CAMOZZI
GROUP

SUSTAINABILITY REPORT

Year 2022

CAMOZZI

GROUP

Sustainability Report 22

Creating value for the future,
a continuous and conscientious undertaking.

THE ESSENCE OF THE CAMOZZI GROUP

The Camozzi Group works innovatively and dynamically within the multiple aspects of Industry 5.0.

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OUR NUMBERS AND OUR VALUES

Initially established as a family business in 1964, the foundations of the Camozzi Group are embedded in our work ethics and recognizing the value of our people.

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FUTURE-PROOF INNOVATION

Emphasizing the applications of Smart Gripper, the intelligent pneumatic gripper created in collaboration with the Istituto Italiano di Tecnologia (IIT), which were developed together with Politecnico di Milano (the Polytechnic University of Milan).

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THE GROUP'S FIVE DIVISIONS

A winning combination of technology and industrial expertise.

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To invigorate its business philosophy, the Camozzi Group has entered into long-term agreements with research and innovation firms, organisations, and institutions.

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On a global level, it is increasingly important to integrate decarbonisation strategies with improving energy security.

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CAMOZZI RESEARCH CENTER

In addition to being the Group's R&D coordination centre, the CRC is a hub that brings together companies, universities, and centres of excellence to develop a smart factory based on Industry 5.0, where people and the environment are the key pillars.

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UNDERTAKING A SUSTAINABLE PATH

Reduction of energy consumption, aiming for a circular economy, utilising renewable materials, respecting the well-being and health of our people and our customers.

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THE CIRCULAR ECONOMY AND RENEWABLE MATERIALS

By focusing our attention on minimising waste, the Camozzi Group manages materials, waste and by-products, based on the principles of circularity.

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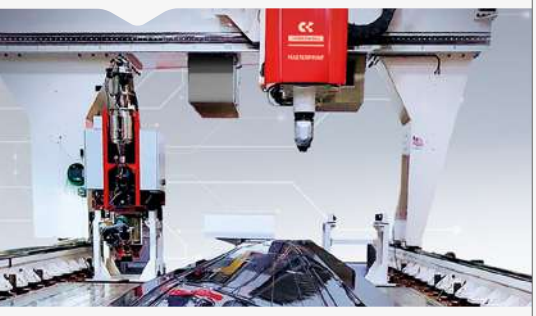

CAMOZZI GROUP

This document was drafted with the contribution and collaboration of all the Camozzi Group offices and the contributions and involvement of organisations in our wider network, with whom we maintain very close relationships and develop new production concepts, are gratefully acknowledged.

We address this report to all our stakeholders, so that they can learn more about our commitments and activities.

Published by

Camozzi Group

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Graphic and creative project: **Mix Comunicazione**

Concept: **Collectibus**

Foreword from the **President**

Lodovico Camozzi

President and Chief Executive Officer of the Camozzi Group

Dear Stakeholder,
This is the third edition of Camozzi's sustainability report. Only three years have gone by since we at the Camozzi Group decided to start documenting and formalising our commitment to the environment and to the communities that host us in an increasingly structured way. Three years may seem like no time at all, but for manufacturing it is almost "a geological era"!

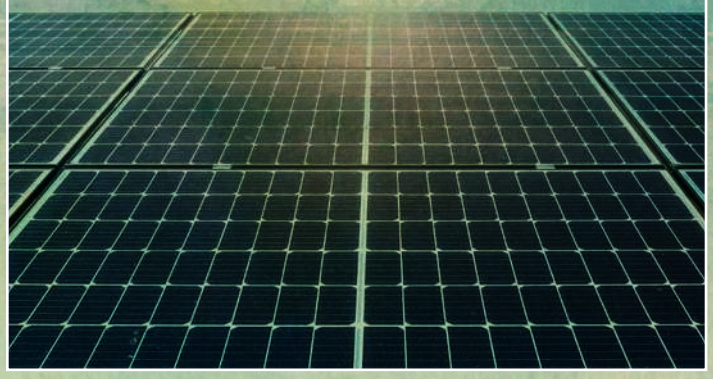
The pace of technological innovation is now so fast that ***the only real constant for people working in industry today is change****. Change encompasses technologies, production materials and the products themselves, which must all meet the pressing challenges of the* ***Green Deal*** *in an increasingly practical way. Change also concerns production processes, which, thanks to the increasingly central role of* ***Big Data****, can be made simultaneously more efficient and increasingly flexible. Industry as a whole is encouraged to* ***change*** *by experimenting with new factory models capable of applying responsibly the Industry 5.0 approach - technologically advanced manufacturing practices capable of making costs and resources more efficient and seizing digitalization cloud-computing opportunities. But above all,* ***putting the environment and people centre stage****. While change is an ongoing challenge,* ***continuous innovation*** *is the primary objective; but its disruptive force today is so high that a business group cannot be competitive by acting alone. The ability to build* ***smart networks along the entire value chain*** *is essential – an ecosystem of businesses, universities, and centres of excellence that can facilitate the swift implementation of positive solutions for everyone, in particular for the communities and areas around our factories. Thus, driving change for the Camozzi Group means channelling its main investments in technology and R&D, stimulating the development of an increasingly interconnected industrial, technological, and scientific ecosystem, contributing to the digitalization of manufacturing, and developing circular production models. The ultimate goal is to* ***create products, platforms and solutions which are increasingly smart and green****.*

Our people*, first and foremost, and everyone else in general, are the* ***basic ingredient*** *for this recipe: because directly or indirectly, the purest essence of a company is to improve the quality of life of human beings and their environment. On this basis, I am* ***proud to present to you the new edition of the Camozzi Group's sustainability report****, where you can see how we are working to drive change, starting from training and spreading a culture of innovation, to explaining the key levers needed to meet the new challenges of Industry 5.0, and thereby facilitate a green and "human-centric" evolution across of all our divisions.*

Enjoy!

We look to the future with confidence, confirming our commitment to the common good and **safeguarding our planet.**

SUSTAINABILITY



Sustainability Report

Methodological note

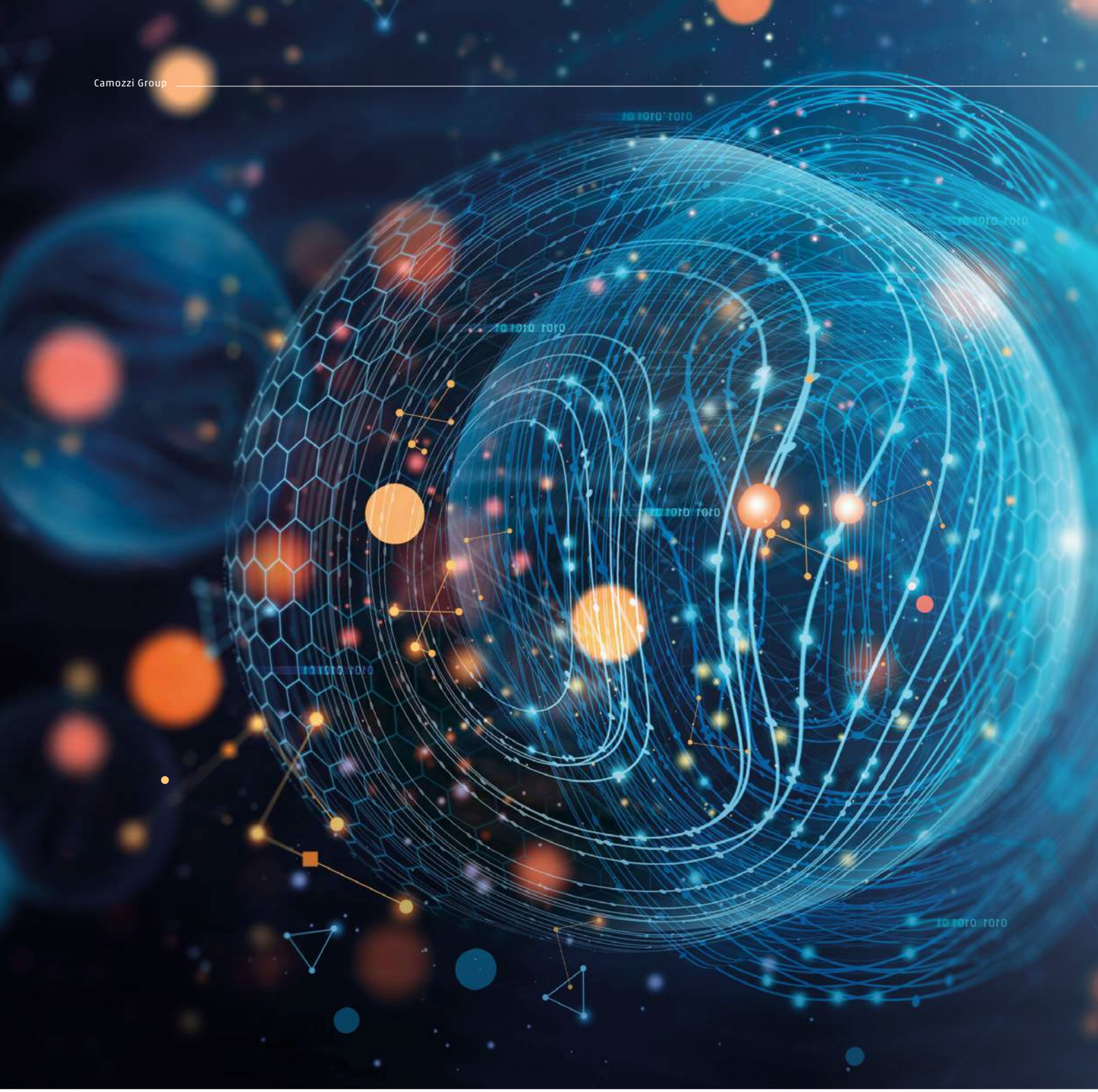
This document constitutes the third edition of the Sustainability Report of the Camozzi Group, with registered office in Milan, in which the Group discloses its approach to sustainability issues to stakeholders, illustrating the main initiatives undertaken in 2022, as well as environmentally and socially significant innovations that have rendered the Camozzi Group a key player for the future of Industry 5.0.
Unless otherwise specified, the environmental and social data shown in this document concern the companies included in the Group's consolidated financial statements and refer to the period from 1 January 2022 to 31 December 2022, taking the two-year period 2021/2022 as the reference period for comparison of environmental and social information. Furthermore, the two-year data has been supplemented with some data from branches not available for previous years.

For consistent comparison, these have also been updated for the year 2021. Economic and positioning information includes all Group companies. In 2022, the Camozzi Group acquired a new production plant in Villa Carcina, which became part of the Camozzi Automation Division. Also, SAM Progetti was acquired at the end of 2022. The most relevant issues and initiatives being reported were identified by means of a 'materiality analysis' in order to identify and share the perspective of internal stakeholders and analysis of external context. Materiality analysis is a methodology used to identify and estimate the possible Environmental, Social and Governance (ESG) issues which might impact a business and its stakeholders. Furthermore, this report presents the sustainability context in which such issues are included. This document was prepared applying the 'With Reference' option from the GRI Standards and was not subject to third-party assurance activities.

*You may **view** and **download** the report at:*

https://it.camozzigroup.com

For clarifications and more information, please email
info@camozzi.com



Now, Camozzi has contributed nearly 60 years of research and innovation for the industrial world, aimed at crossing new boundaries of productivity and environmental and social sustainability.

OUR NUMBERS AND OUR VALUES

+3.000
Employees

€534MLN
Total revenues

€58MLN
Invested in 2022

455
Patents registered as at 31/12/2022

Initially established as a **family business in 1964**, the foundations of the Camozzi Group are embedded in our work ethics and recognizing the value of our people This blend of passion, creativity and far-sightedness gave rise to a **solid Group devoted to growth, innovation, and internationalisation.**

Our numbers and our values

The CAMOZZI GROUP

Our added value derives from our in-depth knowledge of production processes and a strong drive towards innovation.

The Group is an Italian multinational company that is the market leader in the production of **innovative industrial automation components and systems** and among the leading players in **Industry 5.0 integrated systems**. Our added value derives from our in-depth knowledge of production processes and a strong drive towards innovation. Thanks to three brothers from the Camozzi family, Attilio, Luigi and Geromino, the Camozzi Group was established in Brescia in **1964**. They incorporated the first company dedicated to the production of pneumatic components for industrial automation. Over the years, the company expanded its operations into many other sectors, from textile machines and special large machine tools to the increasingly advanced smart-manufacturing technologies. A particular strength is in advanced manufacturing processes for raw materials, notably innovative additive manufacturing methods for composites, titanium alloys and aluminium.

The Company's in-depth knowledge of various production processes constitutes the value added by the Camozzi world. It ensures the understanding of new technological developments, market structures, and social environments, thereby guiding the related research and innovation towards new frontiers of productivity and sustainability. The focus on technological innovation is what pushes the Group companies towards the frontiers

CAMOZZI GROUP

of the industrial world. This combines with our belief that "a company's growth model is sustainable over time when its business objectives are pursued in conjunction with social and ethical objectives".

This approach is set out in the **Camozzi Group Code of Ethics**, mandatory for all Group Companies, so as to adopt a harmonised behavioural model to disseminate values and guidelines in the performance of business activities: compliance with the law, loyalty, correctness, efficiency in internal and external relations in order to create opportunities for collaboration, growth, and development of the potential of all stakeholders and of the environment in which the Group operates.

The Group is a member of numerous business associations, which include the following:

ASSOLOMBARDA

ASSOCIATO AMAPLAST

ACIMIT ITALIAN TEXTILE MACHINERY

FEDERTEC

ASSOFOND ASSOCIAZIONE ITALIANA FONDERIE

UCIMU

Collaboration and integration allow the Group's companies to provide advanced and complementary solutions for their customers.

Our numbers and our values

The GROUP'S FIVE DIVISIONS

CAMOZZI GROUP

A winning combination of technology and industrial expertise.

5 DIVISIONS — **26 PRODUCTION SITES**

Automation *Division*

- **Camozzi Automation** — Industrial Automation Solutions
- **Camozzi Technopolymers** — Plastic Material Moulding

29 SUBSIDIARIES
15 PRODUCTION SITES

Digital & Mechatronics *Division*

- **Camozzi Digital & Mechatronics** — Digital Innovation and IIoT solutions

Machine Tools *Division*

- **Innse-Berardi** — Machine tools with hydrostatic and mechanical technology
- **Ingersoll Machine Tools** — Advanced machine tools with mechanical, 3D printing, and composite technology

5 SUBSIDIARIES
2 PRODUCTION SITES

CAMOZZI Research Center

The CRC develops research activities, providing continuous innovation for all divisions

Manufacturing *Division*

- **Fonderie Mora Gavardo** — Cast iron, aluminium and mechanical machining
- **Camozzi Advanced Manufacturing** — Special processing and 3D moulding of composite materials
- **Newton Officine Meccaniche** — Processing of aluminium and polymeric materials
- **Campress** — Brass moulding

6 PRODUCTION SITES

Textile Machinery *Division*

- **Marzoli Machines Textile** — Advanced engineering of textile machines

4 SUBSIDIARIES
2 PRODUCTION SITES

The Camozzi Group companies are divided into five specialised divisions, differentiated by technology and production methods. The financial, commercial, logistical, and organisational synergies across these divisions guarantee high standards of efficiency in the operational management of their respective activities.

5 Divisions

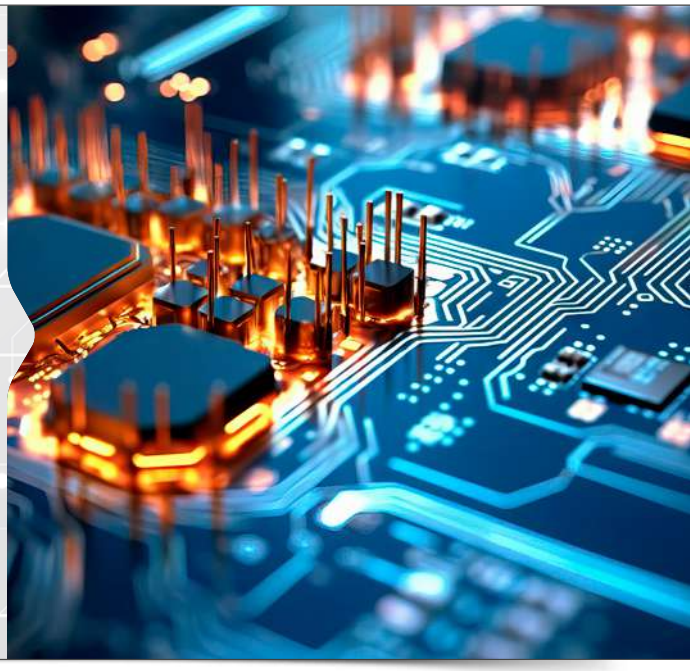
11 Companies

Automation *Division*

Camozzi Automation is a leader in the design and production of components for the movement and control of liquid and gaseous fluids, and of systems and technologies for the industrial automation, mobility and life sciences sectors. Strategically, the Automation division has been increasingly focused on creating products and solutions for the Industrial Internet of Things (IIoT) and on the use of advanced materials and 3D printing technologies. Another key emphasis is the miniaturisation of components, as reducing the size of products helps to optimise the efficiency and performance levels of production machines.

