punching and combined punching/laser and punching/shearing machines, press brakes, panel bender machines and flexible manufacturing systems. **A key reason for choosing Prima Power was its ability to support customers with efficient production automation solutions.**

With prior positive Prima Power collaboration at a different site, the company wanted to work together to find a good solution. The goal was to minimize labor, maximize throughput while increasing accuracy and surface quality. The answer was a servo-electric PSBB (Punching, Shearing, Buffering, Bending) line that automatically processes raw sheets into finished bent elements ready for installation.

"Our prior positive experience with Prima Power was reaffirmed through this project. The collaboration and assistance from

With the integrated manufacturing line by Prima Power, Dringenberg has moved to a fully automated process.



Prima Power were excellent", declares Stahl. The starting point is the 20-pallet tower storage system, allowing the processing of components from a wide range of materials that can be automatically changed under program control. Rene Polz, the group leader for this line, always reserves a free spot for quick turnarounds, enabling the incorporation of less commonly used sheets without interruption.

Sheets move to a Shear Genius punching/shearing cell with a 16-tool turret. All tools for series production fit, eliminating setup for such parts. Further advantages are the integrated trim strip destroyer and the possibility of parameterization in the control system. Elements that differ only in their dimensions but are otherwise identical can be created by changing a few parameters, avoiding elaborate programming. **Ease of use and efficiency are the outstanding features of the entire line.**

After shearing, components are forwarded for buffering and subsequent bending in an automatic bending cell. This task is

/// **Prima Power's system has significantly increased our flexibility and productivity.** ///

performed by a robot, offering a high degree of flexibility and enabling the automatic stacking of larger parts. Material flow can be designed to compensate for the different time requirements of punching and bending.

The sheet metal is either transferred directly to the bending machine, temporarily stored or fed in from the intermediate storage area. **The integrated bending machine prioritizes productivity, quality and repeatability.** Tests are underway to process sheets without protective foil, which could eliminate another time-consuming step.

INCREASING PRODUCTIVITY AND FLEXIBILITY THROUGH FULL AUTOMATION AND INTEGRATION

"With this solution we went from a manual operation to a fully automated process," explains Stahl. **"We were aware that not everything would work right off the bat, but the collaboration and support from Prima Power were exceptional. Since the punching-shearing and panel bending machines are fully automated and integrated in one line, we no longer need any additional material handling. The workpiece remains untouched until we unload and palletize it. This is the only operator intervention required in the entire line."**

This approach also addresses the shortage of skilled workers.

Only one operator manages the entire line, aiming to produce up to 400 parts per shift under smooth operation. The line is currently running in 2-shift mode, but can still be operated completely unmanned afterwards. This has significantly increased Dringenberg's production capacity, allowing for reduced warehouse stock and enhanced operational speed and flexibility. **"Prima Power's system has significantly increased our flexibility and productivity"**, Stahl concludes. Based on this positive experience, Dringenberg will continue its growth course alongside Prima Power.



Andre Polz
Group Leader Production at Dringenberg.

COMBINING TECHNOLOGIES TO EVOLVE CAPABILITIES

AMERICAN COMPANY LEVERAGES PRIMA POWER FOR STREAMLINED PROCESS INTEGRATION

CADREX, A LEADING US-BASED MANUFACTURING SOLUTIONS PROVIDER, UPGRADED ITS CAPABILITIES BY ADOPTING PRIMA POWER'S LPBB INTEGRATED AND FLEXIBLE SYSTEM



In 2022, Chicago-based CGI Manufacturing Holdings rebranded itself as Cadrex Manufacturing Solutions. The company has transformed itself into a unified platform that leverages Industry 4.0 technology to drive medium- to high-volume manufacturing solutions. It has combined company acquisitions, technology investments and a team of skilled craftspeople to serve a diverse range of industries. With 1.5 million sq. ft. of manufacturing space in 20 locations across the U.S. and Mexico, Cadrex has become one of the largest mechanical providers in North America.

The Cadrex facility in Dresser, Wisconsin, manufactures and assembles custom sheet metal and injection molded products that range from cloud and edge infrastructure, network, compute and storage, fiber optics, 5G, and renewable energy. To keep pace with its sales growth, the company began looking for a laser cutting and bending flexible manufacturing system in 2019.

