NEW TECHNOLOGY

PRODUCTIVITY

FLEXIBILITY

# POOPOER E DUNE 2021 VOLUME ISSUE 02 #13

# PEOPLE HAVE THE POWER

HUMAN CENTRICITY: A CONCRETE COMMITMENT, BEYOND WORDS.

**F** \_\_\_\_\_\_ | **POWER LINE** is a **Prima Industrie** publication.





use for everyone.

of users and society as a whole.

beyond words.

that surround them.

The customer stories you find in this issue reflect solid partnerships built over the years, through listening, collaboration, and trust. It is always nice to hear from the voice of our customers that, beyond the technological solutions that help them overcome challenges, it is our people who are able to create exceptional experiences and build unique relationships with them.

As technology gains momentum, human beings' value and capabilities become more important than ever. From this point of view, automation could make us more human and help us evolve further. The future, in any case, is always in people's hands.



We are living in a new era, where technology is becoming increasingly essential and pervasive in every area of our lives. Automation offers businesses many competitive advantages, but it is only thanks to the innate abilities of human beings that these opportunities can be captured. This issue of the Power Line magazine is dedicated to the central role that people continue to play even in the new era of automation.

Companies today have a fundamental role in implementing automation keeping people at the center, trying to transform what technology can offer into advantages, without leaving anyone behind. In the industrial sector in which we operate, automation is essential to increase productivity, efficiency, and to simplify complex processes, but it would be useless without guidance and control from people, who allow for a creative, sustainable, and advantageous

For us, the concept of Human Centricity translates, above all, into two factors: putting people at the center of our organization, and designing products and services around the real needs

To tell you more about the first of these two aspects, we have collected the voices of some people in our Group, which prove how the most deeply human values - such as passion, teamwork, inclusion, and transparency - are for all of us a concrete and daily commitment,

The second aspect of Human Centricity is closely linked to customer experience and empathy. For us, this means trying to understand the real needs of all the people involved in the use of our products and services, putting ourselves in their shoes. In other words: our technologies are at the service of people, developed for the needs of the individuals and the ecosystems

> Ezio Basso CEO Prima Industrie

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A Prima Industrie Publication

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# **PEOPLE HAVE** THE POWER

HUMAN CENTRICITY: A CONCRETE COMMITMENT, **BEYOND WORDS.** 

> TECHNOLOGY, WITHOUT A DOUBT, IS QUICKLY CHANGING THE WAY WE THINK, LIVE, AND EXPERIENCE THE WORLD AROUND US.

#### A TIME FOR TECHNOLOGY

pect of our life. Technology, without a doubt, has impacted this process the most, quickly changing the way we think, live, and experience the world around us. Private life, relationships, and work are changing in both superficial and profound ways, as innovations make it possible to carry out activities we could not even imagine before. Every one of us can notice the effects of what seems to be an unstoppable revolution, destined to lead to extremely significant changes in every facet of our daily life. Just think about smartphones: these devices appeared less than 30 years ago, but have become the icon of a new era. Born as communication tools, they seem to be almost an appendix of the contemporary human being: they are our memory, our network, our work, and the medium that most easily allows us to open up towards the world, and to the other people who live in it.

IN THIS CONSTANT EVOLUTION, ONE QUESTION SEEMS TO EMERGE MORE AND MORE OFTEN: WHAT ROLE WILL HUMAN BEINGS PLAY IN THE NEAR FUTURE?

In the past few years, we have seen a real revolution in every as-

#### THE TRANSFORMATION IS HERE

Considering this example can help us understand how technology has become an integral part of our lives, with an unprecedented impact. The current transformation is bringing to life a complex system with blurred outlines that are hard to define.

The effects of such a fast and pervasive revolution are, indeed, the focus of a number of researches and analyses in a variety of fields, from psychology to biology and from business to politics.

Setting aside the purely theoretical issues, we cannot deny that the increasingly massive presence of technology is leading to a general redesign of the world as a system.

However, in this context of constant evolution, one question seems to emerge more and more often: what role will human beings play in the near future?

#### WORK, TECHNOLOGY, PEOPLE

The answer, just like the answer to any complex question, is neither simple nor univocal. However, we must try to at least narrow it down as regards the context of work, and especially the industrial field. History has taught us this is where we may more clearly grasp the trends, potentials, dangers, and challenges that we will face tomorrow as a society: when technology changes we change the way we work, and society changes as a consequence. Therefore, it's important for anyone who is part of the productive system to face the issue seriously and with a sense of responsibility, in order to bring back into balance the roles different sides play. How important is technology? How important are people? What is the relationship between the two? Only by answering these questions will we be able to build a future for everyone, through a transparent and shared process.

