

# *We are* **UMBRA GROUP**



VALTER  
BALDACCINI

2014 | 2024

cultivating  
a **more**  
**peaceful**  
world

The point of the President  
***UMBRA GROUP: roots and  
future of our organization***

The Voice of the CEO  
***Keep Evolving In A Changing  
World***

Beatrice Baldaccini  
***Organization Without Fear:  
S.A.F.E.T.Y. FIRST***

“

Only one wish stands out above the others:  
may a new age begin in which humanity finally  
finds that peace which is the value on which others  
are based, because peace means life, growth,  
the search for improvement in relationships  
with others and in relations between peoples.

Valter Baldaccini

Editorial Concept

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Translations

Itaca Servizi Linguistici s.n.c.

Graphic Design and Layout

You-n | Agenzia di Comunicazione

Printing

Tipografia Folignate

Photo Credits

UMBRAGROUP

Getty Images

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# UMBRAGROUP: *roots and future* of our organization

**Reno Ortolani**

Chairman of the UMBRAGROUP Board of Directors

Ten years have gone by since Valter Baldaccini passed away. This year, 2024, there will be several events specifically dedicated to his memory. I don't want to commemorate Valter with words, but I'll do it with a promise to him and all of you: UMBRAGROUP will never abandon the values he left us.

And I am sure of this because Valter has been watching over us and will continue to do so. So much has happened in the world in recent years [just to mention the three most serious: COVID-19, the Russian-Ukrainian war, and the Israeli-Hamas war], and the company is still very strong and demonstrably headed toward a rosy future.

I believe he has also been helping from wherever he is now, because it takes great strength to continue to cultivate the great plant whose seed he planted. Those who lead UMBRAGROUP and will continue to lead it can be certain: Valter loved, and will always love, all his employees and friends.

In my article of December 2023, I announced that by the end of the year there would be some new companies joining the group. I wrote: "The weight of Social Responsibility, first and foremost toward our extended community, is constantly increasing. [...] Precisely for this reason, by the end of the year we will have another three companies joining the Group. These are companies we consider strategic mainly for the electromechanical actuator supply chain [control electronics and management software, and complex precision machining]." Today I can reveal the names of these companies. In early October 2023, UMBRAGROUP acquired 51% of CO.ME.AR. S.r.l. and B.S.P. S.r.l., and in early December 2023 it acquired 100% of ERA Electronic Systems S.r.l. The three companies, in addition to having their own customer base, have long been strategic suppliers of Umbra's, but their technology and expertise actually made them true partners, with whom integration is now easier for us. As of today, 1,615 people work in the group, compared to 1,199 on the same date last year. The family continues to grow, as does our social responsibility. One last thought on a topic of global significance: Sustainability.

You've certainly heard many times statements such as, "The planet's survival is at risk due to the increase in CO2 and environmental pollution." This statement is not correct; the reality of the facts is that we are making the planet uninhabitable for human life. The planet earth will survive whatever cataclysmic events mankind may set off. Suffice it to say that our planet has existed for about

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*... we are striving to ensure that our vision incorporates comprehensive sustainability more and more.*

4,500 million years and will be "consumed" by the sun between 5,000 and 7,500 million years from now. In spite of the gigantic upheavals that have occurred in the various geological eras, the planet is still here; man will never be able to "generate" such cataclysms. And in the end we must agree that it is not the survival of the planet, but the survival OF HUMAN BEINGS that is at risk.

We are all well aware of this fact, but we are not taking action with the necessary speed. To be sure, the effects of pollution in general, and especially the increase in CO2, are the factors that have the most impact on the quality of our future life. And the point of no return is not far away. In 2015 the UN launched a plan of intervention called AGENDA 2030: GOALS FOR SUSTAINABLE DEVELOPMENT [consisting of 17 goals, later broken down into 169 targets] to be achieved by 2030. Of course, all 193 member countries, and signatories to the 2030 Agenda, are lagging far behind. But we must act today; it is imperative that we reverse the course. Unfortunately, it may be unpopular for countries' rulers to take the helm and turn it around.



Nevertheless, we ordinary citizens must set an example by doing our part and, most importantly, teach the generation that follows us to continue to do the same.

As a company, we are striving to ensure that our vision incorporates comprehensive sustainability more and more, and we have included medium- and long-term goals in our strategic plan that will reduce our impact on the environment and benefit our extended community. All this is already

in UMBRAGROUP's values, and always has been; Valter taught us. We have taken up the challenge, as we will do every day. For ourselves and for the generations to come.

# Keep Evolving In A *Changing* *World*

**Matteo Notarangelo**  
CEO UMBRAGROUP

In a world that is changing at an increasingly rapid pace, “continuing to evolve” is not just a slogan, but a strategic must for maintaining competitiveness and success. This means being ready to seize every change as an opportunity for improvement, and keeping a flexible mindset and a constant propensity for learning. This way, we are able to not only achieve, but also surpass, our goals.

Evolution does not concern merely the professional sphere, but the personal sphere as well. As we grow as individuals, we become more aware of ourselves, others, and our surrounding environment, and live fuller and more meaningful lives. For UMBRAGROUP, each person represents an immeasurable value, the crux of our organization. Our collective growth is a reflection of the value we place on each individual in our ecosystem.

The first half of the year confirmed the positive trends seen during the last months of 2023. We saw a growth in air traffic that reached pre-Covid levels, leading to a significant recovery of our business in the Civil Aviation sector. This recovery was further boosted by the advancement of new projects in the areas of ball screws, electromechanical actuation, electronic control



units, and precision mechanical components. In the Defense and Space sectors, also, we are seeing the emergence of new opportunities, in both our European and American Divisions.

In spite of these positive developments, we continue to experience significant challenges, particularly in supply chain management, which continues to be a limiting factor. We are working tirelessly to consolidate our existing programs and renew crucial contracts, while maintaining strong partnerships with our longstanding customers.

Our Industrial business is going through a more difficult phase due to the global macroeconomic situation characterized by low growth rates, particularly in China. In times like these, our resilience becomes a crucial asset. We use these challenges as levers to further improve ourselves by innovating processes, products, and markets, and establishing new strategic partnerships.