This search led to Prima Power's showroom in Arlington Heights, Illinois. "We decided on Prima Power's LPBB integrated system, which includes the laser/punch Combi Genius, a loading and stacking robot, the Combo Tower and the EBe automated bender," says Ed Moryn, automation manager for Cadrex. "We reviewed the different capabilities of the system, and what would fit into our building. We also discussed where Prima Power was with Industry 4.0 and we concluded they would be a good partner to move forward with."

The LPBB manufacturing line by Prima Power integrates punching, laser cutting, bending and intelligent part handling.



/// The automated EBe has eliminated much of the human error that occurred when bending was done with manual press brakes. ///

The Combi Genius punching and laser cutting integrated cell combines servo-electric and fiber laser technologies into a fast, accurate automated solution with one setup.

COMPANY HIGHLIGHTS

CADREX MANUFACTURING SOLUTIONS
LOCATION: Romeoville, IL, USA
FOUNDED: 2021
FIELD OF BUSINESS: Manufacturing Solutions

PRIMA POWER MACHINERY

- Combi Genius punch-laser machine
- Loading and stacking robot
- Combo Tower automated storage
- EBe servo-electric panel bender

ENHANCING PRODUCTIVITY BY INTEGRATING MULTIPLE PROCESSES

While Cadrex purchased the LPBB system in 2019, the onset of COVID delayed delivery. The Express Bender was installed in 2019, followed by the Combi Genius and the manufacturing cell's other components in 2020.

The compact LPBB sheet metal manufacturing system processes blank sheets into ready-bent, high-quality components automatically. The system integrates punching, laser cutting, bending and intelligent part handling. The automatic Express Bender employs Prima Power's servo-electric technology for faster production and reduced energy consumption and maintenance costs. The Combi Genius represents a significant change to the sheet metal fabrication process by combining different technologies, such as servo-electric and fiber laser, to process components in just one setup. Faster and more accurate, the system eliminates the need for multiple setups and the resulting longer production times.



Automation Manager **Ed Moryn**, left, and **Steve Riemenschneider**, director of engineering—soft tool, with Prima Power's Combo Tower automated material storage.

"The efficiency and productivity of the EBe panel bender has been phenomenal," says Steve Riemenschneider, director of engineering soft tool for Cadrex. **"We have infrastructure parts that have hems, up and down bends, and some bends that are large, measuring up to 2 ft. by 8 ft. The panel bender replaces three press brakes and six people"**, he says.

"With the current marketplace, adding six additional press brake operators would have been a real challenge. The EBe picks the sheet off the Combi Genius, bends it and then stacks it for assembly. Our throughput is much better. The automated EBe has eliminated much of the human error that occurred when bending was done with manual press brakes."

Riemenschneider says the Combi Genius allows the company to use its standard turret tooling that we have in its stand-alone turret punch presses. **"It produces 300 parts per hour and runs lights out. Between the Combo Tower and the loading and stacking robot that was added to the Combi Genius, we have seen 300 percent productivity gains in comparison to our standard methods. The bender is closer to productivity gains of 500 to 600 percent."**

BOOSTING PROFITABILITY WITH PRIMA POWER'S LPBB AND COMBO TOWER

The low maintenance turret punch press uses numerically controlled, servo-electric axes for high-speed operations that are energy efficient. In addition to large tool capacity, the wide range of tools available supports easy, fast setups and changes. The Combi Genius combines punching with advanced fiber laser cutting to boost productivity, ensuring high speed and quality.

The Combo Tower supports the flexible manufacturing cell's automated operation by serving as material and buffer storage for punched and laser-cut parts. Combo Tower storage can have one or two shelving units which can be adjusted to customer-specific needs.

Profitability with the LPBB has been our number one benefit.

"Profitability with the LPBB has been our number one benefit," says Riemenschneider. "By adding one piece of equipment, we didn't have to add another operator and we have five or six times the capacity compared to a standard press brake."