#### **PEOPLE, FRONT AND CENTRAL**

Perhaps the most recognizable effect of the current revolution is the so-called "Industry 4.0", a complex system composed of industrial automation, digitalization, and new technologies that enable better work conditions, create new business models, increase productivity, and improve product quality. However, it has perhaps an even greater impact on culture and on the way we interpret work. It entails a redefinition of the role played by

PEOPLE HAVE THE DUTY TO LEAD THE TRANSFORMATION: IT IS THEIR PREROGATIVE TO DEFINE THE TRAJECTORIES THAT SHOULD BE FOLLOWED ON THE ROAD TO THE FUTURE. "human resources" or "human capital", as they were called up to a few years ago. Today, these expressions are being replaced by the simpler and fairer term, "people" - a choice of words that is not simply a formality. In a scenario where automation, the digital dimension, and artificial intelligence are taking over increasing space, it is crucial we turn our attention back to people, as the real protagonists of this change. People have the duty to lead the transformation: it is their prerogative to define the trajectories that should be followed on the road to the future. While technology offers increasingly sophisticated tools to gain advantages and profit, only people have the cognitive skills to bring ideas and visions to life. Only the human mind has the creativity and empathy that allow us to orient growth and development towards sustainability and inclusion. Only human beings can see the whole picture and act according to a collective understanding that holds us at the center of the perspective.

#### TEAMWORK

Well-designed human-machine interaction creates a winning system where both sides focus entirely on what they do best. People are irreplaceable in the development, training, and management of machines – which in turn excel in speed, strength, reliability, and efficiency, on top of their crucial capability to gather, analyze, and process huge amounts of data. Technology not only provides technical and practical support to workers, but acts as an accelerator for their professional growth: as machines – thanks to people – become increasingly able to carry out "heavy" tasks, workers have more opportunities to focus on training and developing more specialized and fulfilling skills. Indeed, some experts now interpret "manpower" more as mental power than physical strength.



#### **DIGITAL HUMANISM**

The concept of Digital Humanism clearly expresses the centrality of people. The name effectively synthetizes this age in history: humans are the engine and target of every activity; digital instruments are the tool and language through which this central role comes to life and communicates. Digital Humanism recognizes the unique qualities of every human being and leverages technology to amplify their potential. As people take back their role as protagonists in the productive scene, we must focus on the value system that drives them.

Only by clearly defining this aspect, can we bring everyone together to commit to a shared goal.

#### **POWER IS IN OUR HANDS**

Any functional relationship is based on dialogue: this is true also between coworkers (at any level and between different levels), and between a company and the broader community around it. If we are able to make the values that drive our work more shared and tangible, we can also strive to build a world in which respect, transparency, closeness, and fairness are irreplaceable and necessary, not only for us but also for the social context in which we are immersed.

More than ever, we have a duty to feel we are part of something bigger than ourselves. We know our work has an impact on the territories where we are active, on the people who live near us and, more broadly, on the planet that is our home.

For this reason, we feel a strong responsibility to put people at the center of our commitment and to dedicate all of our energy to building a future in which people can express their full potential – not in spite of their differences, but thanks to them – with the passion no machine will ever be able to feel.



### THE VALUES THAT MAKE US STRONG.

AT PRIMA INDUSTRIE, WE TRULY BELIEVE IN HUMAN CENTRICITY. FOR THIS REASON, WE HAVE INTERVIEWED SOME OF THE PEOPLE WHO WORK AT THE GROUP, ASKING THEM WHAT THEY SEE AS THE MOST CRUCIAL VALUE IN A PROFESSIONAL SETTING, AND HOW THEY BRING IT TO LIFE IN THEIR DAILY WORK. THE OUTCOME IS A SMALL, BUT INVALUABLE **GALLERY OF DIFFERENT POINTS OF VIEW, WHICH MAKES PRIMA INDUSTRIE'S VALUE** SYSTEM TANGIBLE AND CONCRETE BY SHARING STORIES OF SELECTED FIRST-HAND **EXPERIENCES.** 

# WHAT VALUE **DO YOU CONSIDER INDISPENSABLE AT WORK?**



# TRANSPARENCY

Is Prima Industrie a transparent Group? Yes, it is. In the relationships between colleagues, at every level, it is necessary to count on open, direct, and serene communication. Trust and transparency are essential to work well, and to grow both at professional and personal level: they help us feel part of a team, working every day towards shared goals. Fairness, responsibility, and transparency are also key values I try to apply every day in my work, which includes the delicate task of managing projects and related information inside and outside the company.



### PASSION

Is passion a value you find within Prima Industrie? Of course! Passion for what we do and commitment to doing it in the best possible way are my core values, and I find them expressed in every single person here. A sense of duty is important, but enthusiasm is what drives you to always go beyond what is expected. Our jobs are demanding and entail great responsibility, but the feeling of pride that comes from reaching our goals is worth every effort. To keep growing, I am also continuing my education - combining university and work requires many sacrifices and great determination, but I am about to cross the finish line.



# INCLUSION

#### Is Prima Industrie an inclusive Group?

It definitely is. We are over 1,700 employees, coming from different geographical contexts, with diverse educational, personal, and cultural backgrounds. In our Group, individuals' diversity and experience are considered an asset, and this model of inclusiveness is best expressed when each member of the team is open to dialogue. When we are working on a project, we all come together to pursue a common final goal; and when we achieve that goal, it's always touching to think it was thanks to team effort, but also to the fact each one of us could bring their own individual strengths to the table.





## TEAMWORK

#### Is teamwork a value Prima Industrie requires?

Yes, it's essential. High-technology fields like ours require a variety of different skills - and only good teamwork can leverage all of them effectively. Collaboration within the team and the openness to share knowledge is also indispensable to our customers. My work mostly consists in optimizing their applications and solving any technological challenge they may be facing. The key to success in this, is working side by side with the customer's technical staff, sharing our know-how with them as needed.