Digital & Mechatronics *Division*

Camozzi Digital was created with the aim of supporting the digitalization of the Group's companies, but also of third-party companies that operate in various sectors and wish to seize the opportunities offered by IIoT solutions. Camozzi Digital provides a number of solutions to connect machinery and plants, with consequent intelligent data management. This transforms machines into high added value assets. Thanks to advanced cyber-physical systems, complex process data can be seamlessly integrated into the company management infrastructure and into the cloud, providing the means to identify and correct production issues automatically and provide tangible data to inform business decisions **Camozzi Digital & Mechatronics** was launched at the end of 2022. Through two dedicated business units, it integrates digital functions within the mechatronics arena to pursue digitalization in advanced manufacturing by using an integrated approach to hardware and software. Experience previously gained within the Camozzi Group and cross-departmental skills in different application areas (textile, life science, transportation, machine tools, industrial automation) allow the company to operate at multiple levels, from components to plant and machinery.



Machine Tools
Division

The Machine Tools division operates in the large special machine tools sector. The two companies that make up the division, **Ingersoll Machine Tools** and **Innse Berardi**, supply integrated solutions to a variety of markets, including heavy mechanics, transport, energy, aeronautics, aerospace and defence. Innse Berardi specialises in engineering, production and commissioning machine tools. Integrated, connected digital systems enable production data collection and monitoring, including management of predictive maintenance. Ingersoll is a leader in advanced manufacturing processes, in particular additive manufacturing, and a global supplier of machines for the production of components and large structures in titanium, aluminium, other metals and composite materials.

Manufacturing
Division

The Manufacturing division performs cast iron and aluminium casting operations, machining, and – for heavy industries – metal processing; brass moulding and additive manufacturing. The division comprises four highly specialised companies (**Fonderie Mora Gavardo**, **Camozzi Advanced Manufacturing**, **Newton Officine Meccaniche**, **Campress**) and operates as an Engineering, Procurement and Construction (EPC) contractor. Thanks to the synergies between these companies, the Division can coordinate all design, procurement and construction work for a project, from the early design stage to the transformation of raw materials and component processing, to ensure that an entire project is completed as required and on time.

Textile Machinery
Division

Marzoli is a company with a long history in the textile machinery sector and today acts as a textile engineering company. The synergies with the Group's digital expertise and the most recent technologies adopted, including cloud computing, smart sensors, and machine learning, have allowed Marzoli to develop computerised and optimised management platforms along the entire spinning process, to maximise the quality, reliability, flexibility, and efficiency of machinery.

Today, it is no longer enough for a product to be sustainable in its composition, but the entire production process must also be environmentally friendly."

UNDERTAKING A SUSTAINABLE PATH

The macro-themes that permeate the sustainable approach underlying the Group's activities are: reduction of energy consumption; the circular economy; renewable materials; and the well-being and health of the people. The ultimate goal is to contribute to the development of Industry 5.0, so as to put the environment and people centre stage.

Undertaking a sustainable path

THE ESSENCE OF THE CAMOZZI GROUP: SUSTAINABLE INNOVATION

In order to look to the future responsibly, the Group places the utmost importance on the environment and on people within its research and innovation processes.

The Camozzi Group works with innovatively and dynamically within the multiple aspects of Industry 5.0, **combining industrial skills with the most advanced technologies**.
Thanks to its technical skills developed and consolidated over the years, which range from electronics to IT, from mechanics to automation, innovations regarding products, services, and production methods are created within the Group's companies by **merging the physical with the digital world**.
All activities are guided by a common inspiration: **the transformation of data into added value**.

Having an in-depth knowledge of all the parameters that characterise production processes is the key element for undertaking actions that improve company performance. Such improvement optimises economic production, as well as having implications on environmental and social outcomes.
In this sense, data represent the key to add value to production in order to structure platforms and equipment that are smart, flexible, and optimised.

The future is today, an ongoing challenge where innovation and technology contribute to value creation.

OUR VALUE PROPOSITION:

Innovate in order to grow...

Starting from its expertise in the industrial domain, Camozzi has developed strong R&D policies to encourage constant ***technological innovation*** *within all Group divisions.*

This makes the company a fast, dynamic player capable of interpreting and anticipating manufacturing trends and proactively meeting the growing demand for ***miniaturisation****,* ***flexibility****, and customisation coming from the markets.*

We interconnect people and objects to create a "smart" factory, where robots working closely with humans and machines can perform adaptive control, should errors occur.

...while respecting sustainability

By establishing partnerships with customers, suppliers, research centres, and other stakeholders, we work according to the ***integrated industrial supply chain*** *approach, networking knowledge and know-how and above all pursuing long-term objectives.*

We put ***people and the environment centre stage****, including the local area and the community that hosts us.*

For each of our workers, we create a rewarding work environment and human relationships capable of maximising their ***safety*** *and* ***well-being****.*

We continuously optimise the efficiency of our factories and reduce waste. In this way, we provide customers with solutions capable of meeting the great challenges of ***digitalization*** *and* ***environmental sustainability****.*

Camozzi Group Certifications

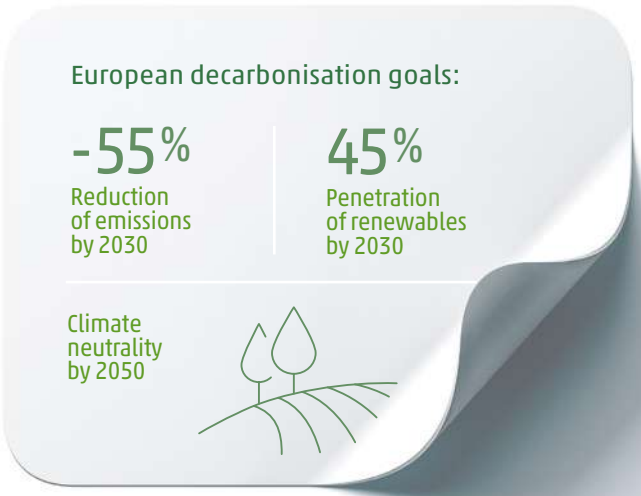
An integral part of business management is the adoption of international standards, certifying the ability of the Group companies to supply quality products, according to a model based on continuous improvement, whilst additionally trying to increasingly meet environmental responsibility criteria. In 2022, the number of Group companies certified to the ***ISO 9001*** *quality standard rose from 18 to 20, while six companies obtained the* ***IATF 16949*** *quality certification, which is specific to the automotive sector. The Group's* ***ISO 14001*** *certified companies increased from four to five, in order to ensure an environmental management system that aims to minimise potential adverse impacts on the local area, with a view to continuous improvement. Two additional production sites have a plan to achieve this milestone in 2023. EN9100 aerospace certification has also been obtained for the Innse-Berardi group company. The Textile Division has also earned the* ***ACIMIT Green Label****, a document that specifies the energy and environmental performance of the textile machines it manufactures and makes them easily identifiable to customers. In particular, the quantity of carbon dioxide equivalent emissions (Carbon Footprint - CFP) produced during the operation of the machinery is a key parameter that provides a value for the efficiency of the certified machinery. The information shown in the Green Label is verified by an international certification body which guarantees its authenticity.*

STRATEGIC GUIDELINES

Taking an ESG approach, the Camozzi Group is a company with a strong drive for technological innovation that considers research and development a key asset for continuously rethinking its use of resources and internal production processes, products and services. Three key objectives underlie this approach: reduction of energy impacts, circular economy and renewable materials, and people's well-being and health.

1. Reduction of energy impacts

Climate change and the race to achieve the **European Union's goals for 2030** and 2050 have increasingly placed attention to the key role of energy in this transition. The overall scenario that characterised 2022 led the European Commission to publish a new strategy, based on the "Fit for 55", package of proposals, making some of the objectives required of the member countries more challenging.



Moreover, an energy efficiency target to counteract increases in gas prices and reduce imports of fossil fuels has also been set for 2030.
Faced with these goals, **flexibility**, **efficiency**, and **reduction of consumption** emerge as strategic priorities for companies in the context of exceptional price volatility.
This is where the reduction of energy consumption becomes the macro-theme underlying the development of all the Camozzi Group's product families: the use of intelligent components and monitoring, control, and supervision algorithms to optimally manage time and resources in the digital factory.

Power efficiency is also vital in the most dynamic development trends for the Group nowadays, such as the miniaturisation of components, where lightness and energy efficiency are necessarily combined for the optimal operation of these elements.

The Group's companies seek to reduce energy consumption not only in products for customers, but also in their own production processes, identifying solutions, efficiency tools, and digital models to find inefficiencies and predict and avoid waste.

2. Circular Economy and Renewable Materials

With a global population of more than 9 billion people expected by 2050 and rapid economic growth in some developing countries, the demand for natural resources is expected to continue to grow exponentially in the coming decades. In this context, the spread of **a new circular model for production and consumption** takes on an element of strategic importance for achieving European sustainability goals and at the same time represents a factor for relaunching countries' competitiveness.
There are two dimensions: "upstream" - managing resources more efficiently; and "downstream", to make sure that any items that may still be useful on a residual basis are recovered and recycled. Light-weight design, **innovative materials**, and **smart solutions for additive manufacturing** are the key elements of the Camozzi Group's innovation process moving towards the circular economy. Lighter weight and the reduction of the use of resources, while still ensuring the same robustness of structures, constitute a challenge that the component industry is facing and for which the Camozzi Group has activated a specific internal **simulation** and **digital twin team**: with the adoption of digital models, engineering architectures may be selected and favoured that ensure the greatest performance with the least use of materials. With a view to optimising material extrusion processes to achieve '**zero defects and zero waste**', the Group is developing smart solutions which make it possible to digitally predict a number of possible failure modes, preventing their occurrence and reducing waste.

[1] "*Strategia nazionale per l'economia circolare*" (National strategy for the circular economy) – Italian Ministry of Ecological Transition, 2022

One of the Group's additional research areas focuses exclusively on materials, that is, the development of innovative polymer formulations involving renewable sources. Such innovations are capable of diversifying procurement and reducing the environmental impact of materials, while ensuring very high product performance.

Through **technological innovation and applying the principles of eco-design**, the Camozzi Group aims to increase the productivity of its production processes and those of its customers, reducing waste and making products and services more efficient.

3. People's Well-Being and Health

Health, well-being and psycho-physical balance have increasingly influenced people's lives in recent years and engender strong social implications.

In fact, they are not just about technology but about people, their jobs and their place within society.

In this sense, the Camozzi Group's position is clear: **technology is a tool at the service of people, and not a replacement for them**, and it should aim to improve the quality of their personal and working lives.

The Group's innovations focus on **collaborative robotics** as an aid to people's activities, supporting them in the most tiring and repetitive operations,

thus upgrading their work and ensuring greater safety and ergonomics of workstations. Correct human/machine interactions and collaboration therefore become an important stage in the improvement of the operators' well-being, both physically and mentally, reducing the need for human effort to carry out the tasks which are the most physically demanding and/or repetitive.

Technological innovation is not only embodied in machinery, but also in new treatments and product features, capable of protecting people's health and increasing comfort during use.
The health, **safety**, **and well-being of customers and employee**s are therefore amongst the main strategic focuses that drive the work of the Camozzi Group.

Circular and Sustainable 'Made-in-Italy' Products

In 2022, the Camozzi Group was awarded the prize "Made in Italy circolare e sostenibile" (MICS, Circular and Sustainable Made-in-Italy Products, https://www.mics.tech). This is an important extended partnership financed by the MUR (Italian Ministry of Universities and Research), representing one of the projects relating to Mission 4 'Education and Research' of the Italian National Recovery and Resilience Plan (PNRR). MICS comprises 25 partners, 12 of whom are state-owned and 13 are in the private sector. It aims to develop Made-in-Italy designs and products that are circular, self-sufficient, self-regenerative, reliable, and sustainable. It consists of eight thematic areas, called 'spokes', on which the partners focus to address the challenges of current design, production, and consumption models from an eco-friendly and circular perspective. Particular emphasis is palced on materials, products, production technologies and the processes necessary to reduce impacts, not only in terms of energy and use of resources, but also of the health and safety of the operators who work within the company. The Camozzi Group is a strategic part of this ecosystem in order to develop increasingly sustainable products in the future and, because of these funds and collaborations, the Group pursues the strategic goals of its innovative vision, transforming some of the projects from concept into reality.

Undertaking a sustainable path

NETWORK CAMOZZI INNOVATION

An ecosystem of collaborations and innovations.

In order to bring its business ideas to life, the Camozzi Group has entered into structured collaborations with **research and innovation firms, organisations, and institutions** on a long-term basis. The aim is to promote a systemic approach to R&D and bringing together the best skills at national and international levels for the **development of Industry 5.0** in its various aspects. The main focus is on the digitisation of products and manufacturing processes, energy efficiency improvements, and the transition towards alternative and increasingly eco-sustainable materials.

Universities:

- Politecnico di Milano (Polytechnic University of Milan)
- Politecnico di Torino (Polytechnic University of Turin)
- University of Brescia
- Scuola Superiore Sant'Anna di Pisa
- Università Cattolica del Sacro Cuore
- University of Udine
- University of Bologna
- University of Maine
- Shanghai Institute of Technology
- Don State Technical University
- National Institute for Aviation
- Research c/o Wichita State University

Technology Partners:

- Siemens
- Microsoft
- SAP
- ABB
- SECO

Institutions:

- Italian Ministry of Universities and Research
- Lombardy Region
- European Union

Research Centres:

- IIT Istituto Italiano di tecnologia
- ITA Istituto Tecnologico de Aragon
- DEVCOM Ground Vehicle Systems Center (GVSC)
- Oak Ridge National Laboratory

CAMOZZI RESEARCH CENTER
Leaders of the Future

The **Camozzi Research Center** (CRC) is a multidisciplinary hub created with the twofold objectives of coordinating the Group's internal R&D and promoting technological networking on a local, national, and international scale, bringing together companies, universities, and centres of excellence. The ultimate objective of the CRC is to contribute to defining the manufacturing practices of the future by promoting the development of a smart factory capable of applying advanced Industry 5.0 models. These place the value of people and of the environment at the heart of industry's attention. In order to pursue this goal, the Camozzi Research Center fosters the development of an increasingly integrated business ecosystem along the entire industrial value chain based on **open innovation and partnerships**.
The CRC has also developed several direct collaborations with academic institutions, centres of excellence, and technology partners, in order to conduct research directly within the Group's factories. Among other things, this grants students and researchers the opportunity to work on highly innovative technologies.
In this way, the CRC is capable of experimenting with new 'on-the-job' learning methods and developing new technologies, innovative processes and products tested in situ in the industrial sector. Among the most distinctive collaborations which the Camozzi Research Centre currently relies on are with the Istituto Italiano di Tecnologia (IIT) and the Politecnico di Milano. Other universities, include the Università Cattolica del Sacro Cuore and Scuola Superiore Sant'Anna di Pisa.
These collaborations are particularly aimed at developing applied research projects in advanced robotics, predictive maintenance, additive manufacturing and materials. These have the shared objectives of **optimising industrial processes and respecting the equilibrium between production and the environment**.

The **Main Initiatives** of 2022

Project

RESEARCH AND UNIVERSITY THESIS PROJECTS: THE CAMOZZI RESEARCH CENTER AS A POINT OF ATTRACTION FOR STUDENTS

2022 witnessed partnerships between the Camozzi Research Center, universities, and other Research Centres grow further: the CRC hosted numerous university and doctoral students and researchers in its laboratories.
This work resulted in the drafting of **11 university theses**.
The students worked side by side with researchers, engineers, and technical representatives of the Camozzi Group, focusing on the issues of future advanced manufacturing and specialising in automation and sustainability.
The theses addressed the development of collaborative and intelligent robotic solutions for the management and efficiency of special applications in which robots do not replace humans but support them to relieve them of the most repetitive and tiring tasks.
The topic of environmental sustainability in manufacturing is increasingly central: for this reason, research activities also focus on enhancing the value of manufacturing waste and developing sensorisation and algorithmic systems capable of minimising errors during production, especially in 3D printing processes.
Carrying out these in-depth analyses ensures **a continuous exchange of ideas, experiments, and applications**, which not only contribute to the growth of the Camozzi portfolio, but are also essential for contributing to **training** future talent.