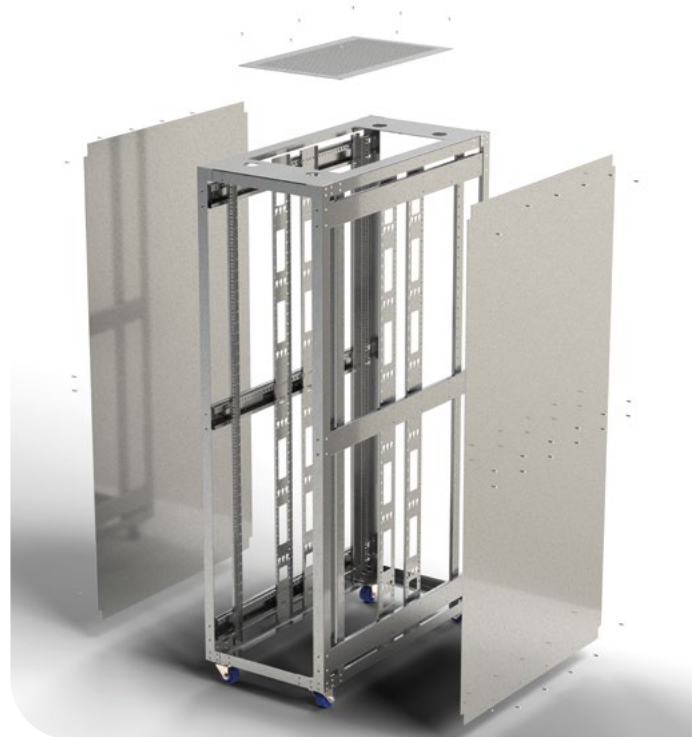
With the LPBB, he says, "we can sell more parts and be on time. Our part rate on the press brake is 12 parts per hour. On the panel bender, we do 68 parts per hour."

"The technology of the Prima Power package challenged us on how we will approach our fabrication solutions moving forward," says Moryn. "Today, we've seen the remarkable progress we've made in upgrading our capabilities, and this will significantly enhance our thought process as we move forward to explore the possibilities of the next generation of equipment."

/// The efficiency and productivity of the EBe panel bender has been phenomenal.



The productivity gains of the servo-electric panel bender is close to 500-600% compared to the press brake.



The Combi Genius installed at Cadrex produces 300 parts per hour and runs lights out.



REVVING UP GROWTH IN THE AUTOMOTIVE INDUSTRY

ZHIXIN'S EXPANSION BOOST WITH 35 PRIMA POWER'S LASER-CUTTING MACHINES

FOCUSING ON CUTTING-EDGE TECHNOLOGY AND LEAN PRODUCTION, ZHIXIN INDUSTRIAL GROUP HAS CHOSEN 35 PRIMA POWER'S LASER CUTTING MACHINES TO BOOST ITS GROWTH AND CUSTOMER EXPANSION IN AUTOMOTIVE HOT STAMPING PARTS PRODUCTION.

Located in Yufu Industrial Park, **Chongqing Zhixin Industrial Group** was established in 1995 and has since emerged as a Tier 1 supplier of stamping and welding components for vehicle manufacturers, as it can develop and provide over **95% of the sheet metal components** required for complete vehicle production.

Chongqing Zhixin Industrial Group, a Tier 1 supplier of stamping and welding components for vehicle manufacturers, relies on Prima Power 3D laser technology.

"Being modest and active, doing things steadfastly and effectively": the core values of Zhixin have led the Group to establish 12 subsidiaries and production bases across the nation. By 2023, Zhixin has totaled 2,500 employees and an annual output value of 2 billion RMB.

It has been an honor to have Mr. Cui Xiao, director of the hot stamping workshop, lead us through a tour to reveal the secrets behind such success.

FINDING THE KEY TO EFFICIENCY

"How do you find the workshop?", Mr. Cui Xiao eagerly asks when he leads us in. Workers stand in front of the state-of-the-art Prima Power 3D five-axis laser cutting machines, monitoring every intricacy of the machine operations; nearby, others diligently arrange and stack high-precision automotive hot stamped parts. The atmosphere is positively bustling and industrious.



"To ensure the prompt and flawless delivery of products, we rely on exceptional management and manufacturing capabilities," Mr. Cui Xiao explains. **"Given the tremendous order volume pressure, it becomes imperative for the production lines to operate efficiently, producing high-quality products swiftly and consistently"**.

In 2016, Zhixin Industrial Group decided to introduce 3D five-axis laser cutting equipment to implement the hot stamping workshop and the production of high-strength steel auto parts.

"In the initial selection stage, we compared Prima Power's Laser Next 1530 with other 3D five-axis laser cutting machines." Mr. Cui

The performance of Prima Power machines in cutting speed has exceeded our expectations.