**CUSTOMER STORY** 



### PRECISION FABRICATION AND PROTOTYPE EVOLUTION WITH PRIMA POWER 3D FIBER LASERS



FROM HUMBLE BEGINNINGS TO TOP SUPPLIER OF PRECISION METAL FABRICATION, PROTOTYPE MANUFACTURING, AND SHORT-RUN PRODUCTION FOR TIER 1 SUPPLIERS AND OEMS IN THE MIDWEST: DUGGAN MANUFACTURING LOOKS BACK ON 20 YEARS OF HARD WORK, SMART INVESTMENTS, AND GREAT CUSTOMER SERVICE, WITH PRIMA POWER AT ITS SIDE.

#### BUILD ON SOLID FOUNDATIONS

Friends Rodney Westich and Tony Pinho had many years of experience in the automotive industry and a common goal: to build a prototyping business that would better service their customers. In 2000, they took a leap of faith and asked friends and family for seed money for their new venture. They purchased a few used machines and began operating an automotive specialty sheet metal prototype and limited production manufacturing company out of a former dairy barn and welding shop in Almont, MI. From the onset, Duggan strove to take on challenges like laborintensive and tight-tolerance parts that few competitors wanted to tackle. While not always the most desirable, these jobs became an opening for a new, hungry company to create a solid reputation for going the extra mile and giving unprecedented attention to detail: an approach that carried over to Duggan's DNA and remained unchanged over the years, as it grew to today's 90 employees working in a main facility of 72,000 square feet and a satellite building of 28,000 square feet.

#### INVEST IN THE BEST TECHNOLOGICAL PARTNER

"We devised a plan to get business rolling, and from that point on, it's been a steady reinvestment plan for the latest machine technology," explains Westich, founder and principal. "We put as much money back in the company as possible." A large part of that investment plan has been dedicated to Prima Power 3D fiber lasers.

"When we began our search for lasers, Prima Power was one of several options. The company was very helpful and open. They arranged for us to visit other customers who were doing laser tube cutting and we knew we were looking at something special. Their lasers are versatile and robust, with high uptime – but if there is a problem, Prima Power's service department responds quickly and with excellent telephone support."

Duggan purchased a 2-kW Prima Power Rapido fiber laser in 2010 and another in 2011. Rapido is equipped with a fiber laser source with different powers, according to the type of production. The high-brilliance fiber laser with high-energy efficiency, ecocompatible use, and no maintenance gives the greatest benefits in large series production. Many applications take advantage of this source, resulting in lower cycle times and reduced cost per part.



Prima Power's lasers are versatile and robust, with high uptime – but if there is a problem, the service department responds quickly.

> Previous page: Rodney Westich, founder and principal (left) and Tony Pinho, president, created Duggan Manufacturing in 2000. Bottom: The Prima Power 3D fiber head features direct-drive motors, double protection SIPS, and a Focal Position Control.

#### RECOGNIZE THE VALUE OF CUSTOMER CARE

"We had such great results with the two Prima Power Rapido fiber lasers, there was no second guessing in what we were going to do when we needed a production laser with a turn table," says Duggan's President, Pinho. "We purchased the Prima Power 4-kW Laser Next in 2016." "We are not a huge company, but our three Prima Power lasers allow us to punch above our weight – meaning we have much more influence than we anticipated, because they give us the same attention that you would expect for a large customer with multiple machines." Time was tight when Duggan purchased the Laser Next. "Prima Power coordinated everything, from getting it built in Italy to shipping and installation. They shortened the initial schedule from 24 weeks from the order to 14, which really helped us."

Prima Power gives us the attention you would expect for a large customer with multiple machines.



Three Prima Power 3D fiber laser systems are in operation at Duagan two Rapidos and one Laser Next 1530.



Above: Duggan recognizes every prototyping job has its own unique set of requirements and production manufacturing challenges.

Bottom: Duggan serves a wide variety of industries, including automotive, battery technology, defense, aerospace, printing, racking and material handling, off-highway trucking, and robotics.



#### MAKE THE DIFFERENCE WITH STRATEGIC DECISIONS

"In 2010, we were the first sheet metal prototype company in the area to have fiber lasers," continues Westich. "It was the best choice for us because it reduced maintenance, overhead costs, and even required floor space: our three Prima Power fiber lasers comfortably replaced five CO<sub>2</sub> machines as they wore out, and keep us competitive. This type of key investments definitely helped us grow." Duggan now serves a wide variety of industries, including automotive, battery technology, defense, aerospace, printing, racking and material handling, off-highway trucking, and robotics. "Prima Power equipment allowed us to diversify," reflects Pinho. "Automotive was 75% of our business at one point, but today digital simulation is improving so much that the demand for prototypes is a fraction of what it was when we started: that's why we diversified." One thing that will never change? "The talent and passion that enabled our company to grow from a small team operating out of a dairy barn to a major manufacturing and prototype development facility," concludes Westich. "It's what continues to drive us forward today."



# 

# **LASER NEXT** THE 3D LASER CUTTING SOLUTION FOR THE AUTOMOTIVE INDUSTRY

Automotive part manufacturers need highly specialized equipment, for sheet metal cutting according to all their specific requirements. Thanks to over 40 years of experience in this field and to a continuous dialogue with customers and partners, Prima Power can meet their needs with a specifically designed 3D Laser Next. Laser Next was developed by focusing on three main user benefits.