During 2022, a big step forward was made in the development of **scheduling algorithms** aiming to optimise production. These applications are capable of optimising low-volume. high-variance production, schedules, so that they can be integrated in the best possible way. This makes them economically sustainable, whilst at the same time improving the energy efficiency of machinery.
Camozzi is one of the partner companies in the applied laboratory of the **Master's Degree in 'Innovation and Technology Management' of the Università Cattolica**.
The students' task is to investigate the research subject assigned to them, presenting the results to the various company tutors involved. Most of the topics assigned by the Group during 2022 concerned feasibility studies and evaluation of the economic impacts of projects based around the circular economy.
This collaboration will be continued in 2023, demonstrating the positive value brought by networking with students and by the Group's commitment to dedicating company resources to the training of young talent. 2022 was also characterised by the start of a new collaboration with Scuola Superiore Sant'Anna di Pisa, which is already bearing its first fruit. This is a partnership that aims to develop innovations regarding the energy efficiency of smart components and which will be completed during 2023.

Project

FUTURE-PROOF INNOVATION: **SMART GRIPPER** APPLICATIONS

In 2022, the applications of **Smart Gripper**, the intelligent pneumatic gripper created the previous year in collaboration with the Istituto Italiano di Tecnologia (IIT), were developed together with Politecnico di Milano (Polytechnic University of Milan). One of the most significant applications studied was so-called '**contouring**'. The gripper's fingers were sensorised in order to reproduce the functionality of skin. Sensorising is a modern technology method for inserting multiple sensors into a device or application. Guaranteeing human-like sensitivity for perceiving the characteristics of an object being handled is one of the most difficult challenges in robotics. In the application being developed, faced with a non-linear object without knowing where it is located in space and without knowing its shape, the robot is able to approach the object, touch it, understand how it is made, and finally place it in the designated holder unaided.

The gripper's sensors reproduce the functionalities of skin and allow it to perceive and position objects.

Undertaking a sustainable path

REDUCTION OF ENERGY IMPACTS

Reducing the energy consumed and encouraging the use of renewable energy: cornerstones for reducing waste and emissions for the benefit of the environment and people alike.

The Camozzi Group's **Approach**

At a global level, it is increasingly important to be able to integrate decarbonisation strategies and improve energy security in order to increase operational resilience.[2] The progressively obvious effects of climate change have increased the pressure of regulations on energy and emissions.
Energy efficiency, renewable sources, and decarbonisation are increasingly interconnected elements that companies cannot ignore today. This growing pressure and the increasingly widespread awareness of sustainability issues within the Group have led it to profoundly reflect on the **management of energy vectors within its Italian companies**.
The minimisation of energy consumption has always been an integral part of the Group's business management processes, based on the belief that **inefficiencies generated in production processes represent nothing but waste** that is harmful to the Group's economy, to the environment, and to people.
During 2022, this belief became more pronounced, and a roadmap focused on achieving greater energy independence was defined for the next two-year period.

2024 GOALS FOR ITALIAN COMPANIES:

-20%
of electricity supplied by self-production

-1 Gwh/year
Reduction in energy consumption

In order to achieve 20% of electricity by self-generation, the Camozzi Group has identified investments and factories where it is possible to install new photovoltaic systems, expecting to **reach nearly 17% by the end of 2023**. For the future, the Group is investigating innovative solutions with even greater impact, for which in-depth reviews and feasibility studies are underway.
Likewise, to achieve this efficiency goal, various efficiency-improvement policies and investments are being analysed, constantly monitoring consumption and the context, to try to seize the best opportunities that may apply to the Group's business enterprise.

[2] "*Volatilità energetica, tra sfide e soluzioni*" - Rinnovabili.it

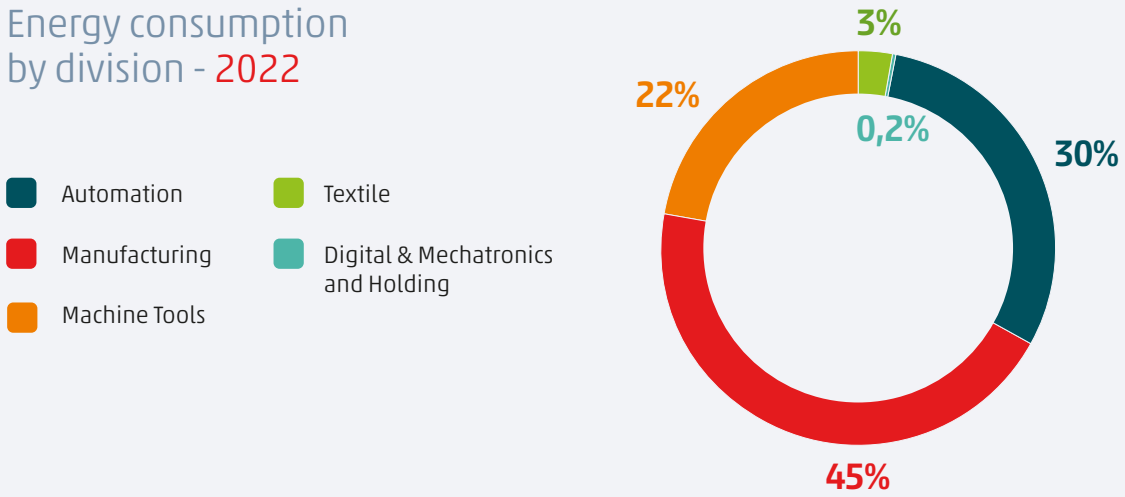
Energy consumption and emissions

In 2022, due to increased attention and efficiency initiatives carried out over the years, total energy consumption at Group level decreased, despite growth in production and revenues.

Group energy consumption

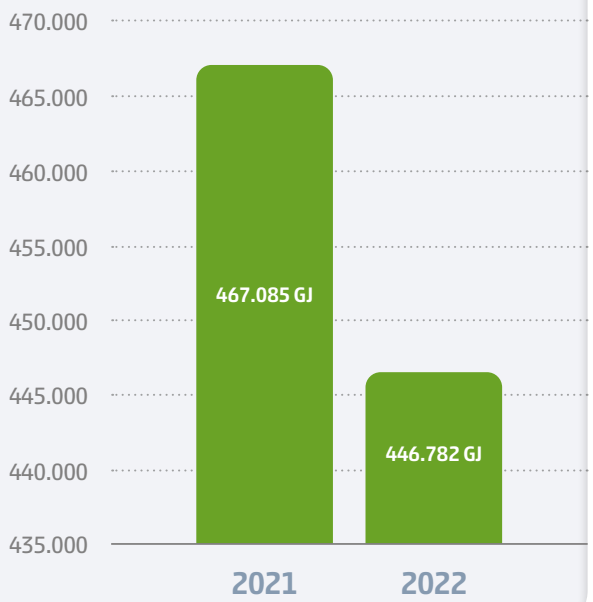
	u.m.	2021	2022
Fuel and combustibles	GJ	**169.274**	**162.471**
Natural gas	GJ	120.991	109.831
Diesel oil	GJ	13.921	13.868
Gasoline	GJ	15.855	18.274
LPG	GJ	16.049	18.114
Fuel oil	GJ	2.458	2.384
Purchased electric power	GJ	**266.877**	**256.498**
...of which, renewable	GJ	252	481
District heating	GJ	**22.081**	**18.870**
Self-produced electricity from renewable sources	GJ	**9.657**	**10.574**
fed into the grid	GJ	805	1.631
Total energy consumption	**GJ**	**467.085**	**446.782**

Energy consumption by division - 2022

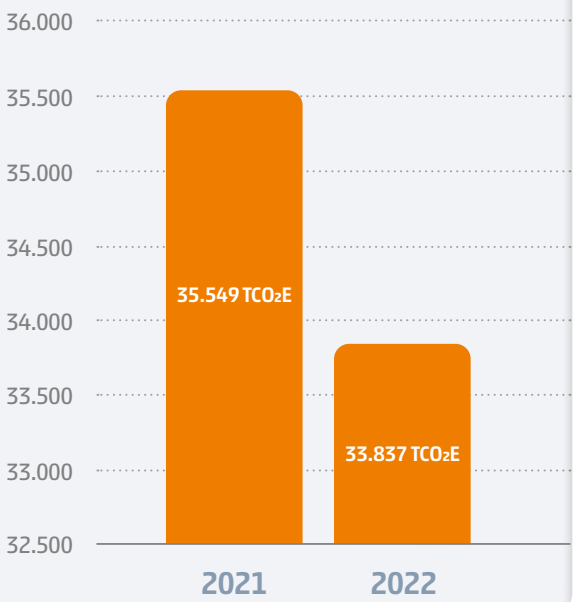


The various initiatives implemented to reduce energy consumption, which decreased by 4.3% compared to 2021, resulted in a corresponding reduction in the Group's emissions.

Trend of energy consumption



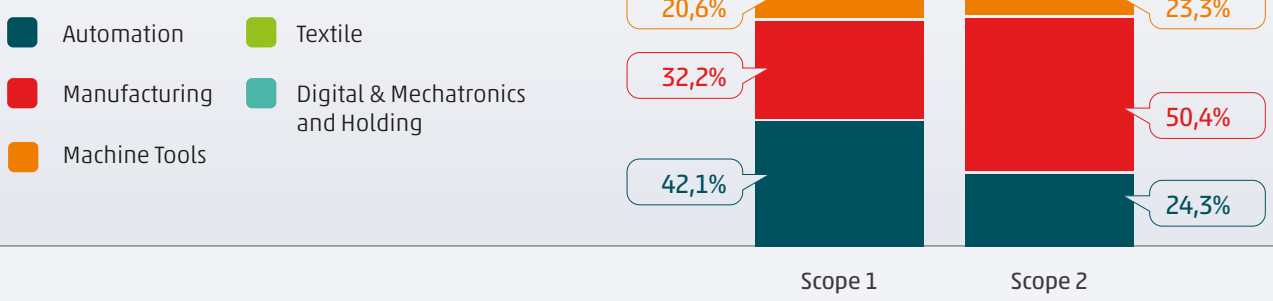
Trend of emissions



Total emissions (tCO_2e)

	u.m.	2021	2022
Scope 1	tCO_2e	**10.132**	**9.805**
Scope 2	tCO_2e	**25.417**	**24.032**
Total emissions	**tCO_2e**	**35.549**	**33.837**

Breakdown of emissions by divisions (%) - 2022



The **Main Initiatives** of 2022

The installation of photovoltaic systems within the Group has been progressively increased in order to expand the self-generation of clean energy.
In 2022, Camozzi's **installed power reached 3.3 MW, (+40% compared to its installed power in 2021)**.
The Group has identified investments and installations for 2023, thanks to which it will **enlarge its photovoltaic system by approximately 5 MW** and will meet nearly 17% of the electricity demand of the Group's Italian companies.

In general, at Group level, an investment plan has been defined for 2022-2023 with the aim of increasing the energy efficiency of its factories. In particular, production efficiency is being investigated, opting for more modern and more efficient ways to reduce production cycle times.

Furthermore, over the past two years, **energy monitoring has been intensified** to identify even the smallest possible improvements and any areas not yet optimised. In this regard, an electrical consumption measurement system created by Camozzi Digital (**Digital Remote Maintenance**) has been installed at the Camozzi Automation plant in Polpenazze.
By applying it to various strategic points in the distribution boards and machines, it ensures the control of energy consumption and the prevention of possible drifts, but above all it provides benchmarks for further consideration.
For 2023, such a monitoring system is expected to be extended to the Lumezzane and Villa Carcina plants.

The ultimate future objective is to compute energy consumption per single piece manufactured: the more data available, the greater the ability and precision with which to monitor the energy needed to produce each Camozzi product.

At the Polpenazze plant, **an automatic air shut-off valve system** has been installed on all utilities, including machine tools, assembly machines and assembly benches. This work is part of a more general plan to reduce compressed air losses and the resulting energy waste.

Since it is not possible to switch off the compressors, due to the need to keep some items in constant operation, the shut-off valves have been designed to block the compressed air in some phases of the processes and isolate subsystems that are not in use.

This initiative aims to achieve **improvements in terms of energy consumption** and prevent productivity losses or unnecessary capacity additions. To maximise the effects of such work, specific signage has also been added to raise awareness among operators.

Lastly, a process for converting machinery to **fully electric models** has begun at **Camozzi Technopolymers**, which will end in 2023 by transforming the entire machinery pool. With the expansion of photovoltaic systems scheduled for 2023, the company's fully electric machinery will be able to increasingly operate using renewable energy, ensuring a reduction in company emissions. Furthermore, these machines do not depend on hydraulics, which also ensures a decrease in the use of oil within the company's production processes.

Mora Gavardo foundry: Class A product according to the findings of the first LCA

In 2022, a ***Product Environmental Footprint*** *study of cast iron castings at the Mora Gavardo*[3] *foundry was conducted with the aim of analysing its environmental impact in relation to the 'Product Category Rules' for cast iron castings, published by the Italian Ministry of Ecological Transition within the 'Made Green in Italy' scheme. This study was used as teaching material within the 'HTA Project for Lombardy Foundries' with Fondimpresa.*

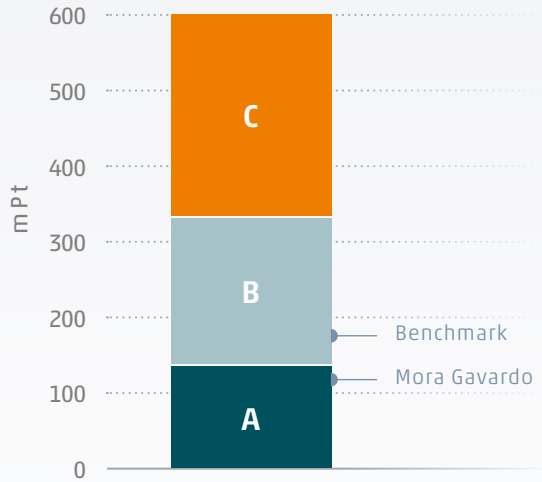
The main objectives of the analysis were to identify the most critical areas within the production cycle or product life cycle, find areas for improvement on which the company's commitment could be focused, and specify the product performance class compared to competitors.

According to the Product Category Rules, the performance class should be calculated as the sum of the weighted results of the ***three categories with the most significant impact*** *for a representative product.*

Specifically, the three categories are:

- *Climate change*
- *Particulate matter*
- *Consumption of resources, minerals, and metals*

The weighted scores in these three reference categories resulted in a ***Class A*** *classification for product from the Mora Gavardo foundry. This is a very positive result, which allowed the company to gain a deeper understanding of its performance and where its products stand compared to the business sector in which it operates. The start of an LCA study for the aluminium foundry and mechanical processing operations has been planned for 2023.*



[3] The functional unit considered for this study was: 1 net ton of raw casting (with cradle-to-gate approach – from the cradle to the exit gate of the foundry)

Undertaking a sustainable path

CIRCULAR ECONOMY AND RENEWABLE MATERIALS

Promoting a new circular and efficient production model.

The Camozzi Group's **Approach**

Over the years, the focus on minimising waste, both in environmental and in economic terms, has led the Group to **manage materials, waste, and by-products based on circularity**, so that these may be reused in the Group's production processes or in other supply chains. Managing these issues stems from the constant analysis of the requirements of applicable regulations and their updates. Where possible, this becomes an active search for cutting-edge industrial solutions. This is not just an approach linked to product innovation, but it entails the continuous monitoring of every single process to find the areas where production can be optimised, that is, a structured **indirect cost management** approach.
In this way, Camozzi specifically identifies and monitors the most suitable solutions and technologies for each Group division and company.

Purchased materials

	u.m.	2021	2022
Aluminium	ton	3.996,5	3.028,4
Brass	ton	4.240,0	2.771,9
Ferrous materials	ton	19.124,1	14.663,3
Other metals	ton	5,6	814,7
Mineral oils	ton	176,1	197,6
Finished and semi-finished products	ton	2.548,8	2.161,4
Plastic	ton	1.415,0	1.212,0
Paper and cardboard	ton	732,8	647,0
of which recycled or certified	ton	22,8	7,1
Quarry sand	ton	5.347,4	5.952,6
Rubber	ton	121,0	166,1
Chemical products	ton	1.829,2	1.652,7
Wood	ton	1.001,0	1.039,1
Detergents	ton	11,8	14,0
Other materials	ton	8,5	1,5
Total	**ton**	**40.557,6**	**34.322,3**

The main materials used in our production processes comprise **metal alloys**, especially brass and aluminium, and ferrous materials, including steel and cast iron.
From the standpoint of circularity, **52% of the steel purchased is certified as "end of waste"**, meaning materials that have undergone a recovery process, at the end of which they lose the status of waste and acquire the status of product.
Furthermore, in addition to brass purchased as virgin material, much of the brass used by Group companies comes from the treatment of industrial production waste by specialist organisations.