COMPANY HIGHLIGHTS

Zhixin Industrial Group

LOCATION: Chongqing, China

FOUNDED: 1995

FIELD OF BUSINESS: Stamping and welding components for the automotive industry.

PRIMA POWER MACHINERY

■ 9 x Laser Next 1530

■ 9 x Laser Next 2130

■ 17 x Rapido+

Thirty-five Prima Power laser machines, both Laser Next and Rapido+ models, have been installed at Zhixin Group so far.



Xiao continues. "We carefully evaluated several factors, such as operational convenience, programming simplicity, cutting accuracy, edge trimming speed, maintenance convenience, after-sales support, technical level, and delivery lead time. Ultimately, we chose Laser Next 1530 due to its superiority in nearly every aspect".

35 LASER CUTTING MACHINES AT WORK

Since 2016, Zhixin Group has been expanding its operations and has successfully established several new branches, consistently choosing to introduce Prima Power's 3D five-axis laser cutting machines, 35 so far, of which:

- **9 sets of the Laser Next 1530:** designed for traditional hot stamping, these machines feature a compact modular design that optimizes floor space, while the unique synthetic granite frame and cantilever design ensure optimal performance and stability – even under the most intensive work shift. The incorporation of linear motors and direct-drive servo technology results in reduced equipment wear and lower maintenance costs.
- **9 sets of the Laser Next 2130:** featuring a large cutting area of 2.1m x 3m, this model is the ideal choice for cutting large integrated parts, such as door rings.
- **17 sets of Rapido+** domestic models, tailored by Prima Power for the Chinese market. It is designed with a working volume of 1.5m x 3m for small to medium size hot stamped parts.

These capabilities are made possible by the continuous support from world-class equipment suppliers, like Prima Power.

"The performance of Prima Power machines in cutting speed has exceeded our expectations. For instance, it just takes 69 seconds to cut a 1.7m upper A-pillar reinforcement with full edge trimming and 56 holes: this is approximately 15% faster than similar machines available in the market". Mr. Cui Xiao also voiced his satisfaction with Prima Power's after sales services: "Prima Power's technicians work with our own to optimize the equipment and processes, continuously improving production efficiency. We always get prompt response and assistance whenever we need it: throughout our 7-year partnership, Prima Power has fully met our expectations as a cooperative partner".



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Cui Xiao, Director of Hot Stamping Workshop, Zhixin (left) and Zhao Jianyong, After Sales Manager of Prima Power.



With their high level of precision, Prima Power laser machines ensure that each part meets the required specifications and maintains consistency throughout the production run.

A REAL BOOST TO CUSTOMER ACQUISITION POTENTIAL

During our visit, Mr. Cui Xiao picked up a cut sheet metal part produced using Prima Power's 3D five-axis laser cutting machine: "The accuracy achieved in the production process was impressive, with a control tolerance of only 0.03mm. This level of precision ensured that each part met the required specifications and maintained consistency throughout the production run".

The **combination of stability, precision, automation, and efficiency** provided by Prima Power's equipment allowed Zhixin to rapidly develop its customer base, opening up new opportunities for growth and expansion.

/// Strong manufacturing capabilities are extremely important. ///

"Currently, our main clients include Changan, Ford, Geely, Wuling, Volkswagen, Great Wall, BYD, GAC Motor, Volvo, Audi, and Lincoln. Our new energy clients include Li Xiang, NIO, Zero Run, Nezha, Lynk & Co, Lotus, Mercedes-Benz Smart, Elf, etc. Strong manufacturing capabilities are extremely important, especially during the development of new customers. And these capabilities are made possible by the continuous support from world-class equipment suppliers, like Prima Power" said Mr. Cui Xiao.

Zhixin currently supplies its customers hot stamped parts, mainly A, B, and C pillars of the car body, parts of the floor cross-members, and integrated door rings; the hot forming process mainly includes Patch-Work Blank (TWB), Tailor Rolling Blank (TRB), Soft Zone and Tailor Welded Blank (TWB), etc. "These parts and processes ensure our **ability to respond quickly to customers, especially in the new energy field where models evolve rapidly and product life cycles are short**, with high production requirements. We can successfully meet these needs because we know Prima Power will always support us" Mr. Cui Xiao concluded.