In the last decade, Prima Power 3D laser machines for automotive applications have improved their performance steadily. Laser Next marks a crucial step forward: a 25% increase in productivity on a typical benchmark component (B-pillar) - meaning four Laser Next systems produce as much as five machines of the previous model.

- productivity per square meter is simply astonishing.
- IMPROVED OVERALL EQUIPMENT EFFICIENCY (OEE)

In designing the Laser Next, Prima Power capitalized on its experience of hundreds of installations for the 24/7 manufacturing of high-strength steel components, widely used in car production. Every detail was studied and developed to maximize machine uptime, and maintenance was simplified and reduced to limit non-productive time and the need for specialized technicians.

The Laser Next has a working range of 3,050 x 1,530 x 612 mm and is equipped with 3-kW or 4-kW high-brilliance fiber laser. Its compact focusing head, fully sealed for best protection, features direct drive motors, double protection SIPS, fully metallic sensor, and Focal Position Control.

#### MAXIMIZED THROUGHPUT WITH A DRAMATIC REDUCTION OF CYCLE TIMES

#### SPACE-EFFICIENT LAYOUT BOTH FOR STANDALONE AND MULTI-MACHINE CONFIGURATION

A well-conceived layout saves square footage and optimizes plant logistics. And there's more: compact installation means you can install more machines in the same area, putting four Laser Next machines where only three units used to fit. You can also connect up to three units, side by side, to the same magnetic scrap conveyor, with no need for excavation. The Laser Next's

# NEW NEW BEGINNINGS SUPPORTING ARC **INDUSTRIES' NEW LAUNCH**

# WITH THE PEOPLE AT THE CENTER

MACHINE MANUFACTURERS ARE RARELY CONFRONTED WITH THE NUMBER OF **REQUIREMENTS ARC INDUSTRIES PRESENTED - YET GREAT ENERGY AND PASSION** FOR A JOB WELL DONE ALLOWED A NEW BUSINESS RELATIONSHIP TO FLOURISH.

#### A COLLABORATIVE MANAGEMENT PROJECT

De Tellier's desire to take over a company was based on a mature reflection about the philosophy he wanted to implement: "A collaborative management model where benevolence towards people includes the right to make mistakes. When one person's error caused damages for 25,000 euros, we turned it into a learning opportunity. The whole team understood how keeping that person could open up to new progress: when you give people responsibility, and the chance to make mistakes, they make very few. Any discussions happen in a framework of trust. Autonomy and freedom become strong motivation to work as a team."

With the same logic, the company has hired people with no previous experience if they showed a real desire to learn.

> When you give people responsibility, and the chance to make mistakes, they make very few.

#### 40 YEARS OF NEW BEGINNINGS

Jean-Pierre Argoud founded ARC Industries in 1981 with the aim of offering a piping and boiler making service to paper companies in the Grenoble region. Securing a major customer enabled the company to move into industrial sheet metal work with ambitious investments: a welding robot and a laser machine at the end of the 1980s, and even a laser cutting punching machine in 1996. In the early 2000s, the client portfolio expanded and the company developed specific skills in the machining of noble materials. Then, the 2008 crisis and Chinese competition led to a 40% drop in turnover: Argoud chose not to lay off staff, but put a halt to new investments.

In 2016, the founder retired and passed the torch to Romain de Tellier, a budding 31-year-old entrepreneur. "I was looking for a company to take over, having clearly identified sheet metal working as my target. I was fortunate to be entrusted with responsibilities early on – I managed a factory at 26, and had to learn quickly – and had worked for three years in a boiler factory," de Tellier remembers. His experience and strong interest in the sheet metal sector convinced Argoud to trust him. He then received support from BPI France and the Arts et Métiers Alumni association to support his funding plan.





Customizable hydroalcoholic ge dispenser manufactured by ARC Industries

Placing people at the heart of the company and investing in innovative production machines are the main pillars of ARC Industries.

#### ASKING SANTA FOR THE MEANS TO GROW

Although the company could rely on large accounts and satisfied customers, the potential for developing collaboration was close to zero. "We had to target large industries that had not yet concentrated their suppliers as much as the automotive or aeronautical sectors. By 2017, it was clear we had to master the metal transformation value chain and expand through organic and external growth. However, in our business assets generate turnover," de Tellier explains. So, an investment plan was drafted with help from the entire company. "I asked them to write a letter to Santa", de Tellier recalls with a smile. Team members took accurate inventory of the company's hardware deficiencies, and came up with a "wish list" worth 5 million euros – reduced to 3.8 million euros in three years by taking priorities into account.

#### TAKING THE FIRST STEP WITH A PRIMA POWER LASER MACHINE

The first investment had to be an automated laser-cutting machine with a mixed load palletizing tower – but picking the right manufacturer was key, and ARC Industries' needs and objectives were quite broad until they met Guy Solmini, Sales Manager at Prima Power France: "Before selling us anything, Prima Power was interested in our production and processes. Guy encouraged us to go further on automation in order to move forward faster," says de Tellier.

ARC Industries also needed a specific maintenance contract that could combine fast intervention and controlled costs: *"Romain* had a tall order, and we learned a lot from this exchange. We worked both with the client and with our management, to do something we had never done before. In the end, this made us a leader in terms of maintenance and has become a selling point for us," admits Christophe Berquet, Sales Director of Prima Power France.