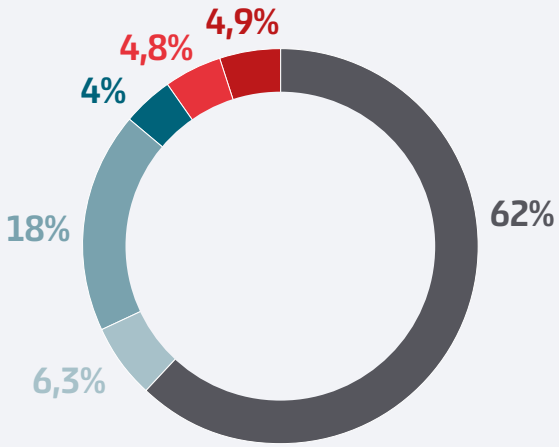
Brass shavings are selected and centrifuged, stored in silos and processed to obtain brass bars, ready to be reworked (see the paragraph "By-products").

The finished and semi-finished products being purchased mainly include **mechanical, electrical and electronic components** which constitute key elements of the products of some of the Group's divisions. Mineral oils include **oils and lubricants** are used especially in the Automation division's chip removal processes; while **foundry sand** is only used by the Manufacturing division for the preparation of moulds.

Paper and wood are used for packaging and as commercial materials. Finally, other purchased materials include **resins, glues, paint and thinners**.

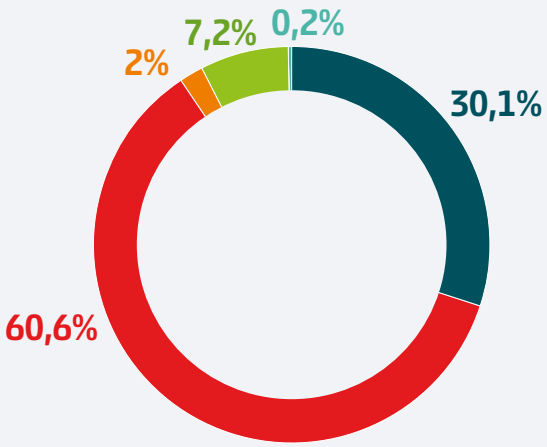
Categories of purchased materials (%) - 2022

- Metals and alloys
- Plastic and rubber
- Finished and semi-finished products
- Chemical products and other materials
- Auxiliary production materials
- Paper, cardboard, and wood



Materials purchased by division (%) - 2022

- Automation
- Textile
- Manufacturing
- Digital & Mechatronics e Holding
- Machine Tools



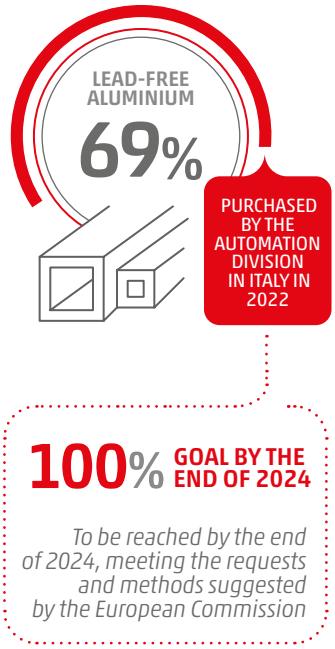
The **Main Initiatives** of 2022

During 2022, feasibility studies continued to investigate the use of **aluminium alloys without heavy metals**, favouring alloys composed of non-toxic substances, which may be found in nature in abundant quantities. Following important investments in new operating machines and new tools, the use of lead-free alloys in the Italian companies of the Automation division increased significantly. In 2022, lead-free aluminium purchased by the Automation division in Italy reached **69%**. The goal is **to reach 100% by the end of 2024**, meeting the requests and methods suggested by the European Commission.

Purchase % by type of aluminium - Camozzi Automation Italia

	u.m.	2022
Previous lead-free alloys	%	**65,4%**
Lead-free alloys since 2022	%	**3,8%**
Alloys with lead	%	**30,8%**

Use of lead-free alloys in Italian companies in the Automation division:



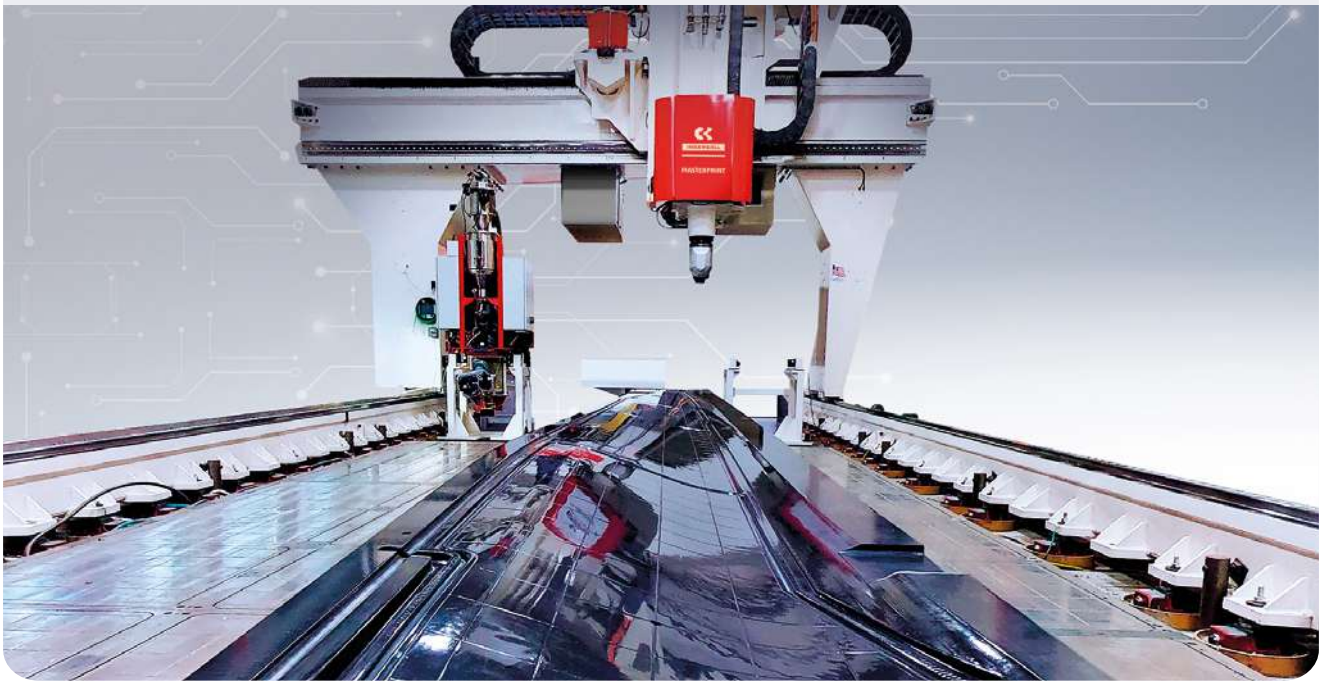
The Camozzi Group acts together with trade associations to explore opportunities in the brass sector. The entire industry is now facing a transition phase in the pursuit of the most suitable solutions to eliminate lead from brass alloys and maintain the high levels of circular economy already achieved in this segment.
2023 will be the year in which previously planned structured tests will be implemented in order to find the most effective approaches, emphasising those which are in synergy with other business sectors.

Also in 2023, Camozzi Automation has plans to use **a new vegetable-based emulsifiable oil**, gradually replacing mineral oil. Over the course of the year, numerous compatibility tests were carried out to determine the best results and the implementation phase using this vegetable oil in machinery and processes will soon begin.

3D printing process: towards a "zero defects and zero waste" scenario. The CRC project with Politecnico di Milano

3D printing can be key to reducing waste in manufacturing production. In order to bring processing to an even higher level, the ***Camozzi Research Center*** *and* ***Politecnico di Milano*** *have started an innovative project aiming to develop technologies and algorithms capable of interpreting processes and preventing possible errors or deviations. To avoid defects and waste in 3D printing, machines should be perfectly capable of printing an object as designed.*

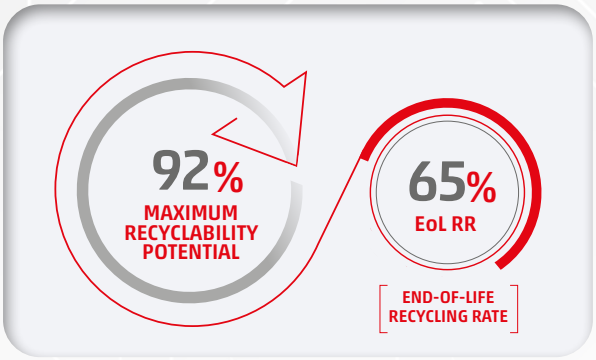
The key to success lies in the data, in the ability to follow the process in detail in ***quantitative terms****: with highly developed sensors, it is possible to generate a virtual archive of various processes from which the machine can learn and improve.*
This is a very ambitious study which is already producing its first results and aims to bring 3D printing towards ***zero defects and zero waste****, resulting in greater efficiency in terms of use of materials and energy.*



In 2022, as part of the project 'Development of a labelling system linked to the Recyclability of Machinery', **Marzoli Machines Textile** actively participated in the definition of the concept and calculation method used for the **Recyclability Index**, promoted by **ACIMIT** and **ASSOMAC**, in collaboration with RINA. The Recyclability index, which is in addition to the Green Label, focuses on environmental performance during use, and ensures the quantification of the recyclable portion of a machine at the end of its useful life.
There are two different indicators that make up such assessments, both of which range from 0% to 100%:

- **Maximum recyclability potential**, which denotes the possibility of separating a material from non-separated waste.

- **End-of-life recycling rate (EoL RR)**, which takes into consideration the portion of waste material that is collected, pre-treated, recycled, and used again in the production cycle. This indicator is more complex, as it is influenced by various factors, including the technical characteristics of the material, the efficiency of collection and recycling systems, the legislation, and the relevant country.



Marzoli calculated the Index for one of its roving frame machines[4], achieving very positive results, and demonstrating the company's commitment to the choice of materials and processes in support of circularity and life-cycle.

[4] Model FT60-192 FUSI without doffing - 3 cylinders

Post-Industrial | Post-Consumer

Regenerated Fiber

Regarding **marketing activities**, in recent years the Camozzi Group has focused its **attention on the environmental impact of commercial materials**. Common guidelines for **minimising the printing of catalogues, brochures, and other marketing materials** have been agreed at Group level and, where possible, smart and digital methods, such as QR Codes and web links, are now preferred. As of 2023, trade fairs will also be the subject of such actions through the use of recyclable and/or recycled materials on all Camozzi stands.

1

The Netherlands

The Group has begun distributing only condensed versions of printed product brochures since 2021. Because of this initiative it is now possible to save a large part of the paper used within the Dutch headquarters offices.

2

Denmark, Estonia, Sweden, and Norway

Since 2021, retailers have increased their use of digital catalogues and have set themselves the goal of reducing the use of paper materials by 80% by 2025.

Goal of reducing paper materials:

WASTE MANAGEMENT

With a view to reducing the inefficiencies generated in production processes, the Group is constantly engaged in research activities aimed at **reducing waste** and creating more efficient production phases.

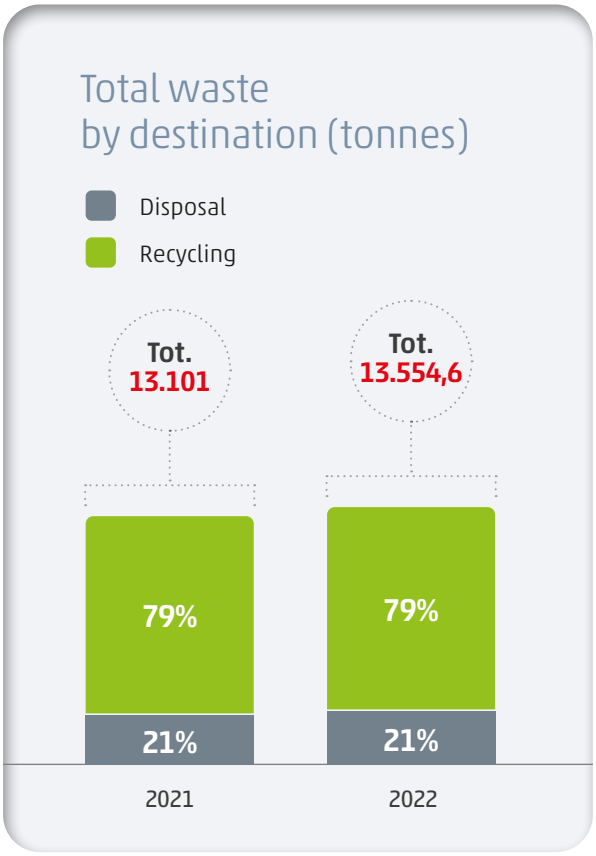
Hazardous waste by destination (tonnes)

	2021	2022
Automation	**206,6**	**168,4**
Disposal	15,4	39,7
Recycling	191,2	128,7
Machine Tools	**71,3**	**46,8**
Disposal	7,0	4,6
Recycling	64,4	42,3
Manufacturing	**234,4**	**197,8**
Disposal	49,4	55,5
Recycling	184,9	142,2
Textile	**1,6**	**0,0**
Disposal	0,1	0,0
Recycling	1,5	0,0
Total	**513,9**	**413,0**

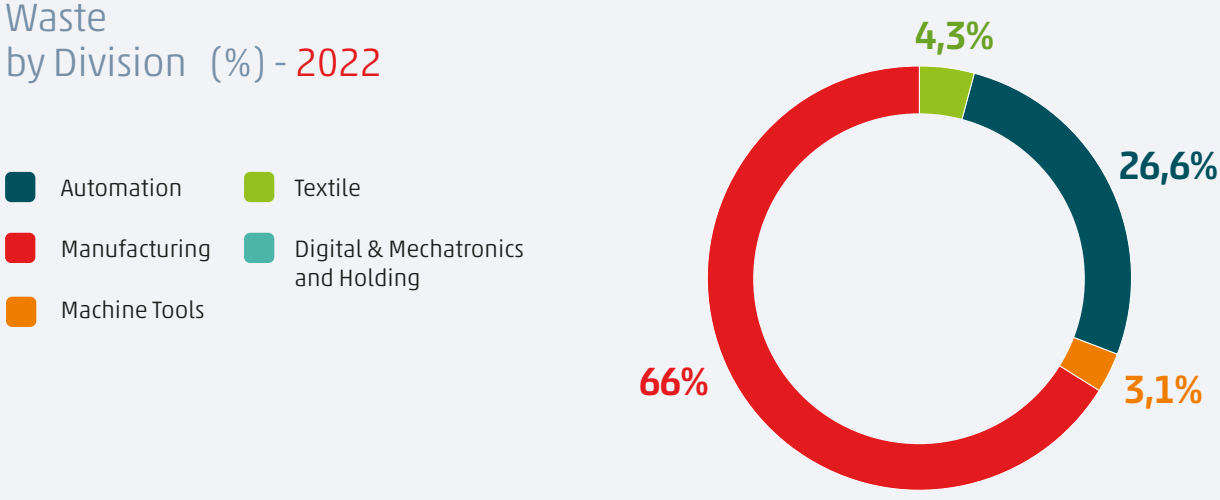
Non-hazardous waste by destination (tonnes)

	2021	2022
Automation	**3.546,8**	**3.542,6**
Disposal	2.435,5	2.550,1
Recycling	1.111,4	992,4
Machine Tools	**383,4**	**384,6**
Disposal	112,8	71,5
Recycling	270,6	313,1
Manufacturing	**8.457,3**	**9.022,0**
Disposal	50,2	32,4
Recycling	8.407,1	8.989,6
Textile	**199,6**	**605,5**
Disposal	34,2	164,0
Recycling	165,4	441,5
Total	**12.587,0**	**13.554,6**

Hazardous waste represents a small part of total waste (**less than 2% in 2022**) and largely consists of oils and oily emulsion residues. Neat-cutting oil or water emulsion is used as a lubricant in chip removal processes.
The Automation division's initiatives for the recovery of whole oil and emulsions are intended to limit the quantity of these materials that become waste, minimising (among other things) new oil purchases.
In 2022, 79% of waste in total was recycled, as in 2021.