Our commitment to full-scale sustainability is unwavering. Every company in the Group, at the global level, is involved in a unique path of continuous improvement, guided by the responsibility of being a driving force for the future of our planet. The main research projects we are developing are geared toward drastically reducing CO2 emissions, thus contributing to a more sustainable world.

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*For UMBRAGROUP,  
each person represents  
an immeasurable value,  
the crux of our organization.*

In conclusion, our ability to transform and strive for higher and higher aspirations is fueled by our determination, commitment, and resilience. We will continue to seek new challenges, constantly improve, and adapt to the changing market conditions and surrounding environment. With our commitment and passion, we are confident that we will continue to grow and prosper, bringing value to our customers, our employees, and the community as a whole.

Together, we are flying toward a glowing, opportunity-laden future.

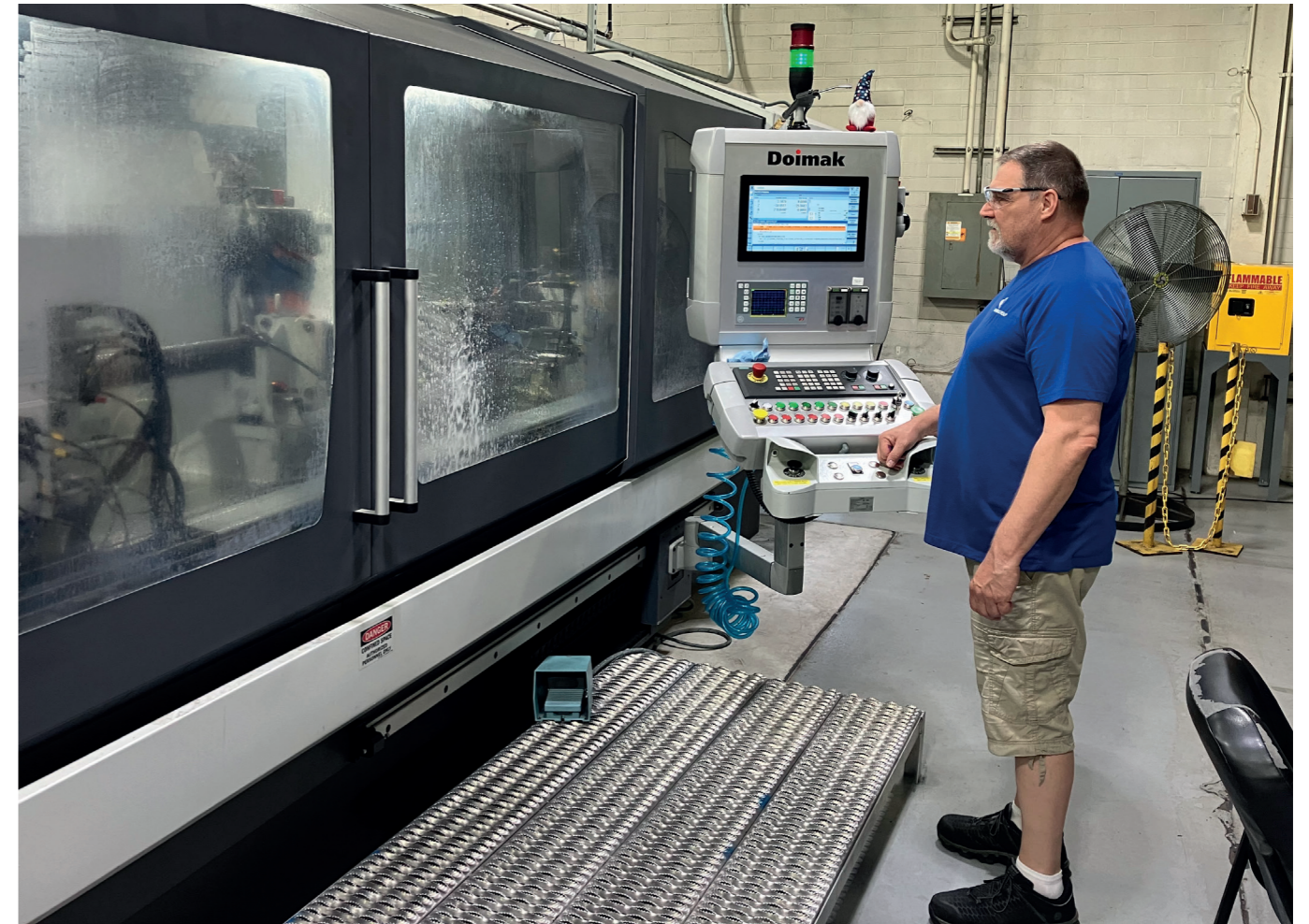


# *Upholding Excellence:* A Note of Appreciation to Our Dedicated Team

**Kathy Moodie**  
CEO US Offices UMBRAGROUP

As UMBRAGROUP US Offices faces unprecedented challenges in the aerospace manufacturing industry, our teams in Everett and Saginaw remain committed to upholding our company Values of Innovation, Respect, and Teamwork. Despite the obstacles we have faced, we continue to demonstrate remarkable resilience, adaptability, and perseverance.

The **Linear Motion LLC.** team is increasing the rate capability of the 787 HSTA Ball Screw Assembly, to support the 787 wide-body airplane program as the demand has tripled and co-production was postponed. With the work of the entire team, we have improved our forging delivery schedule, implemented the new Doimak grinder, improved quality, inspections, and outside processing. All these accomplishments have improved our delivery schedule by 6-weeks.



The new Doimak grinding machine in operation.

Despite order “pushouts” from our critical customer who is slowing down production to focus on safety and quality, our **Umbra Cuscinetti Inc.** team has won and accepted new work statements to close these gaps and maintain the revenue and profitability growth for 2024.

While the current landscape presents numerous uncertainties and stresses, the team's professionalism, and positive attitude shine through, inspiring confidence in our ability to overcome any obstacle that comes our way.

In times like these, it is essential to acknowledge our accomplishments. We have been selected to participate in the development of critical future programs to participate in, such as the Raytheon Long Range Standoff [LRSO] Bell's Future Long Range Attack Aircraft [FLRAA]. These critical programs ensure our future growth and

participation in supporting the Defense sector.