ELEVATING EXCELLENCE: A DYNAMIC IN-HOUSE PRODUCTION JOURNEY

DEA+RO&CO'S PROGRESS WITH PRIMA POWER'S KNOWLEDGE AND SUPPORT

Extract from an article published on the May 2023 issue of Lamiera magazine

THE ITALIAN COMPANY SPECIALIZED IN LUXURY CAR WORKSHOP FITTINGS ACHIEVED SIGNIFICANT MILESTONES BY BRINGING PRODUCTION IN-HOUSE WITH PRIMA POWER'S LPBB LINE.

DEA+RO&Co S.p.A., based in Reggio Emilia with a new production plant in Bellocchi (PU), is a leading name in custom wall systems, workbenches, drawers, and trolleys tailored to specific needs. This specialization has made them a preferred choice for top automotive brands, which prioritize providing readily accessible tools to their operators and workers, following lean production principles and focusing on waste reduction and efficient waste handling.

The company was established in 2021 as a result of the merger between DEA and RO & Co, two experienced enterprises in the automotive supplies industry. Thanks to the merger, the company is now an all-round partner for customer-specific industrial fittings. Tailor-made solutions and high quality have attracted **collaborations with top automotive brands, including Jaguar, Ferrari, Porsche, Audi, Volvo, Stellantis, Renault, and Citroen**, generating €15 million turnover last year, with about 70% from the foreign market.



For its new manufacturing plant DEA+RO&Co has chosen an LPBB (Punching, Laser, Buffering, Bending) line integrated with a Night Train FMS storage solution.



The highly automated system allows the customer to combine productivity and flexibility making it a solution suitable for both large batches and prototypes.

“Our approach,” explains Lino Di Betta, managing director and CEO of the company, “is to sit down with the customer, gather their requirements, and study the area layout for fitting. Our designers then devise the best solution, and production follows. Until recently, production was subcontracted to a trusted network of suppliers, but we have now internalized it entirely after acquiring the Bellocchi plant. This grants us full production control and ensures the highest quality in our products. This true competitive advantage allows us to position our items in an unrivaled premium range.”

FROM OUTSOURCING TO IN-HOUSE PRODUCTION

In 2022, DEA+RO&Co acquired an industrial building in Bellocchi, Italy, aiming to consolidate all production phases: sheet metal working, powder coating, welding, and assembly. *“Outsourcing before 2022 left us with limited know-how in cutting and bending,”* Rino Giliberti, production manager, explains. *“Our goal was a highly flexible production line for large and small batches, prioritizing quality and productivity. **Starting from scratch with such a system was challenging, but fortunately, we found a truly supportive partner.**”*

After reviewing top manufacturers, DEA+RO&Co selected Prima Power, which proposed an LPBB line with Night Train FMS® and a stand-alone eP 1030 press brake. The LPBB (Laser Cutting, Punching, Buffering, Bending) production system includes a Combi Genius with servo-electric punching and 4kW fiber laser cutting, a loading and stacking robot LSR, and a storage station designed to hold stacked semi-finished products, skeletons and any raw sheets. The line also features a dedicated bending station with a part centering device PCD, a tilting device, and EBe servo-electric panel bender. The Night Train FMS® offers flexibility for single parts and large batches. It's a compact and modular system with excellent storage capacity.

COMPANY HIGHLIGHTS

DEA+RO&CO

LOCATION: Bellocchi, PU, Italy

FOUNDED: 2021 (from the merger of DEA and RO&CO)

FIELD OF BUSINESS: Fittings for luxury car workshops

PRIMA POWER MACHINERY

- Night Train FMS®
- LPBB line (Laser-Punching-Buffering-Bending)
- eP 1030 press brake

CUSTOMER STORY

For parts to be bent off-line, the eP 1030 press brake boasts 1,050 kN force and 3,150 mm bending length, with an O-frame for rigidity and precision. The servo-electric system ensures high acceleration, reducing cycle times by up to 30% for enhanced productivity.

"We chose Prima Power," says Giliberti, "a renowned brand in sheet metal working technology, especially in flexible manufacturing systems. Their technicians visited our showroom to understand our product specifics and production requirements. Pursuing excellence in quality and production, we opted for the LPBB line."