Waste management constitutes one of the most significant aspects for the foundry sector, in particular. Overall, nearly 78% of waste produced by the Group can be traced back to the Manufacturing division. Because this is a significant issue that arises from the intrinsic properties of the foundry sector's production processes, and is difficult to manage given the numerous regulatory demands, the Camozzi Group foundries are working closely with Assofond, the Italian Foundry Association, to study and plan waste management initiatives involving the cooperation of various member companies.



The future we imagine is increasingly sustainable: lower consumption, greater efficiency, circularity, clean energy.

The **Main Initiatives** of 2022

In 2022, components for **recovering chips** have been installed onboard machines at the Automation site in Polpenazze.
This makes it possible to **recycle that part of the oil that remains on the chip** and put it back into production, thereby producing waste with a lower humidity level and making it easier to recycle once it has been briquetted.
Since September 2021, the Polpenazze site has adopted **mechanical filtration technology for neat-cutting** oil that does not use diatomaceous earth, eliminating the consumption of this dangerous substance and the need to dispose of residues. Given the positive results obtained, the adoption of this technology has also been planned for the Lumezzane filtration plant in 2023, to maximize the recovery of treated wastewater and minimise the use of new oil.
An emulsion filtration system is also planned to be installed in the mechanical department of the Lumezzane plant, using the same technology as the one installed in Polpenazze in 2022, aiming to eliminate metal residues and enable their reuse within the production process. The adoption of this system will ensure significant reuse of emulsified oil, with a resulting reduction in the consumption of new oil, as well as reducing use of the evaporator for treating the

wastewater, and reducing the oily sludge generated by it.

For the Polpenazze plant, an **automatic 24/7 alarm system** will be activated in 2023, with the goal of monitoring any oil leaks, even when there are no personnel in the plant. This automated system will be connected to an operation centre ready to intervene if necessary, and avoiding unnecessary machine downtime, which could also negatively affect the quantity of waste.

> *Initiatives to recover oil and emulsions and reduce the use of virgin oil*

Finally, to monitor the trend of metal processing residues and verify the presence of oils and residual humidity, regular analyses were set out and implemented by the engineering company in charge of environmental management at many of the Group's companies within Camozzi Automation during 2022.
This additional analysis ensured greater control and monitoring, compared to the analyses carried out by the disposers alone.

By-products (tonnes)

	2021	2022
Aluminium	87,1	59,8
Brass	8.092,3	9.908,5
Steel	12,6	2,8
Other[5]	1,1	4,0
Total	**8.193,0**	**9.975,0**

The Manufacturing and Automation divisions have signed agreements with specialist suppliers to ensure that **part of their production waste is recovered as by-products**, that is, as goods and not as waste, enabling a facilitated recovery cycle. The Automation division generates nearly 60% of total by-products annually.

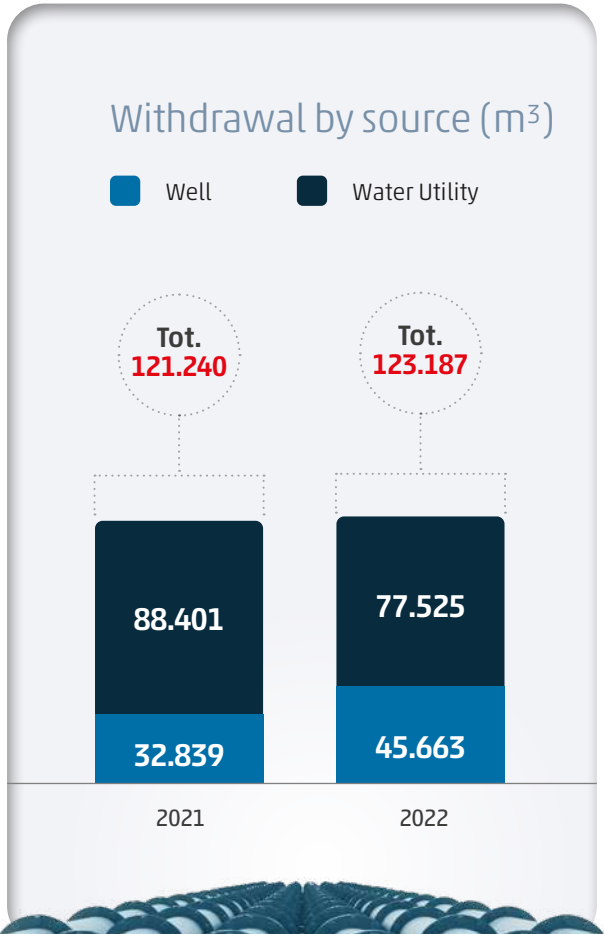
More than 99% of by-products are made of brass. This by-product is mainly made up of shavings reused in the processes of the metallurgical companies, who collect it to produce new brass bars, which are then used as raw material in the production cycle. In this way, through the reprocessing of waste by these specialist businesses, the Group's companies can guarantee good circularity in their production. Steel and aluminium are sold to third parties as by-products, so that they may be transformed and recycled into the production of other sectors.

[5] The item Other refers to ferrous waste.

WATER RESOURCES

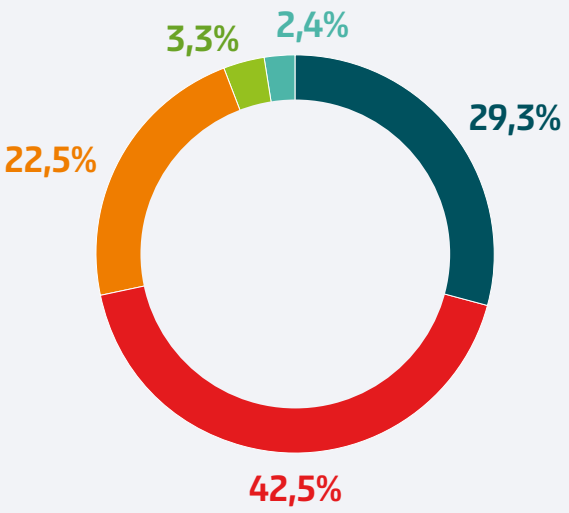
In general, much of the water used within the Camozzi Group is acquired from the public water supply and used in various phases of its production processes, for personal use and for irrigation.

For industrial purposes, water is used at Camozzi Automation companies in the **preparation of emulsions** for cutting oils and for **air conditioning systems**. At Technopolymers, there is an industrial cooling system that uses water resources to cool the plants. Companies in the Manufacturing division are also equipped with industrial cooling systems in various sizes depending on the plants in question. Whilst, at Machine Tools, water is used in some **mechanical processes**. The consumption by other companies in the Group is not very significant in comparison and mainly relates to their employees' personal use.



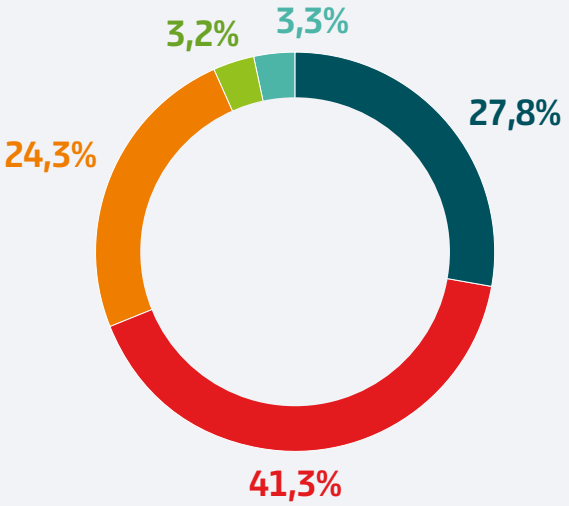
Withdrawal by Division (%) - 2022

- Automation
- Manufacturing
- Machine Tools
- Textile
- Digital & Mechatronics and Holding



Withdrawal by Division (%) - 2021

- Automation
- Manufacturing
- Machine Tools
- Textile
- Digital & Mechatronics and Holding



Undertaking a sustainable path

PEOPLE'S WELL-BEING AND HEALTH

Creating an environment
that supports people,
inside and outside the company.

The Camozzi Group's **Approach**

People have always been a priority for the Camozzi Group: it is thanks to our people that the Group has become the international enterprise that it is today, and it is precisely for these people and their local communities that the company's innovations and activities aim to create a positive change.
A solid and transformative Group that strives to be the engine of inclusive social development, looking towards the future without leaving anyone behind.
A strategic vision that unfolds in three main aspects:

- Safety
- Training
- Proximity to local communities

SAFETY

The new industrial phase that has begun with Industry 5.0 places an unprecedented emphasis on the synergies between humans and machines, seeking to maximise the capabilities of both, to achieve better and safer results. Automation plays a crucial role especially in the area of industrial safety through the integration of digital technologies into the working environment that can significantly improve risk management. But innovation for safety also means the development of new materials and products with specific characteristics capable of maximising the comfort and well-being of the people who use them.

TRAINING

The speed of change around the world is something that is having a growing impact on people's ways of working and their expectations. To keep up with this dynamic trend, the development of new skills and upgrading existing ones becomes necessary to ensure that everyone has the tools at their disposal to play an active role in this transformation and in their own future.

PROXIMITY TO LOCAL COMMUNITIES

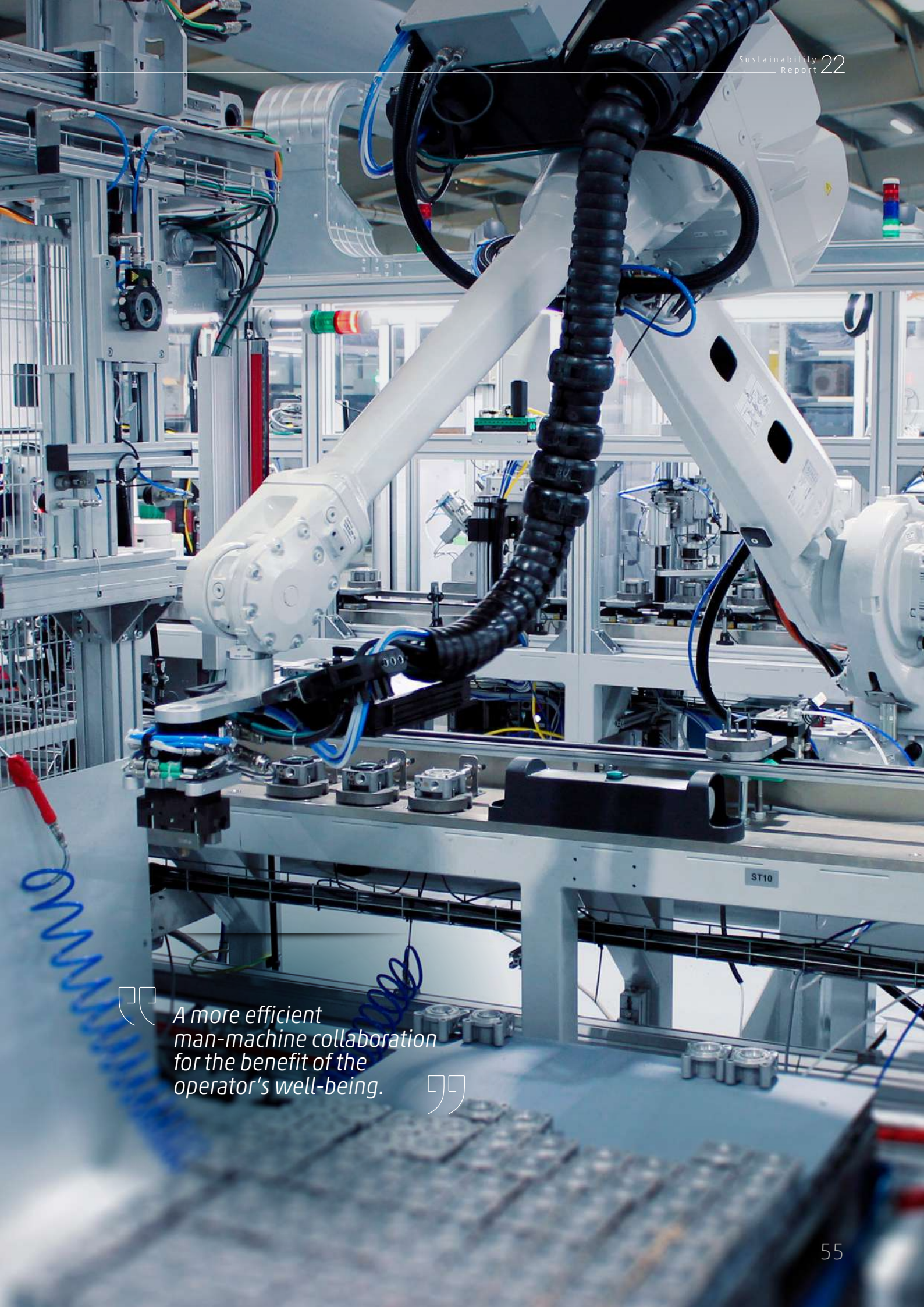
By providing employment to the people who live in the local communities where the Group operates, and by supporting organisations that carry out charity projects in these areas, the Group contributes to the social development of the communities in which it is located.

Project

DIGITAL TECHNOLOGIES FOR **COLLABORATIVE PRODUCTION SYSTEMS WITH PEOPLE**

As part of one of the 'spokes' that constitute the partnership called '*Made in Italy Circolare e Sostenibile* (MICS)', the Camozzi Group, together with several universities (Politecnico di Milano, Politecnico di Torino, Sapienza University of Rome, University of Padua), is developing tools based on data and artificial intelligence to make **production lines agile, flexible, easily reconfigurable, and safe**.

The digital factory will be managed by a high-level control cycle and non-invasive systems will monitor the actions of operators in real time. This information will be used as input to anticipate a person's future movements, optimising the operations of cobots in collaborative tasks, and to evaluate their position from an ergonomic standpoint so as to identify improvements that create positive impacts on the health and safety of workers. The data collected will also enable the development of new approaches to planning activities between humans and robots based on ergonomic performance parameters, making their collaboration more efficient at an operational level and improving the well-being of operators.



A more efficient man-machine collaboration for the benefit of the operator's well-being.

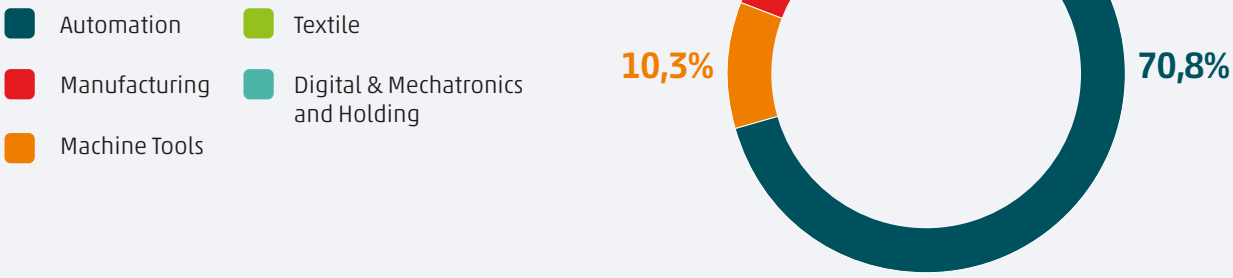
The Company's People

The Camozzi Group comprises, and is represented by, numerous people, companies, divisions, and countries. Each of them contributes to developing, enriching, and improving the business. Camozzi's values and principles are shared by all its people, on behalf of whom the Group undertakes the commitment to guarantee respect and appreciation. In particular, every year all companies implement independent activities to improve the working environment, well-being, and engagement of their employees.

Total number of employees by division 31/12

	2021	2022
Automation	2.220	2.241
Machine Tools	332	325
Manufacturing	300	320
Textile	252	243
Digital&Mechatronics and Holding	24	37
Grand Total	**3.128**	**3.166**

Employees by division in - 2022



The Camozzi Group operates its own production sites and branches in Asia, America, and Europe, the region where the most significant operations are carried out by 54.1% of staff.