Each process we optimize and each problem we solve contributes to our collective success. Thank you to all our team members for your hard work, dedication, and unwavering commitment to Umbra. Your contributions are truly valued and appreciated.

“

*company Values of Innovation,  
Respect and Teamwork*

# Germany: new people and new skills.

## Martin Riegger

General Manager German Offices UMBRAGROUP

The current market situation in the industrial sector is particularly difficult and competitive, and our German plants depend in large part on the trend of this market. In spite of the challenges faced by both KUHN Präzisionsspindeln und Gewindetechnik GmbH in Freiberg am Neckar and Präzisionskugeln Eltmann GmbH, they are focusing on product development and continuous improvement in order to meet the high demands of their customers. Indeed, our main goal is to further increase customer satisfaction and distinguish ourselves with excellence in the quality and reliability of our solutions. We are constantly working not just to meet our customers' expectations, but to exceed them!

Let's discover together all the latest news from the first half of the year at UMBRAGROUP's German sites!

At **KUHN**, to achieve our goal, we are adopting several important measures to optimize processes and improve performance. A central component of our strategy is definitely the intensive training of all employees. In fact, thanks in part to the help of the parent company in Foligno, we have been able

## Oskar Beer

Manager Metallurgical Laboratory  
Präzisionskugeln Eltmann GmbH

to implement major training programs to bring our team up to date with the latest technologies and expand their skills.

We have also invested in a new piece of machinery, which has enabled us to introduce an extremely innovative measuring method. With this advanced technology we can make more precise and efficient tests and checks, impacting product quality and further strengthening our promise of reliability and precision.

But that's not all! As a matter of fact, we've also invested in people, and now KUHN's team can boast a new production manager with great experience, as well as maintenance specialists and expert operators for CNC machines. Indeed, thanks to these new staff members, we are already seeing incredible improvements in the quality and precision of our production.

At the end of this first semester, we can say that we are already reaping the first fruits of our work. In fact, a visit by our CEO, Matteo Notarangelo, provided an opportunity to present the results of the work that has been done. This for us was proof



The UMBRAGROUP SpA team together with the KUHN team.

that the strategic measures we have adopted are having an effect and that we are on the right track! During these difficult times, it is essential to be able to constantly adapt to market demands, and at KUHN we are doing so with determination and innovation. Indeed, we are convinced that our strategic investments will enable us not only to meet current needs, but also to be ready to tackle future challenges!

On the other hand, Präzisionskugeln Eltmann's first half-year has ended with a world record! In the variety of an excavator's operations, there is one detail that often escapes the eye, but which represents a valuable soul for its functionality: the balls. Not just simple balls, but small giants of precision, indispensable elements for the flawless operation of the machine. And when RWE, an energy pillar, found itself in need of these replacement balls for its massive excavator, it chose to trust in Präzisionskugeln Eltmann. It was not an ordinary order: 240 balls, with an impressive diameter of 320 mm, needed to keep the fifth wheel of the world's largest excavator moving during delicate maintenance operations. The huge responsibility rested on the shoulders of these balls, because any possible failure would have resulted in prohibitive service costs.

**Präzisionskugeln Eltmann** took up the challenge! Through an extraordinary team effort with an outside tempering company, they created a custom heat treatment process and optimized the system to ensure that each ball was a guarantee



Bearing balls by Eltmann.

of reliability and strength. Meticulously performed measurements confirmed that each ball met the requirements, even exceeding the standards set by the customer.

The path to perfection was not easy. In order to cope with dimensions that had never been produced before, the grinding machines also had to be upgraded. But Präzisionskugeln Eltmann's commitment and dedication led to amazing results. The finished balls not only met customer requirements, but exceeded expectations, with a precision that was almost a work of art. During a recent audit, RWE's auditors critically examined every detail. What they found only confirmed Präzisionskugeln Eltmann's reputation for excellence. The high quality of the balls and the amount of meticulous work already done impressed the auditors, leading to promises of further orders.

This is not just a story of balls and machines. It's a story of passion, commitment, and know-how that challenges the limits of the ordinary to achieve the extraordinary. It's the story of how Präzisionskugeln Eltmann did not just supply balls, but also delivered trust, reliability, and a commitment to uncompromising excellence.

# The Dream of Italy's Largest *Aerospace* Qualification Center

**Antonio Alvino**  
Technical Director SERMS S.r.l.

During this first half of the year at SERMS, our attention has been mainly focused on a project that, like many other companies in the area, we hold dear for the future of our region in the Aerospace sector.

But let's start at the beginning! In fact, during its 20 years of activity, SERMS has certified the reliability of hundreds of space components, earning a reputation of great expertise in the Italian industry landscape.

SERMS' close ties with Italy's National Institute of Nuclear Physics and the university system have enabled its engineers to train in close contact with first-rate entities such as NASA, CERN, and MIT. The Space Economy is now one of the world economy's most promising development trajectories for the coming decades. The experience

of SERMS and UMBRAGROUP in space, combined with the latter's financial capacity, forms the optimal basis for taking off in this sector. However, for some time now there has been a problem that impedes growth, i.e. the lack of suitable spaces, which hinders the acquisition of new machinery and staff.

This has given rise to the idea of a cooperative growth plan that would include not only SERMS but also its neighboring entities, with the ambitious and achievable goal of creating the largest Italian aerospace qualification center right in Umbria. The ideal site would be the area of the former ISRIM which, after being abandoned for almost a decade, would be redeveloped to host an interconnected ecosystem of industry, academia, and laboratories. Such an initiative would be effective for a number of reasons:

- » Umbria boasts an important aerospace cluster, consisting of around 30 companies that are often forced to make expensive trips outside the region to make use of testing services.
- » Public and private entities with years of experience in electromagnetic compatibility testing and innovative materials development are already established in the area.
- » A number of Umbrian companies have already expressed their interest in participating.
- » New, highly specialized jobs would be created, thus countering the brain drain and contributing to the revitalization of the entire region, in line with the corporate social vision of Valter Baldaccini, UMBRAGROUP's enlightened founder.
- » Similar initiatives in Italy, most notably Turin's Aerospace City, have proven their success and potential impact.