### Before selling us anything, Prima Power was interested in our production and processes.

De Tellier also went on company visits to see different machines in operation. "Prima Power stood out. We observed performances with different thicknesses and tested their software to make sure it could unfold a complex structure."

Finally, ARC Industries invested in a 4-kW Prima Power Platino Fiber laser machine with LST sorting and stacking robot, able to handle thicknesses up to 25 mm for steel and 15 mm for stainless steel, with cameras for remote control and a nine-drawer Compact Tower storage – with two drawers for skeletons – which can operate at night, for a total of almost 3,000 hours/year.

#### CHANGING THE GAME WITH COMBI GENIUS CG 1530

When the company started considering a combined punching and laser cutting machine with palletizing, the process was similarly thorough.

Other manufacturers were consulted, and although de Tellier admits the first successful experience gave Prima Power an advantage, "They still had to pass a test phase with parts of our own design, combining punching, forming, and tapping in our workshop. As an additional condition, the parts had to be programmed automatically, and we went on with a 4-hour production cycle mixing the machining of steel and stainless steel sheets. After delivery and complete installation, we started the procedure and left. The next day, we found everything had worked perfectly."



Olivier Merly, methods and design office manager at ARC Industries. Romain de Tellier, CEO of ARC Industries, in front of the metro turnstiles used in Hanoi, manufactured by ARC with Prima Power Combi Genius.

When the new Combi Genius CG 1530 was delivered, the previous Prima Power Combi was still running reliably. The new-generation model came with faster sheet movement for increased productivity, and better autonomy thanks to the capacity for 88 tools (instead of 32). Setting times decreased with the shift from hydraulic to 30-ton electric punching, in a machine that still keeps noise at a comfortable level, simplifies programming, and reduces maintenance costs.

The possibility of forming from above or below and the addition of tapping have transformed the company's business: "We have a product that we manufacture in 50-60,000 units a year, with 6 to 8 inserts and different variations that make stamping uneconomical. The customer agreed to let us transform the process with our new machine: we punch, stamp, and tap – using flow tapping, which increases mechanical strength – and can use top and bottom forming because one part is bent after machining. All in all, fewer manual operations give us more time for higher-added-value activities," says de Tellier. With the company's employee vision of "Making the human adventure the soul of the industry of the future," ARC Industries offers a business proposition based on a high level of industrialization and design-tovalue services.

After delivery and installation, we started the procedure and left. The next day, we found everything had worked perfectly.

Source: article by Metal Industries magazine. Pictures: © JM BLACHE



"Finally, we love to reinvent and facilitate the industrial relationships!", concludes Romain de Tellier, who appreciates building constructive partnerships with his customers and suppliers, as Prima Power knows well.

> Fewer manual operations give us more time for higher-added-value activities.

> > Gilles Romei, after sales coordinator at Prima Power France – ARC requested a specific maintenance contract to combine fast intervention and controlled costs.



# THE WORD OF THE DAY IS AUTOMATION

## INCREASE FLEXIBILITY, PRODUCTIVITY, AND SAVINGS AT THE SAME TIME

LANKAPAJA CORPORATION IS ONE OF THE BIGGEST AND BEST-KNOWN SHEET METAL SUBCONTRACTORS IN FINLAND, AND MANUFACTURES A WIDE RANGE OF PRODUCTS SUCH AS STORE FURNITURE, TROLLEYS, STEEL COMPONENTS, CHAIR AND TABLE FRAMES, AND RACKS.

The company started as a lampshade manufacturer as far back as 1935, but its capacity and reputation today allow it to deliver comprehensive solutions for shop furnishing or logistics systems for laundries and hotels, for example. With a turnover of €25.5 million in 2020 and 188 employees, Lankapaja has grown and expanded from its original premises, in the Punavuori neighborhood of Helsinki, to no less than three main locations: their current manufacturing facilities are in Nummela (20,000 square meters) and Lahti in Finland, and Skillingaryd in Sweden.



The company has also been able to take on bigger and better jobs by building a strong machine base consisting of lasers, combi machines, right angle shears, and various bending machines from different brands. However, R&D manager Christian Öberg shares that they had been thinking about the future of sheet metal production for a long time, considering what direction their investments should take for the future.

"We considered right angle shears, lasers, as well as bending machines from different manufacturers. We wanted to find the best possible solution to provide cost-effective sheet metal parts to our customers. Some of the machines we had lacked in performance, and some replacements had to be made. As we had invested heavily in our machines over the years, maintenance and operating costs also rose. At the same time, reliability was declining slightly." It was clear that a solution had to be found.

> We wanted to find the best possible solution to provide cost-effective sheet metal parts to our customers.



#### UNLOCKING THE SITUATION WITH AUTOMATION

At the end of 2020, Lankapaja's factory in Nummela received Prima Power's Night Train FMS® automated storage solution, which features an exceptional size range for the business context in Finland. The storage solution delivery also included a new Combi Genius 1530 combi laser machine, which brings together laser cutting and punching technology with an automatic LSR loading and stacking robot.