Geographical breakdown in 2022

Asia
36,8%

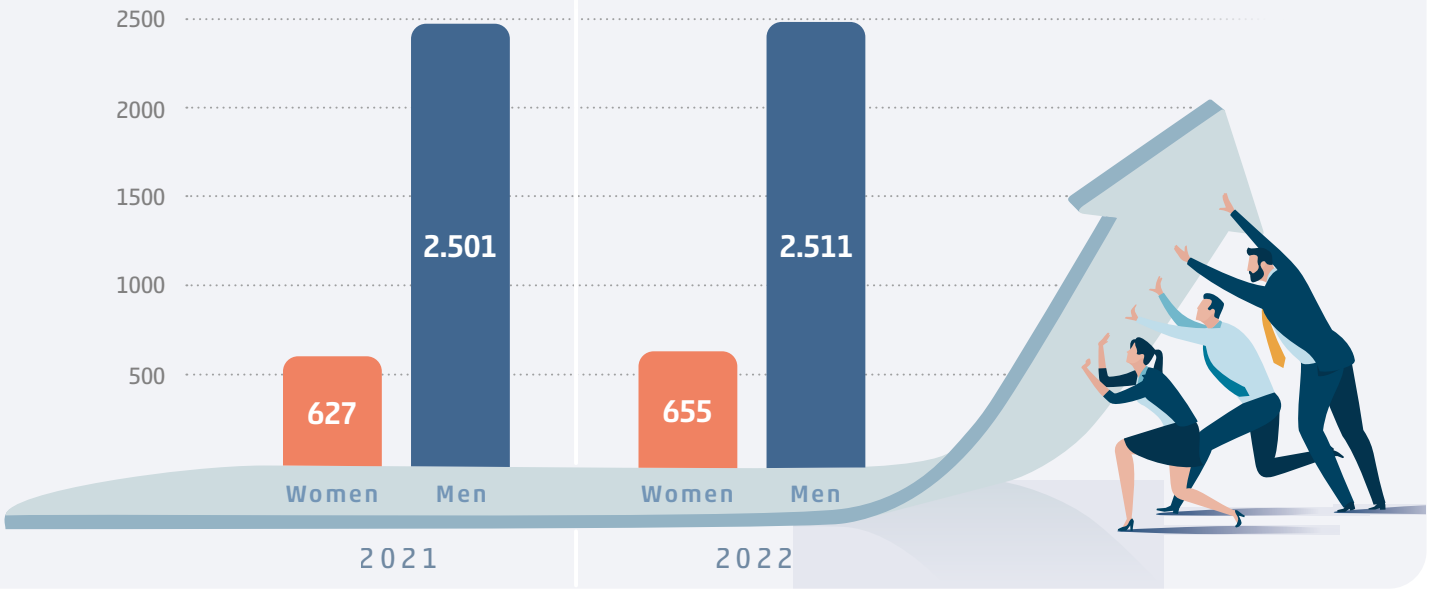
Europe
54,1%

America
9,1%

	2021		2022	
	MEN	WOMEN	MEN	WOMEN
Asia	849	263	887	278
Europa	1.410	318	1.378	335
America	242	46	246	42

In 2022, the number of Camozzi Group's employees remained almost unchanged, with only a slight increase. The number of women in the company also increased slightly, now approximately 21% of the total (20% in 2021).

Total number of employees by gender

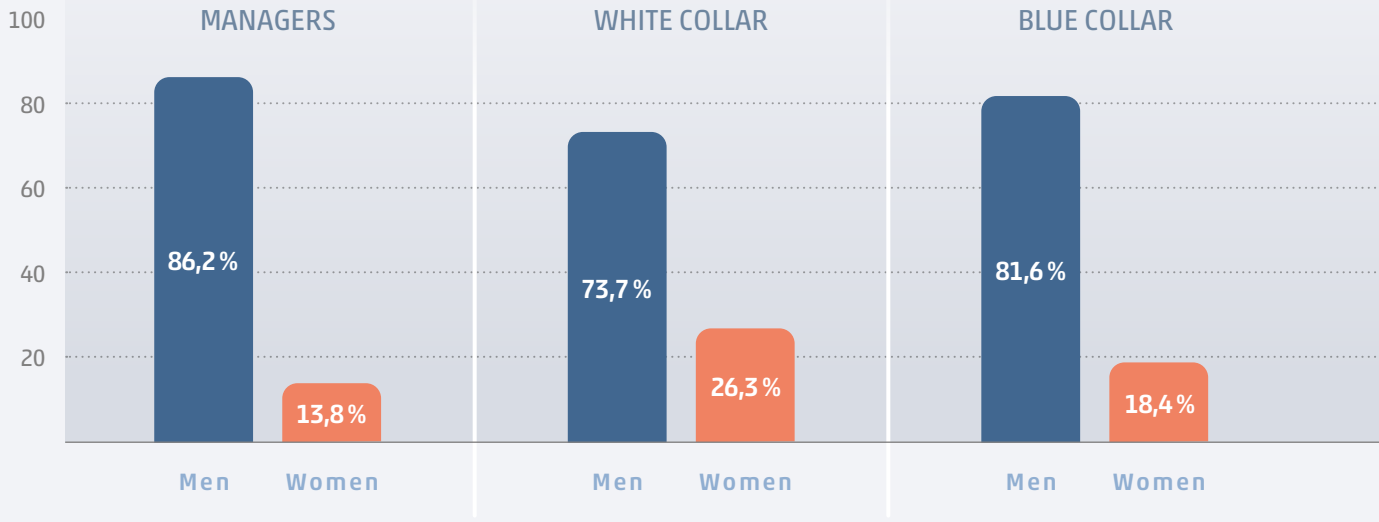


Employees by type of contract and gender

	2021		2022	
	MEN	WOMEN	MEN	WOMEN
Employees under fixed-term employment contracts	251	78	103	56
Total	329		159	
Employees under permanent employment contracts	2.250	549	2.408	599
Total	2.799		3.007	

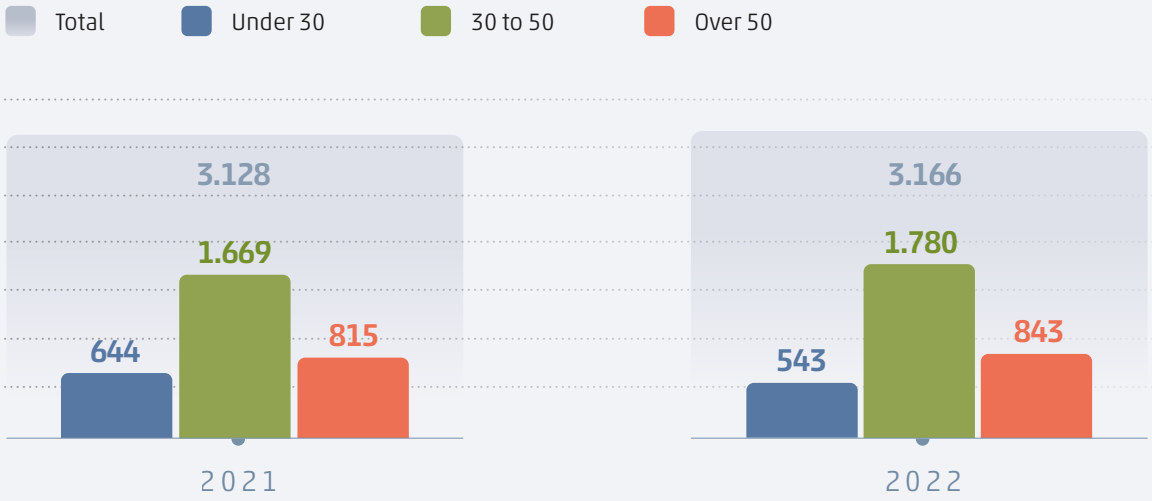
In 2022, **permanent employment contracts** increased further and reached **95% of the total**, up by 7.4% over the year 2021, when they were 89%.

Employees by category and gender (%) - 2022



Because the Camozzi Group is a collection of industrial companies, 51% of its employees are classified as blue-collar workers. Over 36% of its personnel carry out clerical tasks and 12% hold managerial and executive positions. Within the business, women exceed 26% of white-collar workers, 18% of blue-collar workers, and nearly 14% of managers.

Total number of employees by age



In 2022, over **56%** of Camozzi's people were aged **between 30 and 50**, a quite steady percentage between 2021 and 2022, indicating a relatively young company population.

Recruitment and terminations

The Camozzi Group is committed to ensuring equal opportunities during the recruitment phase, evaluating candidates based on the corelation between their skills and the job profile being sought.
In 2022, **505 new employees** were hired across the Group's companies, 25.5% of whom were women.

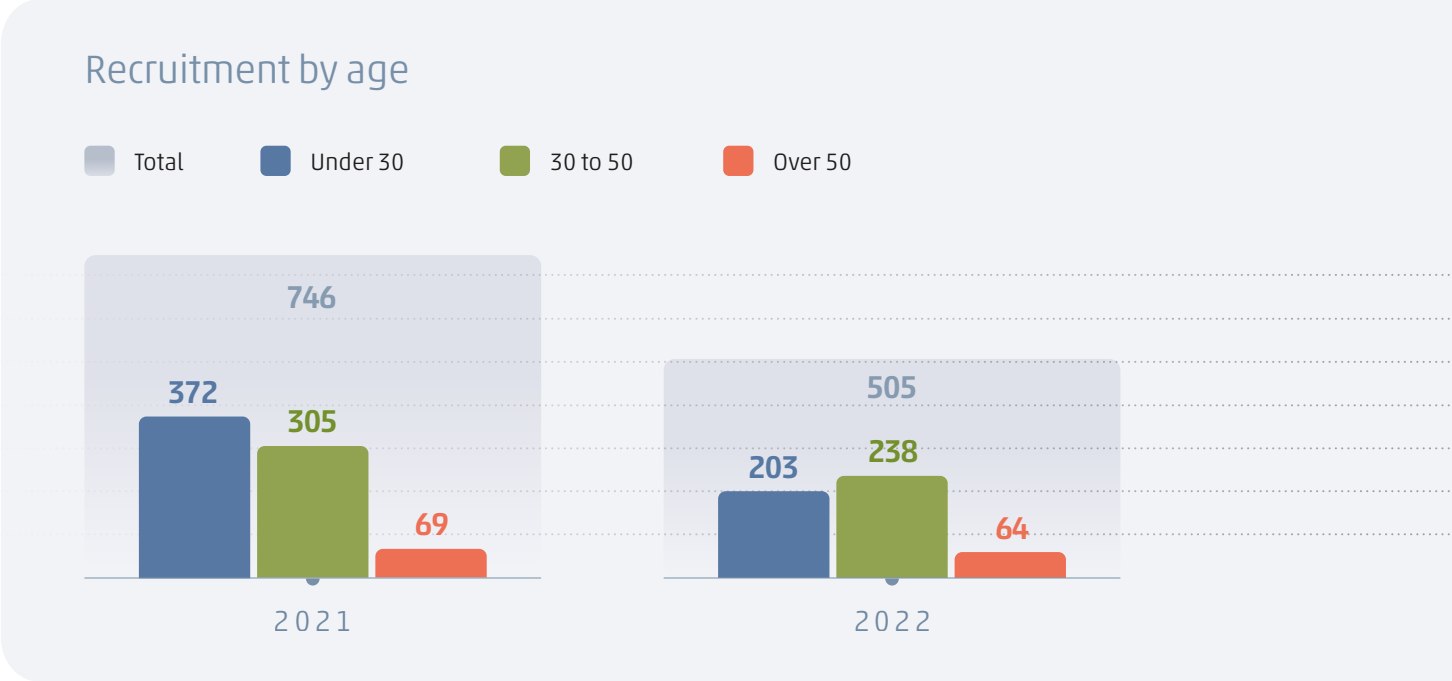
Recruitment and terminations by gender

	2021		2022	
	MEN	WOMEN	MEN	WOMEN
Recruitment	628	118	376	129
Terminations	402	73	366	101

	Turnover 2021		Turnover 2022	
	MEN	WOMEN	MEN	WOMEN
	226	45	10	28
Total turnover	**271**		**38**	

	Turnover rate 2022[6]	
	MEN	WOMEN
	0,4%	4,5%
Total turnover rate	**1%**	

The staff turnover rate shows that the Group recorded a slight growth of 1% in its workforce in 2022. In particular, the number of women increased by 4.5% compared to the previous year.



In 2022, recruitment comprised people who were on average young. 203 new staff were hired under the age of 30 and 238 aged between 30 and 50, representing more than 87% of all personnel recruited during 2022.

[6] See the section 'Notes on the calculation method' for the calculation method used

Health and Safety Management

The Camozzi Group considers its people to be the key element for achieving its corporate activities. Guaranteeing their well-being is essential, as it reflects on the well-being of the Group itself.
Health and safety issues are managed in all Group companies by strictly applying **the legislation in force** for the protection of workers' health and safety in Italy and abroad.
Over the years, the Group's various branches and production sites have initiated prevention programmes aimed at **promoting the health of employees**, which include regular screenings, incentives to carry out physical activities, and initiatives to protect the healthiness of working environments.

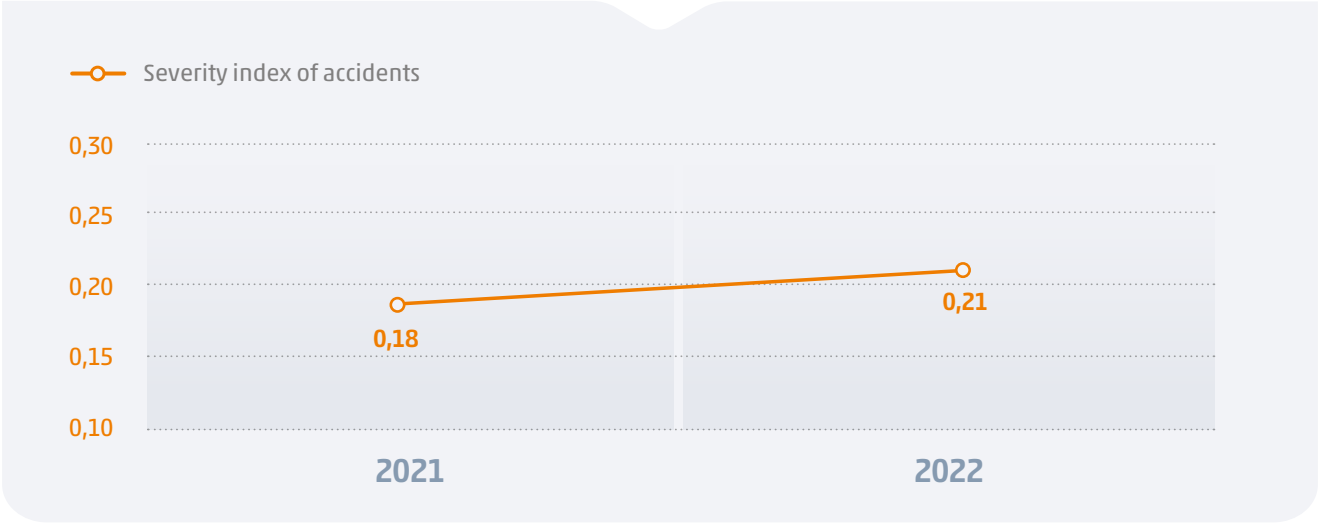
Total number of hours worked by employees by division

	2021	2022
Automation	3.772.811	3.727.850
Machine Tools	557.668	575.013
Manufacturing	448.284	433.124
Textile	377.656	455.645
Digital&Mechatronics and Holding	43.083	59.687
Grand Total	**5.199.502**	**5.251.319**

The number of hours worked in 2022 remained nearly unchanged, in line with production activities.

Workplace injuries: frequency rate and severity

	2021	2022
Number of days lost due to injuries	691,2	774,0
Injury frequency rate	4,8	8,8



The number of injuries went from 25 to 45, while the working days lost – following such incidents – remained essentially unchanged, as did the severity index.

The **Main Initiatives** of 2022

During 2022, the Camozzi Group acquired a **factory in Villa Carcina** to begin a reindustrialization process through the development of innovative technologies and social protection, ensuring employment for the workers previously employed there.

High-tech mechanical manufacturing activities were launched at the plant in line with the Group's strategic development guidelines, according to the paradigm of an innovative, digital, and sustainable industry.

The development of the Villa Carcina plant simultaneously made it possible to streamline the layout of the Lumezzane plant and to enhance some of its top-quality facilities, such as its Mechanical department.

The expansion of the workstation surface area improved **the quality of the working environment**, in addition to making it possible to install **a new extraction system**.

At the Lumezzane site, **fall prevention systems** have also been renewed to further enhance the safety of workers during specific operations. In 2022, a new extraction system was installed at the Polpenazze site, part of the Automation division, with the aim of further improving the working environment. At all Automation division Italian plants, **'Gemba Walks – Safety'** meetings that involve all units dedicated to safety – **employers, safety and protection officers, and worker's safety representatives** – were held monthly to enable open discussion with workers within the operating departments. The goal was to directly observe and understand their needs, foster improvement and reduce waste, in particular by focusing on health and safety.