After years of attempts, it seems that something is finally moving. In fact, the Prime Minister, the Governor of the region, and the Minister for Cohesion have signed an agreement allocating 17 million euros to the redevelopment of the Pentima [Terni] infrastructure hub by the end of 2027. Coordination discussions are already underway among the universities, the region, and the companies involved, among which, of course, we find UMBRAGROUP for the organization of the spaces and the determination of the cooperation logistics.

It appears that the project is about to take off. We sincerely hope so, for the sake of the community and the firms doing business in it.



# Organization Without Fear:

## *S.A.F.E.T.Y. FIRST*

**Beatrice Baldaccini**

Chief People & Brand Officer UMBRAGROUP

To understand why some work teams manage to achieve extraordinary results, while others get lost along the way, in 2012 Google launched its Project Aristotle studying approximately 180 work teams, with the aim of identifying the key factors that make a perfect team.

Who wouldn't want to work on this team? How is it built and how is it maintained? These are the thoughts that guided us in the conception and presentation of our Leadership model which is expressed by the acronym **"S.A.F.E.T.Y."** But what does each letter mean?

Here's the explanation:

**Sustainable Growth** - *Guaranteeing a long-term sustainable growth of the organization, its stakeholders, and the environment.*

**Achievement** - *Allowing for a decision-making process and proactive implementation.*

**Foster relationships** - *Permitting people's involvement and creating positive relationships.*

**Empathy** - *Empowering others and developing talents.*

**Trust** - *Embracing leadership and being credible.*

**Your Self Development** - *Embracing a sense of responsibility and personal development.*



The UMBRAGROUP team during the International Soccer Tournament on June 15th.

allows people to feel comfortable expressing their ideas, opinions, and concerns without fear of retaliation. It's a climate in which relational risk and fear of tainting the relationship with a colleague or superior in any way, because of expressing an opposing or divergent opinion, are likely to be zero.

Among the factors are: reliability, i.e. mutual trust among team members; structure and clarity of team goals, roles, and decision-making powers; the meaning the activity represents for each team member; and the impact, i.e. the certainty of contributing with their work to the achievement of the organization's goals. In a nutshell, the macro factors are: INCLUSION, RESPECT, and TRUST among all the team members.

Working as part of a good team makes us feel good and helps us feel safe, in all circumstances. TEAM: "Together everybody achieves more." We definitely have to agree with Aristotle:

“

*The whole is greater than the sum of the parts.*

Aristotele

The six dimensions are made up of a total of twelve subdivisions, each of which is associated with the respective observable organizational behaviors. For this first year, a small group of behaviors have been chosen and evaluated to create awareness and allow everyone to be aligned with them; in fact, it is only possible to improve something that is measurable.

The leadership model is a framework for determining, developing, and evaluating the competencies guiding other people and the teams, in order to understand which approaches should be preferred and which should be avoided, through constructive discussion with the managers.

So what were the conclusions of the Project Aristotle observed and highlighted by Google's researchers? A series of elements were found that guide the relationships among team members. First of all, psychological safety, on which all the other factors are based. The term "psychological safety" refers to the favorable social climate that

cultivating a **more peaceful** world

# A *2024* to be remembered!



Dedication of the Municipal Stadium of Cannara to Valter Baldaccini.

**Sara Bordoni**

Marketing &amp; Communication Coordinator UMBRAGROUP

**Beatrice Bandinelli**

Communication Officer UMBRAGROUP SpA

## *Valter Baldaccini: Cultivating a more peaceful world.*

With these words, the year 2024 began for the Marketing & Communication Office. The first days of the new year were already buzzing: 2024 marked the 10th anniversary of the passing of our founder, Valter Baldaccini.

We felt the need to find the best way to celebrate him as a person, his ideas, and his values: a way that would involve all employees, longtime customers, friends of the Valter Baldaccini Foundation, and our stakeholders.

From the very start, the best way to honor and remember Valter Baldaccini – an entrepreneur, philanthropist, and man of great complexity who loved the simple values – was clear to us. Those who had the privilege of knowing him will surely remember his love for sports, especially for soccer.

In 2022, on the occasion of UMBRAGROUP's 50th anniversary, numerous longtime customers and friends asked us to bring back the international soccer tournament, since soccer was a sport that

Valter himself had always promoted both as a man and as an entrepreneur, even to celebrate UMBRAGROUP's most important dates. As we write these words, the tournament is coming to life day by day, with the spirit and values our founder taught us.

When Valter crossed the threshold of our headquarters for the last time ten years ago, he told us that we had sown a great seed together, and that that seed would have become a great plant. Today, we would like to remember him with the promise that we are still working together to sow the seed of peace, and we look forward to the next initiatives we have planned for this 2024.



## BRANDING: The new strategy!

Dear readers, we are excited to share an important chapter of our history with you. Since February, we have been immersed in an exciting and inspiring journey to redefine our brand strategy.

In this adventure we have been working closely with experts and strategists who, with dedication and passion, have spent months with us, both remotely and through visits to our headquarters, collaborating with our decision makers and managers from the various business divisions and Group locations. The result of this intensive effort will be a transformation that promises to elevate our brand worldwide. We look forward to sharing it with all of you, so stay tuned! It will certainly be worth your while!

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*... a transformation  
that promises to elevate  
our brand worldwide.*



The “Anthropocene and the Challenges of Sustainability” team.

## A sustainable future

In addition, the first six months of 2024 have been a period of great excitement and empowerment for UMBRAGROUP. Together with the Office of Health, Safety, Environment & Energy, we launched a number of important projects at the local and non-local levels. These included World Occupational Health and Safety Day, which was a huge success.

For the occasion, we held an in-house contest for the children of UMBRAGROUP SpA employees, inviting them to express their idea of safety with a drawing. Choosing the winners was an arduous task, but the joy on the children's faces during the award ceremony in Da Vinci Hall repaid us for all our efforts. The promise of a second edition of the contest was greeted with enthusiasm!