MASTERING PRODUCTION IN JUST SIX MONTHS

Prima Power's challenge was not only to supply the system but, most importantly, to get production started given the company's lack of prior experience.

*"During negotiations," says Di Betta, "Prima Power estimated a 9-month run-in time, but we achieved production in just six months. Credit goes to our open-minded operators and Prima Power's training and support. **Whenever we needed assistance, their response was swift, helping us optimize parameters and unlock settings as needed.**"*

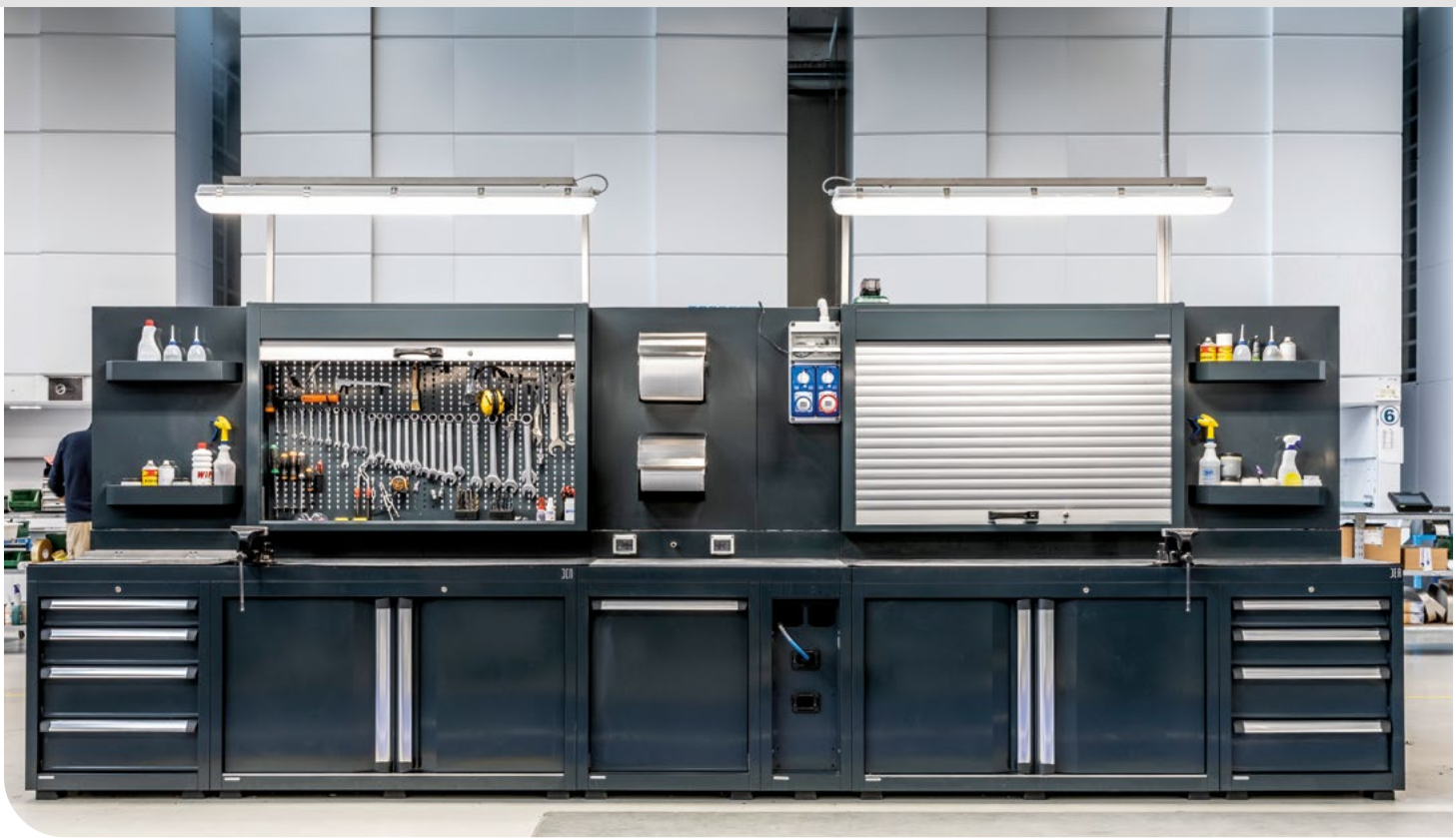
A year after installing the line, DEA+RO&Co operates autonomously with two shifts, reaping the benefits of automated technologies, especially in paneling. Automated cycles for bends replaced manual press brake operations, enhancing productivity, repeatability, and maintaining high quality while reducing costs. The LPBB excels in cutting quality, avoiding burrs and sharp corners, offering in-line engraving, countersinking, and forming capabilities with Multi-Tools.