"We realized that our only option was automation. That way we could reduce the number of different machines, increase production efficiency, and lower costs," Öberg continues. And customers demand and appreciate automation as well. According to Öberg, automation is one of the elements that are perceived as a guarantee that a supplier will be able to offer its customers competitive prices now and in the future. "We do a lot of small runs, making shift times important. This is why we chose the most flexible sheet metal machine on the market, Prima Power's combi laser. It can run even small batches efficiently. The storage solution also allows us to automate the loading and unloading of sheets."



 Previous page Prima Power Night Train storage solution helped Lankapaja achieve great cost savings and efficiency.
Above R&D manager, Christian Öberg (left) and IT manager, Jon Törnwall trust Prima Power's automation.

We realized that our only option was automation. That way we could reduce the number of different machines, increase production efficiency, and lower costs.



#### A NEW PARADIGM FOR NEW OPPORTUNITIES

Lankapaja runs the machines in two shifts, totaling about 8-12 hours of effective operating time per day per machine. With the help of the automated storage solution, the goal is to reach 15-20 operating hours per day per machine: a huge increase in productivity that will not trigger the additional costs of manual alternatives. "We noticed that with automation, we are able to increase productivity, flexibility, and savings," Öberg states.

Jon Törnwall, the IT manager at Lankapaja, goes further into the details: "This requires a new kind of thinking for programming and job queue planning. We investigated this at length and noticed that most waste in production comes specifically from picking, loading, and unloading of the sheet metal. We believe we will reach our goal by automating these steps and that in the future, with the help of the storage solution, we will manage the same amount of work with two machines as we do now with three machines."

The Combi Genius installed at Lankapaja features an optional protection cabin allowing noise reduction and a more sustainable working environment.

Based on previous experience, it was easy to choose new technology from a reliable partner.

The factories of Lankapaja corporation are located in Nummela and Lahti in Finland and Skillingaryd in Sweden. The picture shows the Nummela factory.

#### EXCELLENT MAINTENANCE

Prima Power's Night Train FMS automated storage solution has been Lankapaja's biggest investment so far. The decision was considered carefully, down to the final choice between Prima Power and another major manufacturer. "Both companies had their strengths, and it was difficult to compare their technical specifications. In the end, we chose Prima Power based on a working example where I personally know that the Night Train storage solution brought great cost savings and efficiency," Törnwall says.

"In addition, Prima Power's excellent maintenance service influenced the decision. We know for sure that the machines will keep running thanks to efficient maintenance and good response time. Prima Power has always provided us good service and answered our questions. Based on previous experience, it was easy to choose new technology from a reliable partner," Törnwall praises.

Combi laser machines offer significant flexibility and keep set-up times to a minimum, even with small runs.

See Prima Power machines in action at Lankapaja's Nummela factory, in the short video available a



#### THE FUTURE IS FLEXIBLE

Mikko Fiskaali, Prima Power's sales manager in Finland, is sure that the Combi Genius 1530 machine and the Night Train FMS automated storage solution are just the right choices for Lankapaja's needs.

"With the help of the Night Train automated storage solution, efficiency will increase, and machine utilization rates can grow. A level of utilization of more than 90% has been achieved in several customer companies measured on an annual basis," Fiskaali says. "Combi laser technology has been quite sought-after in Finland recently; we have sold more punch-laser machines than punchingright angle shearing machines in the last few years. Combi laser machines are very well suited to varied production, which is also the case at Lankapaja. They offer significant flexibility and keep set-up times to a minimum, even with small runs."

"The advantage of a combi machine is that many work phases can be performed simultaneously, eliminating unnecessary costs and low added value manual work" says Fiskaali. Thus, following its internal analysis and farsighted investment, Lankapaja is on the right track to continue growing with great efficiency, productivity and customer success.



# NEW TECHNOLOGIES, OLD PARTNERS

# THE VALUE OF GREAT CUSTOMER CARE

AT PRIMA POWER, WE STRIVE TO BUILD LONG-LASTING BUSINESS RELATIONSHIPS BASED **ON MUTUAL TRUST AND RESPECT. BUT DON'T** TAKE OUR WORD FOR IT: OUR CUSTOMER RAPPO, WHOM WE'VE WORKED WITH FOR 25 YEARS, SHARES HIS POINT OF VIEW.

#### BUILDING TRUST AND EXPERTISE

"I met Prima Power in 1996, when we purchased a punching machine. Two years later, we added a Platino laser cutter – perfect for the flexibility and design complexity the interiors market demanded at the time," explains Luigi Rappo. "The engineer who installed it is still our contact at Prima Power: after over 20 years, this is one of the few companies where we still talk to the same people. This builds trust and makes it easier to face any issue - but also means their personnel puts a vast experience at our service. They don't spend hours on the phone with the headquarters, trying to figure it out: they always know what to do."

#### SERVICE TILTS THE SCALE

A second Platino machine was added in 2002, soon followed by a combined Shear Genius system. "The SG6 offered terrific productivity," but had to be sold when large repetitive orders faded in the wake of the 2008 crisis. In 2015 Rappo opted for a Prima Industrie Platino 4-kW Fiber laser cutter with Compact Server automatic load/unload. "It was a turning point, allowing us to enter new markets with smaller and more diverse orders - in the medical field or for heat exchangers, for example. Then we added a new-generation Platino Fiber in 2018: another leap forward, in terms of technology and ease of use. Press a button and it does all the work." "It's blood, sweat and tears every time we buy a new machine", Marco Rappo jokes about how they go over every option. "All leading brands have reached impressive quality standards. But the service Prima Power guarantee always tilt the scale in their favor."