Also during the first half of 2024, another clean-up of the green area and parking lot at our headquarters in Foligno was organized: an act of respect demonstrating our awareness of the importance of being the first to take action in protecting our work environment. This first semester has been a true journey of growth and

awareness for all of us at UMBRAGROUP. Last but not least, we have been involved in the organization of a training program called “Anthropocene and the Challenges of Sustainability”.

An outside trainer is accompanying us through a process of spreading a sustainable culture, not only within the company, with the participation in various workshops by Management and several business ambassadors, but also outside, through the presence in the training of stakeholders and suppliers. We are addressing issues of extreme importance which help us reflect on what we can actively do to contribute, in our own small way, to the creation of a more sustainable future.

Dear readers, 2024 is shaping up to be a year full of excitement, novelties, and not-to-be missed events! The international soccer tournament is just one of the many surprises awaiting you in the next issue of “We are UMBRAGROUP!” Continue to follow us and share this exciting journey with us. We promise it will be a memorable one!

# A new organization, greater cooperation!

**Martin Riegger**

Group Chief Operating Officer UMBRAGROUP

UMBAGROUP is growing and the other Group companies and personnel are increasing along with it, as are the challenges to be dealt with! Starting in January 2024, there have been a number of new developments in Operations, first and foremost a new organization for the **Aerospace line**, which aims to increase collaboration among all the Group's subsidiaries in Europe and America working in this sector.

The structure, which is highly integrated among the various company functions, reinforces the course already undertaken within the parent company in Foligno. This has led to full cooperation among the various headquarter lines (Aerospace OEM, Aerospace MRO, and Industrial), along with enormous benefits thanks to the flexibility created within the plant.

As a first step in the integration with aeronautics companies in the United States, it was decided to assign a group of inter-functional persons who, taking a long trip abroad to Saginaw, could start working side by side with American personnel to

share know-how and create Group synergies aimed at a continuous improvement of the company's performance. To this end, our "pioneers" (Stefano Minni, Michele Fongo, Daniele Cecconi, and Francesco Silvani) have spent several weeks, with more to come, at Linear Motion LLC., immediately bringing home enormous results for the entire Group.

Thanks to the support and coordination of the entire Aerospace structure here in Italy, led by Operations Director Angelo Radicioni and Operations Manager Riccardo Maccaglia, the progress of shared actions is monitored daily and any obstacles, if they arise, are eliminated very quickly.

This is just the seed we are sowing, for the birth of the first Aerospace "S.W.A.T. Team", which will lead to smoother and more efficient exchanges of information among Group companies, including through periodic trips and visits to U.S. plants. In addition, the team will continue to grow and new support functions will be added, including direct



The cross-functional team at work on the 90-day plan.

production personnel already training in Italy. So let's take off, **S.W.A.T. Team!**

Also on the **Industrial front**, 2024 opened with an organizational challenge. We are, in fact, adopting an approach to the market that is increasingly international and Group-wide in scope. For this reason, for everything Operations-related, we are not focusing on a single plant, but rather thinking as a single global division. This *modus operandi* gives us a sense of how globalization has radically transformed the business.

Indeed, the goal of the new organizational structure is to work as a single integrated division, considering geographical and cultural differences as a competitive advantage and exploiting them to optimize production, improve efficiency, and access new markets in order to focus fully on customers. This way of working, considering the geographic relocation problem, made it necessary to delineate a clear strategy, to be shared at both the division and the Group level.

Our aim has always been to be a team that can share best practices across the board, proactively use all communication technologies made available by the company, and build a global supply chain, in a constant pursuit of a unified corporate culture and of integrated management systems.

During the first half of 2024, the new organizational structure of the Industrial division has already produced positive results, thanks to its activities which are defined and monitored monthly, via the "90-day plan" and the impeccable work of a cross-functional team made up of employees from both UMBAGROUP Foligno and Kuhn in Freiberg am Neckar.

We have been able to experience firsthand all the benefits of the work we are doing, but at the same time we have assessed the present and future challenges. Certainly the main and immediately noticeable advantage was the opening of the Group's various locations to global markets, with the possibility of exporting our products all over the world, also thanks to important agency agreements. In addition, we can also highlight a greater operational efficiency and the possibility of creating various synergies among the plants, resulting in obvious cost and resource optimizations. Last but not least, among the benefits of the new organizational structure we can also count a greater dissemination of ideas and innovations coming from the Group's different locations, which enable us to improve and speed up the product development process.

Of course, our sights are always set on the future, with the goal of continuously improving and being ready to take on new challenges.

# A View of the Future: Innovations and New Prospects

**Frederic Malleret**

Aerospace & Defense Business Developer UMBRAGROUP

## UMBRAGROUP: Contributing to the Future of Aviation.

Last May 15th the UMBRAGROUP team proudly enjoyed the invitation to be part, amongst the official and others key program partners, of the RACER official unveiling.

*"We recently put in flight the RACER demonstrator and it is a wonderful adventure for AH and all the partners involved. This is the second time in my career that I have the opportunity to work with UMBRA. This time it is for the rotating actuators of the flaps installed on the wings and the vertical fins of the RACER. I'm still impressed by the professionalism and the commitment of UMBRA teams and I also observe the huge progress performed in the field of EMA's technology. I think this is a very good step towards future collaboration. Thanks a lot for your contribution and congratulations for the achievement on the RACER!"*

**Brice Makinadjian**

RACER Program Manager at Airbus Helicopters.

This is a great first step of a success story started on June 20, 2017, during the biennial Paris Air Show, Airbus Helicopters unveiled a new program: the high-speed demonstrator based on the X3 [X-cube] project. This is a European-led initiative funded by the European Commission itself through the CleanSky2 program, which supports two crucial projects:

- » **RACER (Rapid and Cost-Effective Rotorcraft)** with AIRBUS Helicopters.
- » **NGCTR (Next-Generation Civil Tiltrotor demonstrator)** with LEONARDO Helicopters.

Indeed, the RACER and NGCTR demonstrators are breaking new ground in the helicopter field, offering increasingly advanced and innovative capabilities that can make the difference between life and death in search and rescue [SAR] and emergency medical services [EMS] missions.

These high-speed aircraft also promise to revolutionize European mobility, enabling travel between any two points in the European Union



Official presentation of the RACER.

in less than four hours. The future of European aviation looks very exciting indeed!

