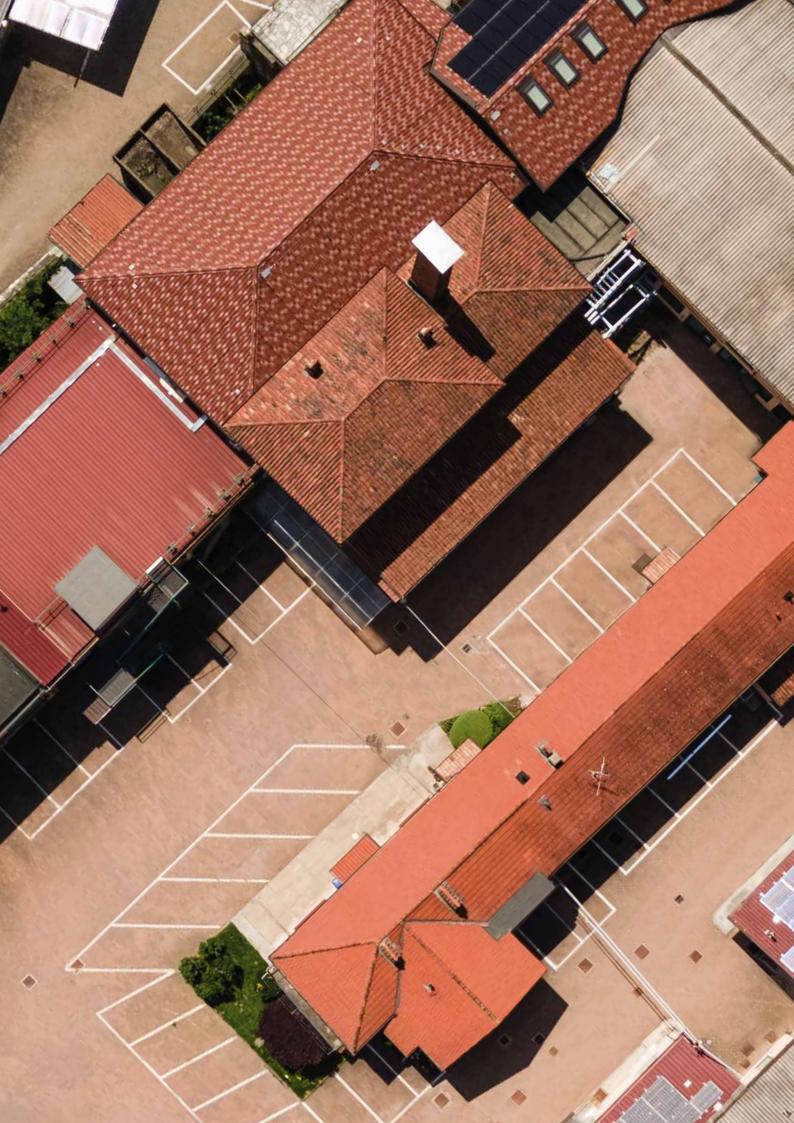




CHAPTER

WHO WE ARE AND WHAT WE DO

OUR HISTORY	.1
OUR VALUES	.2
OUR ACTIVITY	,3





1. WHO WE ARE AND WHAT WE DO

OSAI A.S. S.p.A. is a company which operates internationally in the **design and manufacture of systems for the automation of industrial processes**, in particular in the assembly and testing of high-tech components for the semiconductor, automotive, medical and electronic manufacturing industries.

In over 30 years of activity, we have developed a rich portfolio of technology and experience that has enabled us to establish ourselves in the market as a benchmark for the development of technologies capable of solving complex production problems.

The target markets in which we operate are affected by favourable long-term macro trends in digitisation, technological innovation, and the green and circular economy.



Left:

Top view of the historic Paper Mill in Parella (TO), now the headquarters of the Company

AREA	RESULTS	SDG			
ECONOMICS AND GOVERNANCE	+11% - €31.65 mil Revenues 2022* Average annual revenue growth CAGR 2007-2022				
ECONOMICS AND GOVERNANCE	+13% Average annual employee growth CAGR 2011—2022				
ECONOMICS AND GOVERNANCE	Ethics Organization, Management and Control Model and Code of Ethics	8 Y			
ECONOMICS AND GOVERNANCE	Legality rating ★★★				
ECONOMICS AND GOVERNANCE	Environment Management UNI EN ISO 14001:2015 standard certification system				
ECONOMICS AND GOVERNANCE	Quality Management UNI EN ISO 9001:2015 standard certification system				
ECONOMICS AND GOVERNANCE	Occupational Safety Management UNI EN ISO 45001:2018 standard certification system				
ECONOMICS AND GOVERNANCE					
ECONOMICS AND GOVERNANCE	Research and development 9.2%* of revenues invested in R&D (2022) Innovation & Development Committee to promote research activity in the company and support strategic decisions of the Board of Directors	4===			
ENVIRONMENT	NMENT 100% electricity from renewable sources (from 2019)				
ENVIRONMENT	32% total energy from renewable sources (2022)				
ENVIRONMENT	+ 0.2% self-generated electricity from renewable sources (compared to 2021)	•			