"Our products require top-tier quality," says Giliberti, "and finding a partner like Prima Power was crucial. The machinery's potential exceeded our expectations, and our technicians are now exploring new design aspects to further enhance our product range."

With Prima Power technologies we are able to achieve the desired quality with the utmost flexibility. Integration is the strength of Prima Power systems.

From left to right: **Lucio Volpe**, Prima Power area manager, **Rino Giliberti**, DEA+RO&Co production director, **Lino Di Betta**, CEO & Founder of DEA+RO&Co, **Riccardo Pellegrini**, Italy Sales Manager for Prima Power.





DEA+RO&Co is specialized in the supply of workbenches, shelving and equipped walls for the automotive sector.

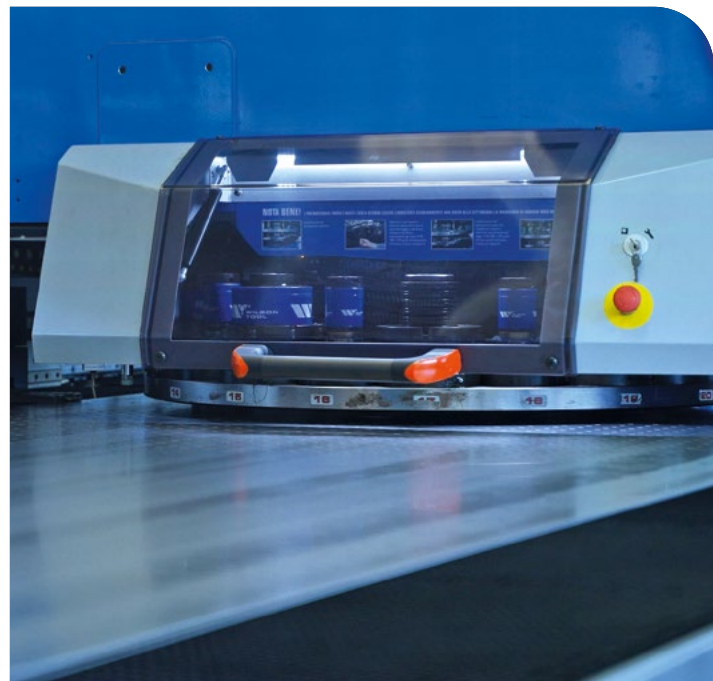
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A PARTNERSHIP THAT PROPELS FURTHER GROWTH

One peculiarity at DEA+RO&Co is having the plant set up to cope with **fluctuations in demand that can result in production peaks and times when only small batches need to be produced. This is possible with the Night Train and 4.0 production management.**

All technologies provided by Prima Power embody the principles of Industry 4.0 and DEA+RO&Co has taken advantage of this feature to establish the new system as a true digital factory.

Such achievements fuel the company's ambitions for further growth. "The work carried out by our technicians with the



The customized turret design of the Combi Genius allows up to 384 standard or 128 index tools for active use.

support of Prima Power has exceeded my expectations," Di Betta states. "We see untapped potential in volumes and production solutions for our products. We plan to exploit this potential, solidifying our presence in foreign markets, especially in the US where we already have a sales branch. If results permit, a second production site with Italian technology may even emerge in the land of Stars and Stripes."

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EVOLVE BY INTEGRATION

DYNAMIC SOLUTIONS TO LEVEL UP YOUR PRODUCTION PROCESS

Sheet metal working asks for profitability. Whatever your size, Prima Power provides you with modular and high-performing technologies that support your future growth.

- 1 Unique expertise in **technological integration** with native solutions for unmanned production.
- 2 **Customer- focused approach and design** that target your productivity challenges.
- 3 Full system of **high-speed flexible solutions** combining precision, versatility, and efficiency.

2D & 3D LASER CUTTING | BENDING | PUNCHING & SHEARING | AUTOMATION | SOFTWARE | FMS



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