The RACER demonstrator, in fact, combines the vertical flight capability of a helicopter with the speed of a fixed-wing aircraft, increasing cargo capacity, maneuverability and agility. With an innovative design, the RACER is optimized for a cruising speed of 400 km/h while reducing fuel burn and therefore CO2 compared to conventional slower rotorcraft.

As part of this innovative project, UMBRAGROUP also made a key contribution, providing the advanced electromechanical actuators [EMAs] for the RACER's horizontal flaps flight and vertical rudder control. The innovative ROTARY EMAs, based on differential ball screw concept, proved to be highly efficient and reliable, leading UMBRAGROUP to receive the prestigious AIRBUS Helicopters Innovation Award 2022. The very successful collaboration with the AIRBUS Helicopters team has been a perfect example of teamwork and passion, in which the two teams have worked overcoming significant challenges and meeting ambitious timelines.

The RACER program reflects UMBRAGROUP's ongoing commitment to increasingly green and sustainable aviation. Through initiatives such as Clean Sky and Clean Sky2, and on-going projects such as SMR [Short and Medium Range] and AIRBUS Upwing X-Wing, UMBRAGROUP demonstrates its expertise in developing flight-critical electrical solutions.

The success of the RACER program is the result of the dedication of the UMBRAGROUP team, including ERA Electronic Systems S.r.l., part of UMBRAGROUP since November 2023 and partners, such as AESIS S.r.l., and the University of Pisa. Special thanks go to the RACER program manager and key contributors from AIRBUS Helicopters.

This ambitious path underscores the central role UMBRAGROUP is playing in the journey to shape the future of aviation, paving the way for innovative and sustainable helicopter technologies. By continuing to work with focus and dedication, with input from all stakeholders, the future of aviation is brighter and greener than ever!



**Daniele Frillici**  
Head of Sales Industrial UMBRAGROUP

## New Horizons.

During a historic period in which the industrial sector still doesn't seem to be able to see the light at the end of the tunnel, after six months of stagnation, UMBRAGROUP is speeding up its pace along the path set out by the 2024-2028 Industrial Plan. There are new horizons, in both geography and applications.

The electrification process is continuing at a rapid pace, and the goal of being one of its protagonists is not just a slogan, but a daily mantra. This year will be remembered by the Industrial Division as a watershed in trade fair organization.

28 As always involved in events in Italy and Germany, in the early spring, for the first time in its history, UMBRAGROUP presented its solutions in India (IMTOF) and Taiwan (TMTS). These are two

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*In the challenge among high loads, accelerations, and reliability, UMBRAGROUP responds: present all the way!*



The Industrial Sales team  
at the TMTS trade fair in Taiwan.

where UMBRAGROUP's electromechanical actuation proposals are taking shape: Wave Energy, Simulation, Biomedical, and Off-Road Vehicles. Each of these addresses a specific customer need and is fully in line with the corporate strategy guidelines. Energy harvesting from sea waves represents a great challenge for the future, and at the same time a tangible action toward sustainability, not only through electromechanical excellence, but also through the study of materials suitable for operating in the aggressive marine environment.

A totally different scenario is presented by the Entertainment and Flight Simulation world, where speed, acceleration, and fluidity of movement are essential elements for the success of a project. The biomedical sector is a well-known one for UMBRAGROUP, but the real novelty is the transition from being a supplier of components such as micro recirculating ball screws to a partner who can work alongside the customer to design and build a complex system consisting of screws, motor, bearings, and electronics. Last but not least is the agreement signed with one of the world leaders in Motion and Control technologies. The two companies will work closely together in the removal of hydraulics on off-road earthmoving vehicles. UMBRAGROUP is developing electromechanical actuators that will be installed in the test vehicle. This innovative technology will be presented next year in Munich, for the first time in the world, during the industry's most important trade fair [Bauma]. So many seeds have been planted which could blossom into cutting-edge projects over the next five years. And as the world ponders which path is the best one to follow to achieve independence from hydrocarbons, the focus on hydrogen remains high. In the challenge among high loads, accelerations, and reliability, UMBRAGROUP responds: present all the way!

extremely lively areas, ready to be explored, thanks to a collaboration with several major local partners. But that's not all! Right after the summer, an even more challenging experience is coming up for the Industrial Division. In fact, from September 10th through 14th we will be present simultaneously, with two separate teams, at both the AMB fair in Stuttgart, one of the world's most renowned Machine Tool fairs, and the IMTS in Chicago, an absolute novelty for UMBRAGROUP and a must for acquiring a presence on the U.S. market.

Four fairs, four countries, four distinct geographic areas. In other words, wide-ranging actions that will be enriched by some interesting projects, which are now in the prototype stage, but which are destined to be of strategic importance along the way to electrification. And the number 4 comes into the picture yet again: the number of applications

# Safety Management System and Quality Management System

## *the integrated approach*

**Marco Ceccarelli**

Compliance Monitoring and Safety Manager Head of Quality Assurance UMBRAGROUP

UMBRAGROUP quality teams are focused on improving the Quality **System** of the Group in the Aerospace and Industrial divisions responding to business needs and applicable regulation.

**UMBRAGROUP Aerospace Division** is consistently committed to collaborating with the relevant Authorities and Certification Bodies to ensure the timely implementation of new regulations and standards related to the Aviation Safety, including the **Safety Management System**.

The Safety Management seeks to proactively identify hazards and to mitigate the related safety risks before they result in aviation accidents and incidents. It enables an organization to

manage its activities in a more systematic and focused manner. When an organization has a clear understanding of its role and contribution to aviation safety, it can prioritize safety risks and more effectively manage its resources and obtain optimal results.