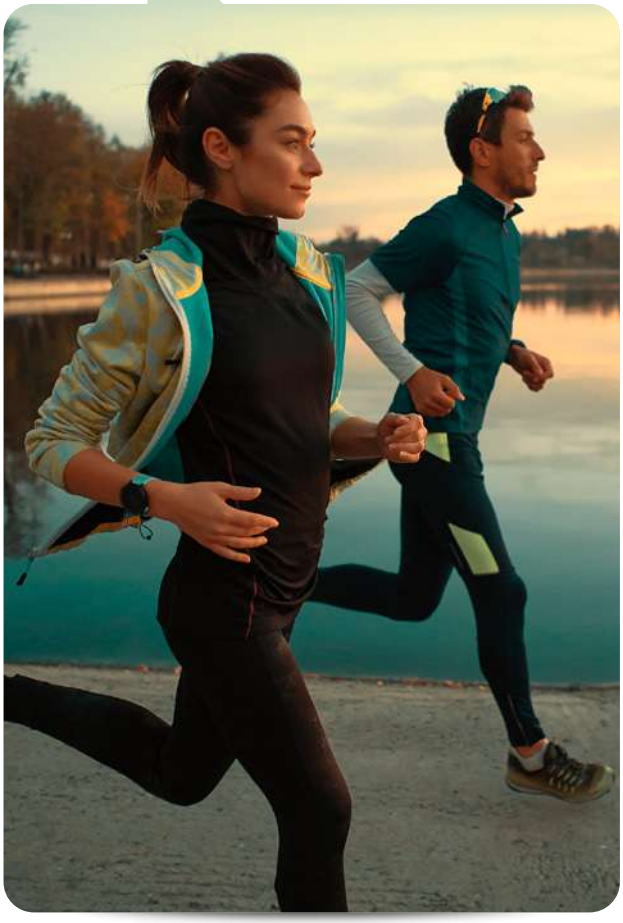
This project was also received very positively by the workers' union representatives and was considered useful for engagement and the continuous improvement of company life.

In Camozzi Technopolymers, important investments have been approved with the primary objective of improving workplace safety.
By launching **automatic warehouses for managing moulds**, their traditional handling using forklifts will be significantly reduced, aiming to minimise the possibility of accidents and the stress level of workers.

Furthermore, some **robots** will be installed on the new fully electric **material-picking** presses during the initial packaging phase. This will reduce the human contribution to handling parts and will allow workers to carry out activities of greater added value.

The programmes launched in previous years to increase people's well-being are still ongoing within the Group.
Since 2011, the US branch of Camozzi Automation has been offering the **Camozzi Life Program**, designed to improve our people's working experience and work-life balance. Each year, a new Camozzi Cultural Committee, made up of one employee from each company department, is selected to define the initiatives to be implemented within three areas of interest: employee engagement, personal development and community involvement.
Special focus is placed on the **Wellness Program**, which in addition to promoting health screening activities for all personnel, carries out training courses related to topics such as mental health, healthy diets, physical exercise, and first aid courses

"The Group's various companies have activated specific programmes to increase their people's well-being."



Camozzi Care is another example. The Camozzi Automation site in Germany has implemented a plan based on four modules (Safety, Health, Retirement, Benefits), with the aim of taking care of people in all aspects and at all stages of their lives.
Each module of the plan comprises numerous initiatives, including voluntary collective insurance against accidents, free medical examinations and additional pension contributions.
The voluntary check-up programme includes a medical examination and diagnostic tests every three or five years, depending on the employee's age.

*Camozzi Life Program and **Camozzi Care** take care of people in the company for different aspects of their lives.*

At Camozzi Automation in Poland, a package was set up in collaboration with a private health services company, which provides different types of **medical assistance**, including blood, lung, heart, and eye tests.

As a result, the Group's personnel get the opportunity to benefit from these check-ups free of charge every two years in order to find any issues in advance.
Additionally, the Swedish commercial branch continues implementing initiatives aimed at encouraging employees to take care of their personal health by providing **regular screenings and campaigns to promote sports activities**. Employees are encouraged to play sports for a certain number of hours to receive a gift card that can be used to purchase sports equipment. The initiative was well received again in 2022 and the goal is to involve 75% of staff by 2025.

Training

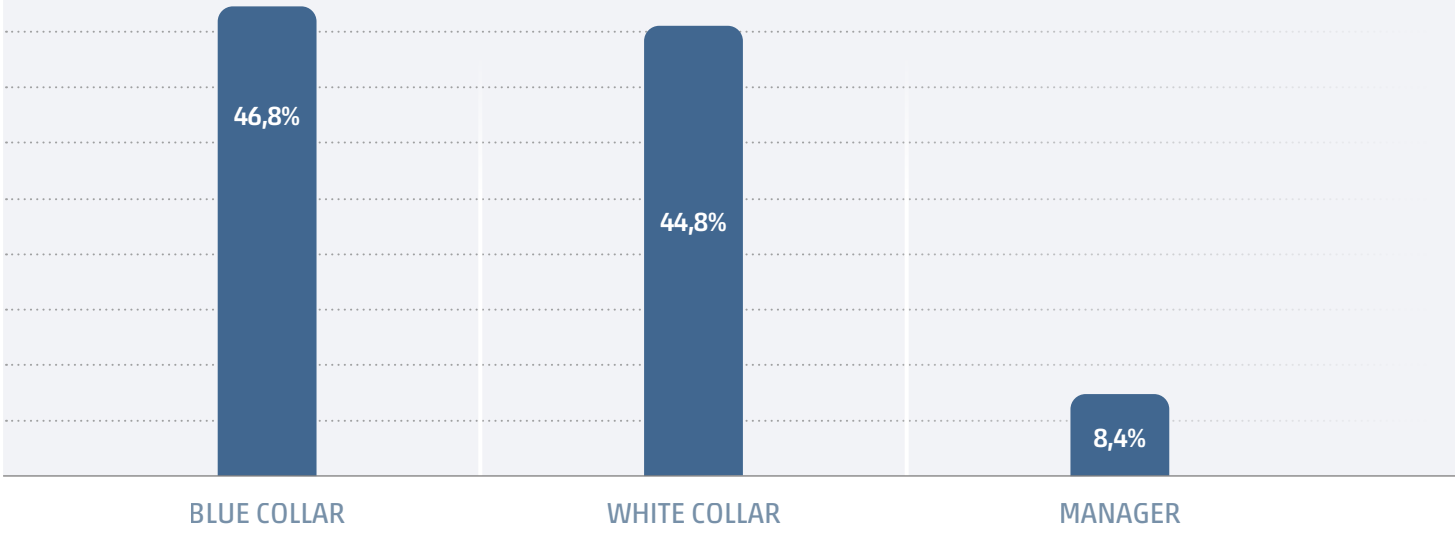
The Camozzi Group is well aware of the rapid evolution taking place in its industry sector and the need to keep people's skills in step with these changes, improving existing ones and developing new ones. Ever more complex tasks require new technical skills and consequently, targeted training. For this reason, the Group is trying to gradually expand opportunities for employees to build their skill sets, allowing them to contribute to the Group's development and, in a broader sense, to the development of the entire industry.

Employees, based on their country and the site or branch where they work, can take advantage of technical courses aimed at developing skills relevant to their roles, commercial courses, soft skills development, as well as courses offering broader benefits such as foreign language courses.
In 2022, training hours continued to follow an upward trend, aligning with the Group's commitment to investing in this area for the development of its personnel.

	2021	2022
Total training hours	14.494	18.107

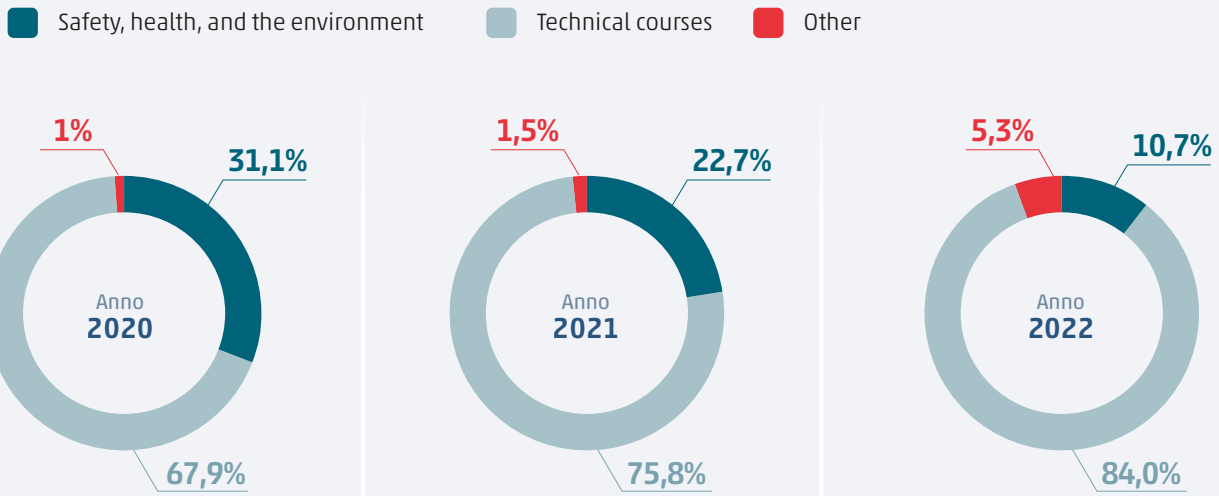
Overall training hours increased by almost 25% between 2021 and 2022, outlining a positive evolution.

% of training hours by category - 2022



The training hours that the Camozzi Group makes available to its personnel are of different types, the majority concerning **technical courses relating to work activities**, which represented 84% of the total training hours provided in 2022. 11% of training hours concerned health and safety, while the remaining part related to other types of courses, **including selling techniques, soft skills, and foreign languages**.

Number of training hours by subject (%)



To address the need for change that technological, competitive, and social challenges impose on businesses and people, over the past two years the Group has developed **Camozzi LINK**, the Group's corporate academy dedicated to the **training of employees and their family members**.

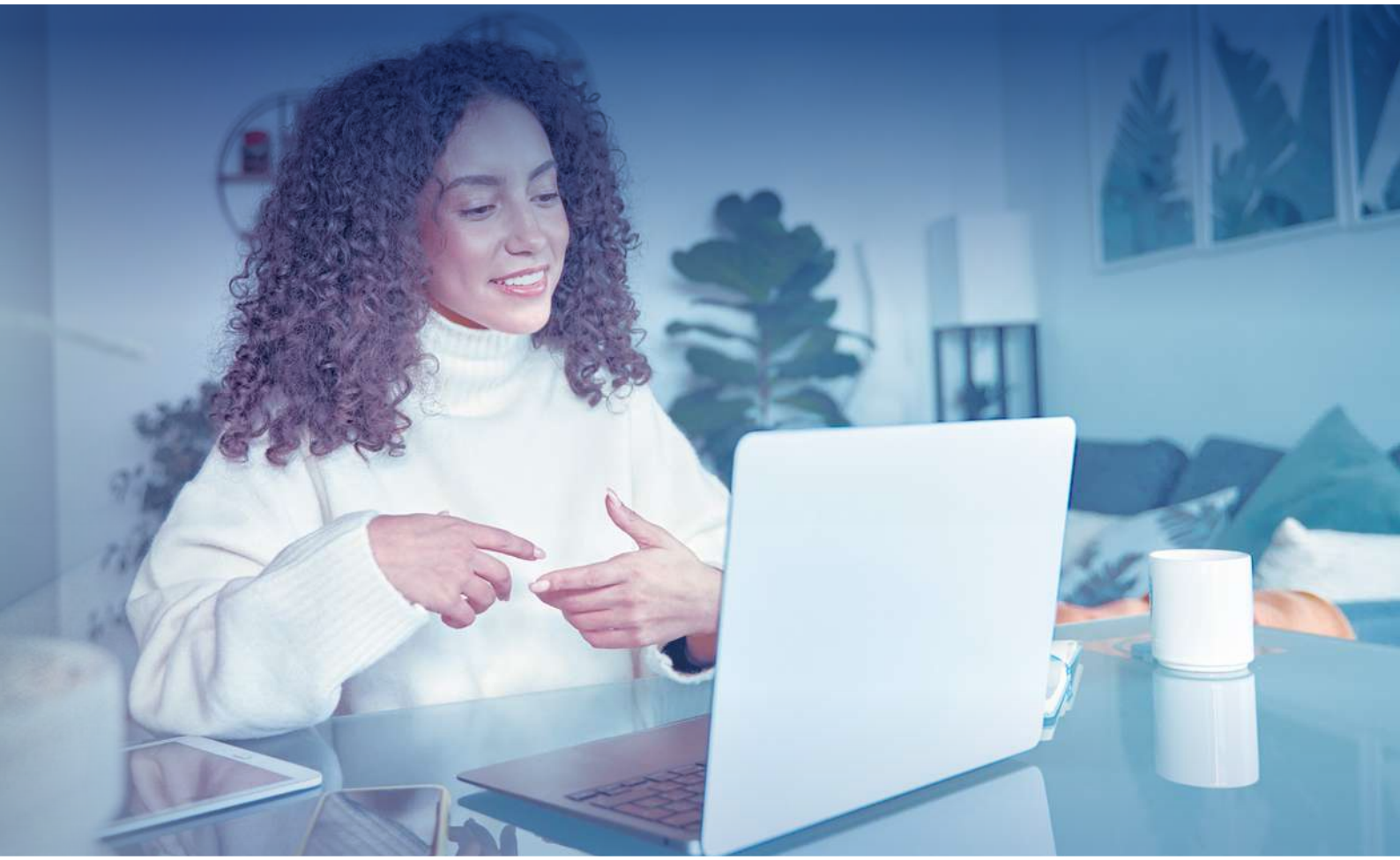
2022 was the year in which the platform and training activities were launched within the Italian companies. The aim is to gradually expand their adoption at the other Group enterprises.

The launch of the platform abroad also achieves the goal of deploying common tools and sharing the same vision within the Group.

The e-learning platform is available 24 hours a day and was launched at the end of the year, giving access to family members and enabling a wider spectrum of users to access the development of new skills. This initiative is divided into training, education, and sharing activities as well as paths for the up-skilling **and re-skilling** of staff and for developing the talents of new generations.

All of which is integrated into the **'SuccessFactors' IT SAP system** which ensures the involvement of all Group companies and the harmonisation of the potential, performance, and career path assessment processes in support of the Group's personnel.

The project has been designed to accompany the Group's evolution,



change processes and growth, while safeguarding the alignment of values, strategies, and its people. The scope of activities involves all staff across the various departments and will extend to customers, suppliers, and other categories of stakeholders with whom the Group works.

In particular, for the Automation division, there is a section for distributors and customers that provides technical training on products at a global level.

The platform will also include young people interested in working for Camozzi companies, with initiatives around recruitment and training and, from mid-2023, it will host a section about onboarding processes to facilitate the integration of new hires.

> *A project to accompany the Group's evolution, change processes, and growth.*

Camozzi LINK positions itself as a center for the re-skilling of individuals within the Group, with a focus on continuously updating and developing cutting-edge skills. It also serves as a reference point for students approaching the working world, aiming to transform their knowledge into innovations that can be turned into industrial reality.

It will be necessary to act as an engine for inclusive social development, which looks forward without leaving anyone behind, in order to achieve a sustainable future.

Undertaking a sustainable path

EXPERIENCING THE COMMUNITY

The close proximity of local communities has always been a distinctive element in the relationship between the Camozzi Group and the communities in which it operates. Providing employment opportunities as well as supporting organisations that assist the more vulnerable segments of the population is how the Group contributes to and supports the development of the communities in which it is located.

Undertaking a sustainable path

ECONOMIC VALUE

Distribution of the value created within the company to the various corporate stakeholders.

Value generated and distributed

In 2022, the Group has again proven to be a stable entity, having amassed nearly 60 years of activity, **demonstrating the ability to generate economic value for itself and its stakeholders**. It has built stable relationships based on mutual trust. In 2022, the generated economic value **increased by 23% compared to 2021**, highlighting the achievements and capabilities of a Group increasingly dedicated to development.

536.767.000 €

Economic value **generated by Camozzi in 2022**

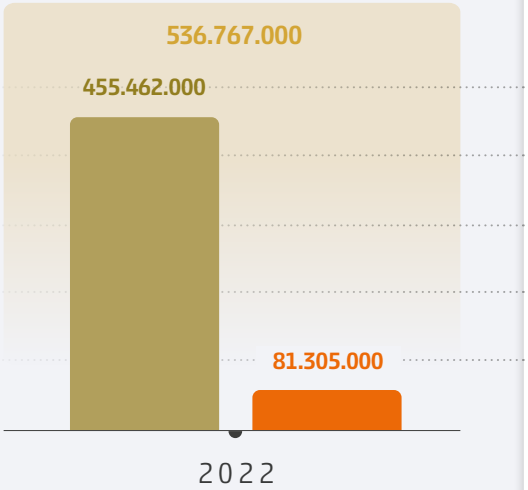
of which:

2022

85%

REDISTRIBUTED TO VARIOUS STAKEHOLDERS

Economic value generated[8] (€)



[8] Data referred to the Consolidated Financial Statements of the Camozzi Group

In particular, **we distributed:**:

To our **suppliers**
305.404.000 €

By purchasing raw materials, components, and services that allowed the Group to carry out various activities during the year.