> 🦉 We know we can count on a partner that has proven we can trust them.

#### MAINTENANCE IS KEY

"Our Prima Power laser cutting machines are the heart of our business," Marco Rappo says. "If they stopped, all other departments would stall within 48 hours – so maintenance is key. Our contract with Prima Power covers all regular activities, allowing us to plan everything and solve issues promptly. If anything happens, we know we can count on a partner that speaks our same language and has proven we can trust them." And it's not just the technical assistance, Luigi Rappo adds: "Their sales team helps out way beyond sales. One rep once personally picked up a spare part from the warehouse while the engineer worked on the system, just to get the machine running as quickly as possible. That's real teamwork, and a real effort to be a partner to the client."

Prima Power service engineers don't spend hours on the phone with the headquarters, trying to figure it out: they always know what to do.

### **ABOUT RAPPO SRL**

Rappo Srl has specialized in sheet metal components since it was founded in 1972 in Samarate (Varese, Italy). Thanks to Luigi Rappo's entrepreneurial ability and eye for technological investments, the company has grown to 30 employees and two Renata Genoni, their son Marco and daughter Rossella.

**Discover Prima Power's service** agreements and warranty extensions

The Rappo family - Marco and Luigi Rappo, Renata Genoni and Rossella Rappo - together with Massimiliano Tarable, Prima Power after sales marketing manager (left).





Above Fabio Carantini, Prima Power Field Customer Service Engineer, during a preventive maintenance intervention on the fiber laser head at Rappo. Bottom Laser cutting is the heart of Rappo's business and an effective maintenance is a key factor.





# THE HUMAN FACTOR THE IRREPLACEABLE **VALUE OF CUSTOMER CARE**

### AS A LEADER IN THE CHINESE HIGH-TECH MARKET

CHINT NEEDS THE MOST FLEXIBLE, **INTEGRATED AND POWERFUL EQUIPMENT TO MEET THE REQUIREMENTS OF AN INCREASINGLY COMPETITIVE MARKET.** 

The company's ability to recognize emerging trends and keep up with innovation has allowed it to make the right investments for business success and almost 30 years of growth in a technologydriven field.

And yet, the human factor still plays a part in many of its important decisions, today and for the future.

The highly automated LPBB flexible manufacturing system installed at CHINT offers outstanding productivity



"With the huge revolution of the industrial structure, process automation has become of the utmost importance for us, in order to increase uptime, efficiency, and quality. Therefore, we need machines with a higher level of automation and higher processing precision, also featuring detection functions to ensure the quality of our products."



#### A GLOBAL LEADER AT THE FOREFRONT OF INNOVATION

The CHINT Group was founded in 1992 and is located in LeQing City, in the Zhejiang Province. During its 30-year development, CHINT has always been focused on its core businesses and has played a leading role for other Chinese industries as a high-tech manufacturer across the entire industrial electrical supply chain, encompassing power generation, storage, transmission, transformation, distribution, and utilization. With annual sales for more than 50 billion renminbi (over 6.5 billion euro), today CHINT is a global leader in industrial electric equipment and new energy.

"The Zhejiang CHINT Electrics Co., Ltd. Jiaxing Branch is a subsidiary of the CHINT Group," explains Sheng Lidong, Technical Supervisor of the Production Department. "We are engaged in the R&D and manufacturing of integrated switchgear ranges between 6kV and 35kV. The product series includes KYN28A, KYN61, XGN2, XGN77 and XGN15 which are widely used in major public projects such as the state grid, airports, the construction of urban rail transit systems, the petrochemical industry, and data centers. Our products are exported to more than 30 countries and regions in the world, including Russia, Australia, India, and Vietnam".

Sheng Lidong, Technical Supervisor of the Production Department at CHINT (left) and Xiang Liping, Prima Power technician.

Process automation has become of the utmost importance for us, in order to increase uptime, efficiency, and quality.



Above: Sheng Lidong showing a panel of an electrical cabinet manufactured with the Prima Power LPBB line. Bottom: Automatic material flow improves production efficiency and quality and reduces inventory and material waste



#### A PRIMA POWER LPBB LINE FOR TOP AUTOMATION

"We have been cooperating with Prima Power since 2012," continues Sheng Lidong. "The machines we have all share a very high level of automation and efficiency, from the very first standalone E5x model punching machine we purchased, to the most recent Prima Power LPBB line that offers laser cutting, punching, buffering, and bending all in one. This allows us to maximize production capacity, ensure the longest operating time, and finally achieve the goal of unattended production, where human labor is dedicated to more complex tasks." The highly-automated Prima Power LPBB line at the CHINT site includes one servo-electric punching and fiber laser-cutting Combi Genius CG1225 equipped with 3,000-W fiber laser CF 3000, an intelligent storage system for up to 40 meters in length, an automatic sorting unit with 9 pallets for small laser-cut parts sorting, an LD + LST automatic loading, stacking, and unloading system for large workpieces, a servo-electric panel bender EBe2720 equipped with a PCD (picking and centering device) complete with two wagons (a fixed and a scissor one for external parts feed in), and a BTD (automatic part turning device). To top it off, there is also a USS system used for stacking bent parts with a maximum work range of 2,720 millimeters.