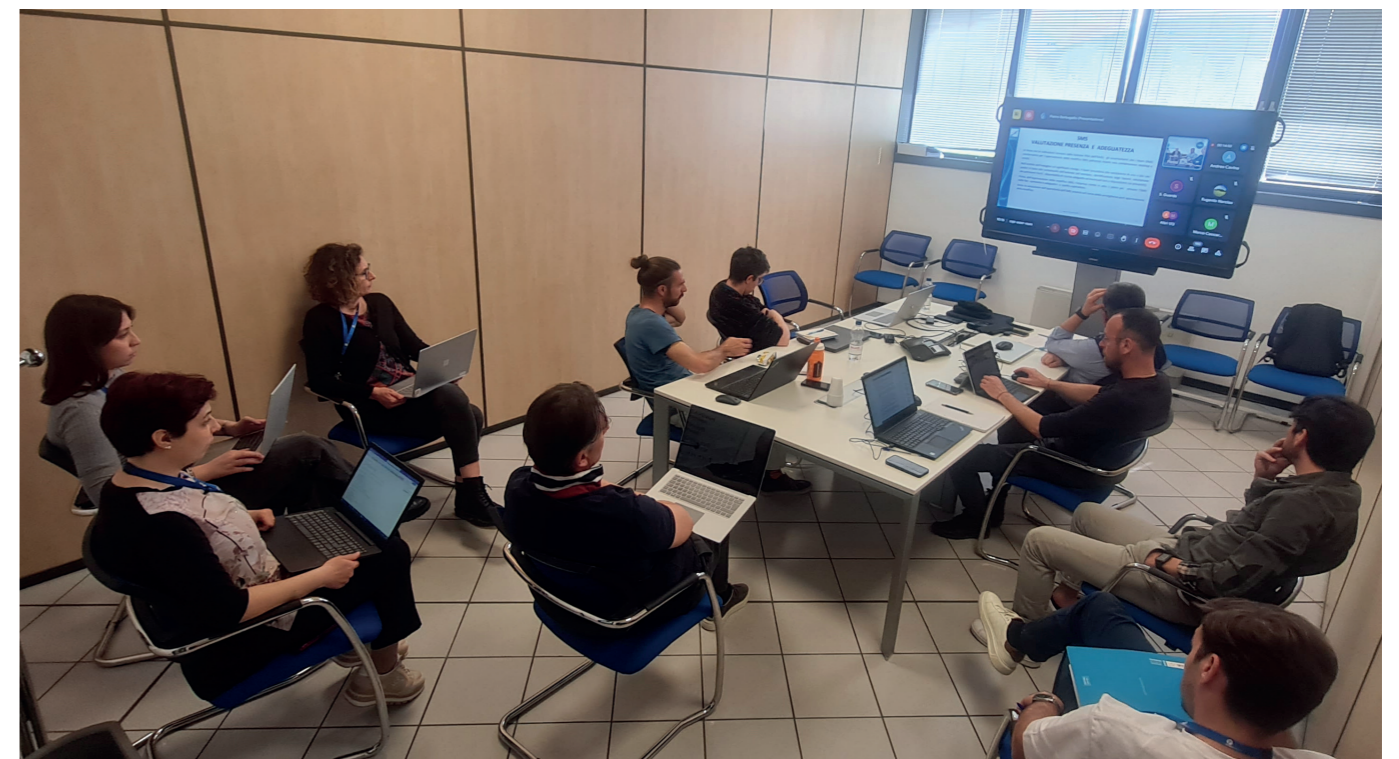
In fact, during the last period we all assisted several accidents and incidents that affect the safety of aviation and transportation in general. The relevant Authorities reached the following conclusion:

*"... our philosophy was 100% compliance equals 100% safe, but we were having accidents. We needed more than regulations. Today, we're proactive and identify and address risks to prevent accidents."*

Aviation Agency and Authorities (EASA, ENAC, FAA,



The Industrial Quality team and NSK staff after qualification.



The Aerospace team at work on the implementation of the Safety Management System.

etc.) encourages organizations like UMBRAGROUP to embed Safety Management and risk-based decision-making into all their activities, instead of superimposing another system onto their existing Quality Management System and governance structure.

The core elements of the Safety Management System are:

- » clearly define accountabilities and responsibilities;
- » establish a safety policy and the related safety objectives;
- » implement an occurrence reporting system;
- » implement internal safety reporting procedures in line with ‘just culture’ principles;
- » ensure the identification of aviation safety hazards posed by its activities.

One key to the successful implementation of safety regulation is to attain a “just culture” reporting environment within UMBRAGROUP: an atmosphere of trust in which people are encouraged, even rewarded, for providing essential safety-related information - but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior.

A team of UMBRAGROUP employees is working to implement those new policies and procedures. The picture related to this text is representative of a series of specific workshops and training done with external consultants and the Italia Authority ENAC relevant to the Safety Management System implementation.

The work done by the UMBRAGROUP team will be applicable to all sites and divisions of the Group and will support a continuous improvement approach and an important cost reduction linked to the non-compliances that may affect safety of our products and services.

At the **Industrial division**, we are engaging the team at Group level to improve processes that will be important for the business.

The collaboration between the Präzisionskugeln Eltmann and Kuhn with the UMBRAGROUP Quality team, which has a focus on the standardization of processes along the whole Group. For UMBRAGROUP and the entire team, in fact, the understanding of the customer’s critical requirements is fundamental to ensuring their satisfaction, and thanks to everyone’s hard work and dedication came the successful qualification of the new customer NSK.

Finally, a cross-functional team, consisting of both the Aerospace Division and the Industrial Division, is working to improve processes related to Internal Auditing and the management of Root Causes and Corrective Actions.

I would like to thank all those who are consistently supporting the implementation of these strategic business development projects, which will culminate in the second half of the year, when many UMBRAGROUP employees will be involved in the training and full understanding of the new procedures that will become standard. The participation and commitment of all UMBRAGROUP employees is essential to the success in the long term and to ensure the highest standards of safety, quality and excellence, both in the aerospace and industrial sectors.



The employees who took part in the clean-up of UMBRAGROUP’s green area.

# Sustainability: In Our DNA

**Sara Ortolani**  
CEO Health Safety Environment & Energy UMBRAGROUP

“*The why comes from looking back,*” writes Simon Sinek in his famous *Start With Why*, a book that invites organizations to rediscover the deepest reason for their very existence. To find our *raison d’être*, we must go back to our roots, to our DNA.