To our **employees**
127.869.000 €

By paying out wages and contributions in exchange for their work.

To the **community**
1.307.000 €

Ascribable to donations.

To **capital providers**
8.630.000 €

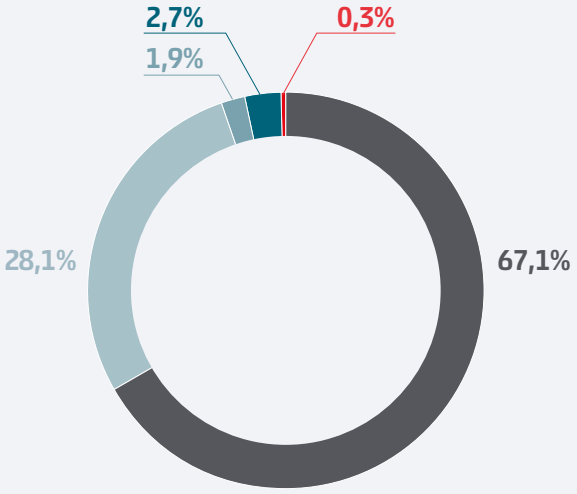
Ascribable to interest expenses and other financial charges.

To **the Government**
12.252.000 €

By paying taxes and other management fees.

Economic value distributed by allocation (%)

- To suppliers
- To employees
- To capital providers
- To the Government
- To the community



The retained economic value within the company amounts to **€ 81.305.000**, which represents 15%.
This is directed towards investments for business continuity and growth, also ensuring financial stability for the various stakeholders with whom the Group engages.

Undertaking a sustainable path

THE GROUP'S RELATIONSHIP with LOCAL COMMUNITIES

The **Brescia region** represents for the Camozzi Group the starting point of a story of **growth and corporate development**. It is the community where the company began its activities and where it still operates significantly today.

For this reason, the Camozzi Group remains committed to its birthplace. This **strong connection** forms the basis of support for local organisations that deal with various social needs, directing their services to different parts of the population.

The Group's major donations are concentrated here, supplemented with support for several international initiatives and local projects sponsored by overseas branches.

Our initiatives

In 2022, the Group supported various organisations and associations, renewing existing relationships and building new ones.
In Brescia, it supported the **Diocesan Museum**, which works for the care and protection of historical and artistic material and arranges meetings, events, and educational activities for cultural purposes, including the **San Benedetto Foundation of Brescia**, committed to cultural and professional training, a commitment that especially caters for young people, and the **Santa Giulia Academy**.
The Group companies have also supported the social and socio-health assistance activities of **Fondazione della Comunità Bresciana** and the activities of **Brescia Soccorso**, volunteers who provide first-aid services to citizens on a daily basis.

Every year, the Group works alongside the **Associazione Amici degli Anziani** in **Lumezzane**, which provides company and comfort to the elderly by organising recreational activities, trips, or simple engagement opportunities and encounters aiming to prevent loneliness for a group of people at risk.

A large part of the donations has been allocated to the Brescia area, the Group's hometown

Acts of support were also carried out for the benefit of parishes and communities, local cultural associations, the **University of Brescia**, **Croce Bianca in Lumezzane**, **Comunità San Patrignano**, **AIRC**, and **Banco Alimentare**.
Support has also reached the recreational activities of young people through the sponsorship of the Lumezzane Football Club.

The club supports both male and female teams, allowing boys and girls from the area to engage in sports activities and develop relationships and team spirit.

For over 10 years, Camozzi has enthusiastically supported the projects of **Active Sport** and the activities it organises for people who have suffered a disabling physical trauma, so as to foster social inclusion and an active lifestyle through sport. Active Sport was founded and is managed by people with motor disabilities. Today it is a nationwide point of contact in terms of its number of members and sports facilities for Paralympic sports. The now multi-year support for **Icaro Sport Disabili** and the **MITE Project** are projects with similar ambitions.

Outside the Brescia area, the Group has for years supported the organisation Take Care Kids, a non-profit association that operates in Thailand and works to protect mothers and children from violence and abuse and helps them rebuild their future.

In 2022, some donations were also directed to Ukraine, to support people in difficulty and provide them with basic necessities.

Every year, our overseas branches also support charitable initiatives within their communities. The Czech Republic branch donated sports clothing to the association **Emil Open**, which organises sports activities for people with disabilities. Additionally, every year it sponsors several sporting events of the national Floorball team, one of the country's main sports.

"The Group's support is concentrated in the areas of social assistance, sport, culture, and education."

The choice of this sport derives from the fact that it is a sport for everyone, genderless, widely played by young people, and it teaches important values, such as respect for others.

The same branch helps students from the **University of Ostrava** every year in the international Formula Student competition by providing them with certain Camozzi components and offering the expertise of its employees. Following this principle of close engagement with students, the US branch of Camozzi Automation, as part of the broader Camozzi Life Program, has been supporting for years the robotics team at Collin County, the region where their facility is located.

The employees support the students throughout the year, dedicating six to 20 hours a week, assisting them in developing professional skills, designing circuits, 3D modeling, and manufacturing robots during the competition season.

The Polish branch, throughout the year, organised several technical lectures for **Opole University** involving the company's employees.
These activities, canceled in 2021 due to the COVID pandemic, were finally carried out and received a positive reception from the students.

Sustainability Report

Notes on the calculation method

The criteria used in calculating some of the indicators included in this Sustainability Report are shown below. Some data have been restated with respect to the previous document in light of a refinement in the calculation methodologyand in the scope of data collection.

ENERGY CONSUMPTION

The Camozzi Group's energy consumption was calculated in terms of gigajoules (GJ) using the UK DEFRA (Department for Environment, Food & Rural Affairs) "UK Government GHG Conversion Factors for Company Reporting" as a source for the conversion factors for the years 2020, 2021 and 2022.

GHG EMISSIONS

Greenhouse gas emissions were calculated according to the principles of the GHG Protocol. In particular, it should be noted that the only greenhouse gas considered for purchased electricity was carbon dioxide (tCO2), while the tons of carbon dioxide equivalent (tCO2eq) were considered for fuel and combustibles, in line with the sources of emission factors used. Self-produced energy through photovoltaic systems was not included in the calculation of emissions as it was considered to produce zero greenhouse gas emissions.

Scope 1 direct emissions: with regard to the consumption of natural gas, petrol, diesel, LPG and fuel oil, the emission factors listed in the UK Government GHG Conversion Factors for Company Reporting of the UK DEFRA (Department for Environment, Food & Rural Affairs) were used for the years 2020, 2021 and 2022.

Scope 2 indirect emissions: indirect emissions are equal to the consumption of purchased electricity. For the calculation of these emissions, the location-based methodology was used, making use of emission factors for each country in which the Group operates, as shown in the tables published by Terna in the section "International Comparisons", whose source is Enerdata.
The factors were used in their most recently available versions: the 2018 version for the calculation of 2020 emissions and the 2019 version for the calculation of 2021 emissions and this same version for the 2022 emissions of non-European countries.
The emission factors for the year 2022 of European countries refer to the 'Production mix' in the AIB's annual report 'European Residual Mix 2021'. For the calculation of emissions from district heating, the emission

factors listed in the UK Government GHG Conversion Factors for Company Reporting of the UK DEFRA (Department for Environment, Food & Rural Affairs) were used for the years 2020, 2021 and 2022.

INJURY RATES

Injury rates were calculated according to the following methods:

- the injury **frequency rate** was calculated as the ratio between the total number of injuries and the total number of hours worked, multiplied by 1,000,000;
- the injury **severity rate** was calculated as the ratio between the total number of working days lost due to injury and the total number of hours worked, multiplied by 1,000.

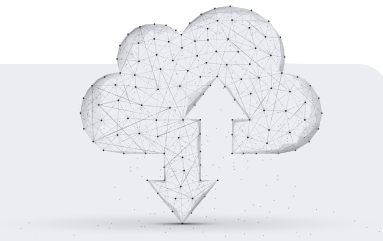
TURNOVER RATE

The turnover rate is determined as the difference between the percentage incidence of new hires and departures during the reference year, compared to the starting workforce (corresponding to the headcount as of 31/12 of the previous year).

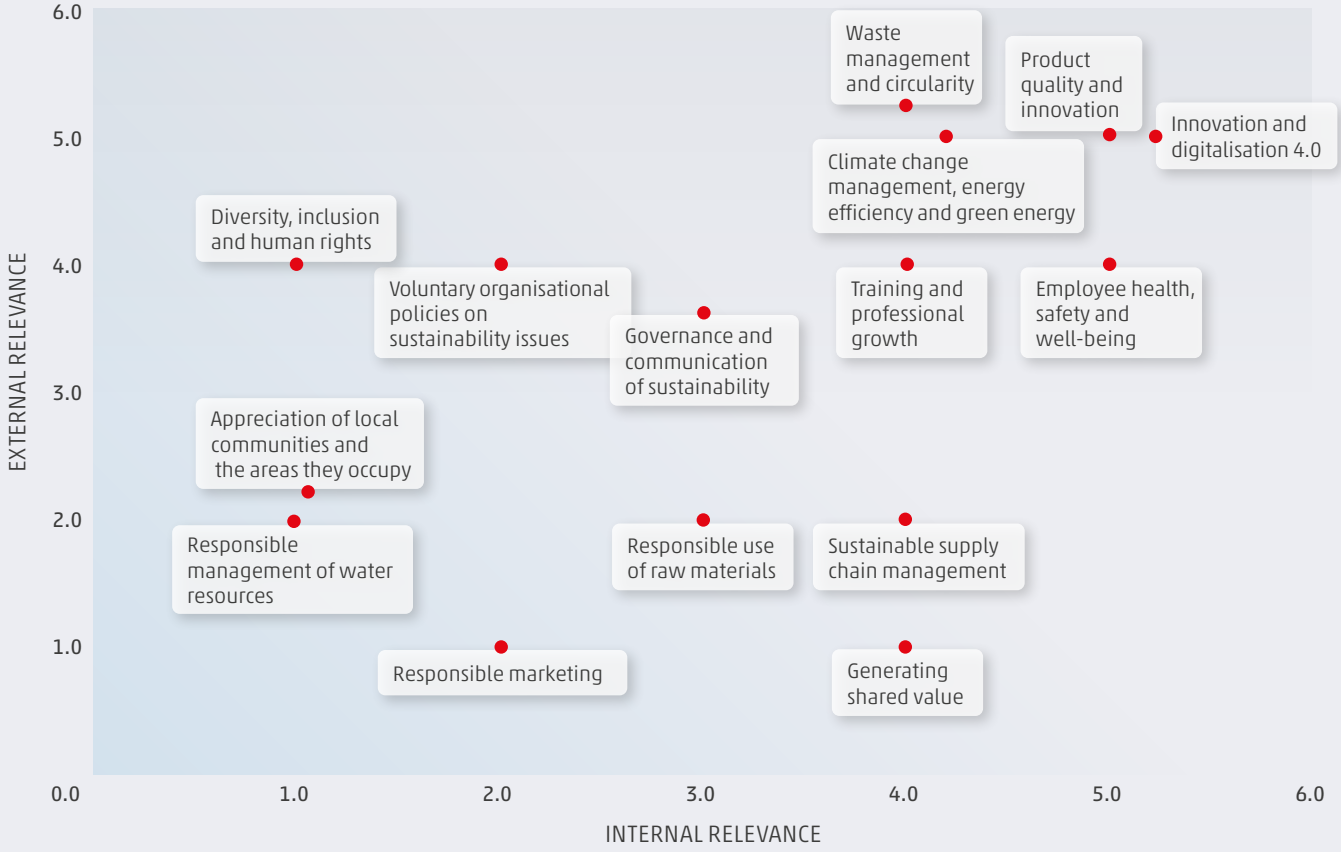
ANNEX

The materiality matrix

The decision to operate on specific strategic lines arose as a result of different study and in-depth investigation initiatives carried out during 2020: the Group looked at sustainability within its business with new eyes and carefully examined the sustainable development goals (SDGs) of the United Nations and analysed the competitive context in which it operates. From this analysis and the direct involvement of international management, the Camozzi Group's **materiality matrix** del Gruppo Camozzi.



The most significant issues for us and for our stakeholders are summarised in the materiality matrix.



In particular, the issues that are considered priorities both for stakeholders and for the Camozzi Group mainly concern the following areas:

Innovation and digitalisation

Development of products and innovations capable of meeting the challenges of an increasingly digitalised and sustainable industry.

Partnerships and collaborations underlying innovation that could be "disruptive" but capable of seizing new business opportunities and meeting emerging social and environmental challenges.

Management of the environmental impacts related to our activities and our solutions.

Reduction of energy consumption and greenhouse gas emissions generated by our activities, also with a view to impacts along the value chain, in particular on customers who adopt our products and solutions.

Integration of the principles of a circular economy in the development and manufacturing of our products, promoting responsible waste management to reduce its total production and favouring recycling, both upstream and downstream of our activities.

People management

Protection of the health and safety of our employees in the workplace through prevention and protection activities aimed at spreading a culture of safety at all corporate levels.

Creation of a working environment where people have the opportunity to enhance their talent and develop new skills in order to grow professionally and personally and contribute to the Group's prosperity.

GRI CONTENT INDEX

GRI STANDARD		ASSOCIATED MATERIAL TOPIC	REFERENCES IN THE REPORT - NOTES
GRI 2: GENERAL INFORMATION			
REPORTING PRACTICES			
2 - 1	Organisation details		The Camozzi Group
2 - 2	Entities included in the organisation's sustainability reporting		Methodological note
2 - 3	Reporting period, frequency and point of contact		Methodological note
2 - 4	Review of information		Notes on the calculation method
ACTIVITIES AND WORKERS			
2 - 7	Employees		The people in the company
STRATEGY, POLICIES AND PRACTICES			
2 - 28	Membership of associations		The Camozzi Group
GRI 3: MATERIAL TOPICS			
3 - 1	Process of determining material topics		Table of materials
3 - 2	List of material topics		Table of materials
3 - 3	Management of material topics		Table of materials
GRI 200: ECONOMIC PERFORMANCE			
ECONOMIC PERFORMANCE			
201 - 1	Economic value directly generated and distributed		The economic value generated and distributed

GRI STANDARD	ASSOCIATED MATERIAL TOPIC	REFERENCES IN THE REPOR - NOTES
GRI 300: ENVIRONMENTAL PERFORMANCE		
MATERIALS		
301 - 1 Materials used based on weight or volume	Product quality and innovation	Materials purchased
POWER		
302 - 1 Energy consumption within the organisation	Climate change management, energy efficiency and green energy	Energy consumption and emissions
WATER		
303 - 3 Water use		Water resources
EMISSIONS		
305 - 1 Direct greenhouse gas (GHG) emissions (Scope 1)	Climate change management, energy efficiency and green energy	Energy consumption and emissions
305 - 2 Indirect greenhouse gas (GHG) emissions from energy consumption (Scope 2)	Climate change management, energy efficiency and green energy	Energy consumption and emissions
WASTE		
306 - 2 Management of significant impacts related to waste	Waste management and circularity	Waste management
306 - 3 Waste generated	Waste management and circularity	Waste management
306 - 4 Waste not sent to landfill	Waste management and circularity	Waste management
306 - 5 Waste sent to landfill	Waste management and circularity	Waste management

GRI STANDARD	ASSOCIATED MATERIAL TOPIC	REFERENCES IN THE REPORT - NOTES
GRI 400: SOCIAL PERFORMANCE		
OCCUPATION		
401 - 1 Recruitment of new employees and employee turnover		People in the company
401 - 2 Benefits for full-time employees	Employee health, safety and well-being	People in the company
HEALTH AND SAFETY AT WORK		
403 - 2 Hazard identification, risk assessment and accident investigation	Employee health, safety and well-being	Health and safety management
403 - 5 Employee training on health and safety in the workplace	Employee health, safety and well-being	Training
403 - 6 Promotion of workers' health	Employee health, safety and well-being	Health and safety management
403 - 9 Injuries in the workplace	Employee health, safety and well-being	Health and safety management
TRAINING AND EDUCATION		
404 - 1 Average 1 hour of training per year per employee	Training and professional growth	Training
DIVERSITY AND EQUAL OPPORTUNITIES		
405 - 1 Diversity in governance bodies and among employees		People in the company

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