The machines we have all share a very high level of automation and efficiency. This allows us to maximize production capacity, ensure the longest operating time, and finally achieve the goal of unattended production, where human labor is dedicated to more complex tasks.

INTEGRATED, FLEXIBLE, AND EASY TO USE The combination of laser cutting and punching in a single system The LPBB flexible manufacturing system installed at CHINT offers is also the source of a variety of benefits for the final customer. outstanding productivity resulting from Prima Power's modular When there is a rush order, or a test series to prove delivery technology and intelligent material flow management. The compact capacity, the laser is often able to provide the best solution to the LPBB line processes blank sheets into ready-bent, high-quality challenge. On the other hand, in case of longer series, punching components automatically. The sheet metal manufacturing system adds manufacturing speed and cost efficiency, allowing for versatile integrates versatile servo-electric punching, flexible and efficient forming and providing a competitive edge that cannot be matched fiber laser cutting, high-quality servo-electric bending, automatic by individual laser or punching machines. Even if the LPBB line is intelligent part handling, and sophisticated software. It is everything suitable for complex manufacturing, it is extremely easy to operate CHINT needs to meet the very limited reaction times expected and features minimal set-up times. The information flow is totally in modern production, where machines have to be flexible and transparent and fully automatic from programming to production extremely fast to quickly respond to production orders, often for reportina. very small quantities.



The Zhejiang CHINT Electrics

Co., Ltd. Jiaxing Branch

specializes in integrated

between 6kV and 35kV

switchgear range

The LPBB flexible manufacturing system installed at CHINT offers outstanding productivity resulting from Prima Power's modular technology and intelligent material flow management.

#### THE SECRET TO LONG-TERM CUSTOMER SATISFACTION

The technical specifications meet CHINT's needs to perfection. But Prima Power is happy to do even more: putting integration, flexibility, and automation in clients' hands is only the beginning. "We are very grateful to Prima Power engineers for their direct effort on the site," concludes Sheng Lidong, "They are working incredibly hard and have helped us iron out any issues. The sales department is also very active in responding to any requirements, and have always been fully available to listen and support us." As always, while being able to provide cutting-edge technology that meets the needs of modern manufacturing is crucial, believing in the value of solid relationships based on trust and human connection, and approaching work with a true partnership mindset, is what makes the difference in long-term customer satisfaction, anywhere in the world.

We are very grateful to Prima Power engineers for their direct effort on the site. They are working incredibly hard and have helped us iron out any issues.



Watch the video interview to our customer CHINT





**SOFTWARE CORNER** 

# **SMART MANUFACTURING** MODULAR SOFTWARE

## TO MEET ANY PRODUCTION NEED

**PRIMA POWER OFFERS 4 SOFTWARE** PACKAGES TO SUPPORT ALL TYPES **OF PRODUCTION WITH DIFFERENT TECHNOLOGIES AND AUTOMATION** LEVELS.

#### SCENARIO 1:

Small sheet metal factory with automated information flow

- NC Express e<sup>3</sup> Classic
- Network license
- Tulus<sup>®</sup> Office Basic

#### SCENARIO 2:

- Static nests-driven production
- NC Express e<sup>3</sup> Classic
- Network license
- Static nesting
- Tulus<sup>®</sup> Office Classic

#### SCENARIO 3:

Mass-production flow with constant variations

NC Express e<sup>3</sup> Premium

drastic reduction in working times.

- Network license
- Tulus<sup>®</sup> Office Premium
- Parametric Programming
- Tulus<sup>®</sup> Storage
- Tulus Terminal

#### SCENARIO 4:

Fully automated, lights-out operation

- NC Express e<sup>3</sup> Premium
- Network license
- Tulus<sup>®</sup> Office Premium
- AOP

bv Ivana Montelli

Software modularity is key to ensure all aspects of

performance are perfectly and simply managed within a fully

interconnected and integrated digital factory, programming

and monitoring the entire production process - to achieve

remarkable increases in efficiency and productivity, and a

Prima Power S Product Manage

MANAGING CONSTANTLY VARIATING MASS PRODUCTION FLOW Full support for 3D FEATURES Import 3D assemblies Filter and convert asse NC Express e<sup>3</sup> Premium ROUTING: Parametric Programming Visual order status view to sheet metal parts Tulus<sup>®</sup> Office Premium and single workst reporting to ERP: Unfold CAM Tulus<sup>®</sup> Storage Automatic tooling • Tulus® Termin 3D Nesting Laser cutting Parametric production Bending Generate new part programs automatically from a script Manual work step: Fast programm of constant ERP 150 torage software connecti rkstep status reporting to to ERP ensures raw material ERP enables Kanban method with PUSH or PULL production co



- CUSTOMERS, as the protagonists and focus of our attention.
- CORRELATIONS between products, technologies, market sectors, services, and customer stories, at the heart of the website. This is the element that leads us from the concept of product catalogue to the concept of added value



# **THE MAIN PILLARS OF THE NEW PRIMA POWER WEBSITE**:

- drivers. We don't just build machines: we want to listen to customers and be at their side, in every application need they may have.
- **CONSULTING**, because visitors are free to enter from any page, and will feel welcomed and guided through our range – thanks to advice, correlations, and an "always active" guideline.

CHECK IT OUT NOW! www.primapower.com