The beginning for us is in the words our founding father Valter Baldaccini spoke ten years ago, “Together we have sown a great seed that will become a great plant,” and from the values that symbolize it. Respect and care for the community and the world around us, now internationally referred to as “sustainability”, has always been a part of us, because it derives from our *raison d’être*. Today we work tirelessly to ensure that our DNA remains intact no matter where we are located.

For this reason, starting in 2024 UMBRAGROUP has launched an ambitious project that will involve all of its member companies to plan for our future and safeguard the next generation. To this end, Group monitoring of a set of standardized sustainability

indicators has been initiated. In addition, we are working to release our first sustainability report in accordance with the European Union’s Corporate Sustainability Reporting Directive in the year 2025. It is a business model that remains true to our values: with the aim of giving more and more added value to our customers, innovating both processes and our mindset; we will comply with European legislation, and respect the environment and the people we affect with our products; we will do good for our community through our social initiatives. Surely the only way to achieve these results is enclosed in one word: teamwork!

We are firmly convinced that by staying true to our roots, we will be able to renew ourselves, discovering every day new ways to carry on the legacy that Valter left us and which is now part of our everyday lives. It is part of us. Part of our DNA.

# From Foligno to the rest of the world: the secret lies in *innovation*

**Luciano Pizzoni**

Head of Technology and Innovation UMBRAGROUP

I find myself writing, for the July edition of our magazine “We are UMBRAGROUP”, this account of life lived hand in hand with business within UMBRAGROUP. I will try to offer my contribution simply and without excessive emphasis, but with the awareness that Umbra has given and is continuing to give a positive and important global boost to the evolution of aviation and industrial actuation.

Over these years the product has evolved, and we have moved from components to subsystems and then to integrated mechatronic systems. This has been a major leap that has required [and continues to require] inventive effort, study, design development, testing, and, above all, major investments in completely new technologies. We followed it and continue to follow it with a dedicated R&D path because the new product represented and continues to be perceived by the

market as a radical transformation. Research evolutions have been followed by UMBRAGROUP seeking to transfer knowledge to the mass-produced product in order to shorten the time to market as much as possible.

Vision, perseverance, and investment have always been in our DNA, as there is only one certainty: through R&D projects we grow, mature, and evolve. Starting from needs, from a knowledge of the markets, from contacts with customers, from participation in conferences and international congresses, and sometimes even from dreams, to arrive at defining the path in its main guidelines, most Research activities are an investment of the Company, which encompasses in its very being a firm belief in business development through Innovation.

I say this with clarity from an observation point that is characterized by an intense history within UMBRAGROUP and with the absolute conviction that pride also plays its part, as I am fortunate to be able to say that I am a “one-company man” who has seen the growth of our working family



Luciano Pizzoni, Head of Technology and Innovation during a symposium on energy.

through a path of innovation immersed within the international scientific and technical community. While in the early 1990s there were around 200 of us employees in Foligno, today we number more than 1,600 all over the world and boast a Group of 10 companies. There are certainly multiple different ingredients at play, first and foremost innovation, and they have a very visible common thread, if we look back over the path: Sustainability.

In fact, ever since the early 1990s, Umbra began to adopt stainless steel to replace conventional steels for the ball screws that move the flaps. Today, over 30 years later, we have approximately 160,000 reliable UMBRAGROUP components in the air. But what does this mean? It means that we have saved the environment from over 70,000 kilograms of chromium and 100,000 kilograms of paint. But that was not, and is not, enough for us. For this reason, we began our transformation of actuation systems targeting electromechanics, starting from the industrial applications of presses and pumping machines [characterized by high performance and high efficiency and therefore low energy consumption] to electric axes for primary and

secondary flight surfaces, for landing gears, and on to newer products such as electric propulsion motors for air cabs and the fascinating future plans for a new “generation” of power generators.

Today, UMBRAGROUP's challenge is a large-scale, global one, with a network of Group companies that can contribute in synergy to the overall development of the business, tackling the global market all together. The road may start from a shared roadmap of the Group's future technology, and may be achieved with a structure that may include one or more innovation hubs to be enriched with the deployment of parallel activities.

It is a challenge that UMBRAGROUP, also through its new Technology Committee operating at the Group level, will be able to meet and surely win.



# Congratulations

## New hires

### UMBLAGROUP SpA

Azzarelli Matteo  
Bronchinetti Andrea  
Catri Geraldo  
Ciotti Emanuele  
Costantini Alessandro  
Creta Agnese  
Di Tommaso Alessandro  
Fagotti Daniela  
Foglietta Matteo  
Lombardi Simone  
Pacchia Giulio  
Paci Leonardo  
Pinti Matteo  
Sforza Francesco  
Tiribuzio Moreno

### UMBRA CUSCINETTI Inc.

Baquian Leonardo  
Brewer Nicholas  
Everest Don  
Johnson Trevor  
Presler Fred  
Walior Jason

### KUHN GmbH

Oltean Ionut-Andrei

### ERA Electronic Systems S.r.l.

De Giorgi Mario  
De Luca Massimo  
Marini Marco  
Mazzanti Elena  
Migliosi Luca  
Persichetti Alessio  
Piccini Andrea

### LINEAR MOTION LLC.

Dickerson Chris  
Folts Christi  
Jackson Rachel  
Krueger Michael  
McMillan Tim  
McQuaid Cody  
Mieske Zach  
Searles Peggy  
Smal Neil  
Zadonia Wyatt

### AMCo S.r.l.

Lumaj Luka  
Ricci Devid

### PRÄZISIONSKUGELN ELTMANN GmbH

Amrhein Jürgen

## Just Married

### UMBLAGROUP SpA

Gentili Lorenzo e Gervasi Chiara

## Births

### UMBLAGROUP SpA

Bosi Matilde  
Grilli Giosuè Riccardo  
Magrini Matteo  
Marchionni Gioia  
Pontelli Pietro  
Reint Rayan

### PRÄZISIONSKUGELN ELTMANN GmbH

Fritzmann Nele  
Geldner Luisa  
Neeb Johann  
Shazim Muhammad Naveed

### ERA Electronic Systems S.r.l.

Casciari Matteo  
Casciari Sveva



**UMBRA**GROUP

n.38 | July 2024

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