AREA	RESULTS	SDG			
ENVIRONMENT	Zero CO₂ emissions for electricity use (scope 2, market based)				
ENVIRONMENT	<0.6 kg waste produced per €1,000 production value				
ENVIRONMENT	99.8% of waste sent for recycling (2022)				
SOCIAL	212 employees +7.6% over 2021				
SOCIAL	97% employees hired on a permanent basis				
SOCIAL	Continuing Education 23 average hours/year per employee (2022)				
SOCIAL	Zero occupational diseases (2020-2021-2022)				
SOCIAL	Work-life balance agile work; flexitime; hour bank				
SOCIAL	Corporate welfare plan Applied to 11 areas** and expanded by supplementary health/social security insurance and subsidized loans	*****			
SOCIAL	Social and environmental criteria in the selection and evaluation of suppliers				
SOCIAL	Customer satisfaction analysis extended to all customers				
SOCIAL	Sustainability for the territory 4 projects in favour of socio-economic development of the community Indipendente-mente - independent living for young people with disabilities; Mixed Ability Sports - removal of barriers to participation in sport for people with disabilities; Orto 4.0 - valorisation of Villa Girelli with didactic-productive horticulture; Spazio Blu - day centre for the autistic world	1 mm			

^{*} Consolidated data of the Group OSAI A.S.

**According to the PMI Welfare Index for SMEs, Osai, through its welfare policies, covers 11 of the 12 categories under the most comprehensive corporate welfare model.





1.1 OUR HISTORY

1991

Founded by Carlo Ferrero, OSAI A.S. was established as a one-man company from the collaboration of a group of technicians with many years of experience in the electronic and mechanical sectors, offering the industrial market automatic production systems with a specific focus on micro-processing, assembly and testing of small to medium-sized products with high technological content.

1994

The signing of a partnership agreement with one of the world leaders in the field of Laser sources, creates a turning point in the Group's history. The combination of Laser technology with industrial process automation immediately enables rapid production development, with increased investment in innovation and the creation of new standard solutions aimed at industrial Laser markets.

2001

The 'Neo' platform is born, a project aimed at the electronics industry, consisting of customisable systems that provide various solutions to improve the efficiency of processes such as assembly, marking and separation of electronic multiplates (PCBs).

2009

Our German branch is inaugurated - **OSAI A.S. GmbH** - based in Munich.

Left:

Electronics Division Production Area

2009 2013 2015

The German branch is founded - **OSAI A.S. GmbH** - based in Munich

The first **Neo Handler** system for handling and testing components for the growing semiconductor industry is introduced to the market

Chinese branch is opened - OSAI A.S. (Dalian) Co - China - based in Dalian



Founder **Carlo Ferrero**'s passing, sister Mirella takes over the leadership of the Company

The group takes part in the ADIR (Circular Economy) project that is part of the HORIZON 2020 call and coordinated by the prestigious Fraunhofer Institute





2020 2019 2022 On **November 14, 2019**, the 3 November 2020 start We set up Osai Green Tech

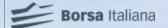
Group received the 2019 OPEN **INNOVATIVE SME** award.

of trading of OSAI A.S. S.p.A ordinary shares and Warrants on AIM Italy of Borsa Italiana

Società Benefit S.r.l., a new company whose mission is to bring industrial automation to the world of recycling.

The presentation press conference is held during the 25th edition of Ecomondo.









2013

We market our solutions for handling (Test Handler) and testing components (MEMS - Micro-Electro-Mechanical Systems) aimed at the semiconductor industry. In the same year, the Chinese branch is opened - **OSAI A.S. (Dalian) Co - China** - based in Dalian to provide our customers with a greater presence for after-sales services in the Far East.

2014

We change the corporate form and OSAI becomes a Joint Stock Company (S.p.A.), setting the stage for the listing path.

2015

Upon the untimely death of our founder, his sister Mirella Ferrero took over the management of the Group. In the same year, the Group opened a new showroom in Zhuhai (China) and a branch office in Dallas in the United States: OSAI A.S. USA Corporation.

2016

In March, we obtained **registration in the special register of innovative SMEs**. We also obtained a B1.2 (Investment Grade) public rating from Cerved Rating Agency S.p.A. and in December we listed our first minibond on the ExtraMOT.

2017

Another important public acknowledgement confirms our financial solidity and reliability: the Italian Competition and Market Authority (AGCM) acknowledges for us the **Legality Rating** * ++, thus certifying compliance with high standards of legality. The score was updated in 2021 with the maximum value of * *. Also in 2017, we listed our second and third minibonds on the ExtraMOT.

2018

Our patent Testing Method and Unit for Mi-

cro-Electro-Mechanical Systems (MEMS), relating to a technology conceived and developed by Carlo Ferrero and CTO Marco Guolo, is registered by the US patent office.

2019

We forge strategic business partnerships in the Far East and North America to expand our presence in these markets; we also register a new patent on the electromagnetic induction process for soldering components, aimed at the world of power semiconductors. During the same year, we received the **OPEN INNOVATIVE SME award**, a prestigious recognition dedicated to innovative SMEs, conceived and organized by Bernoni Grant Thornton in collaboration with CNEL (National Council for Economy and Labour).

2020

Borsa Italiana accepts our application for admission to trading of its ordinary shares and Market Warrants on AIM Italia, a multilateral trading system dedicated to small and medium-sized companies with high growth potential. Our shares close the opening session registering a performance of 25.3% over the Offer price.

2021

We publish our **first Sustainability Report**, covering the year 2020, and deliver to the market the first fully automated system dedicated to a critical step in the production of silicon carbide crystals, a key material for energy management in electric mobility.

2022

We set up **Osai Green Tech Società Benefit S.r.l.**, a new company whose mission is to bring industrial automation to the world of recycling.

Right:

Opening day of stock market trading for Osai A.S. S.p.A., 2020 Presentation of Osai GreenTech at Ecomondo, 2022



Il nostro contributo
per lo sviluppo
dell'economic
circolare e della
sostenibilità.

Adottiamo una
politici curezza
ambir anto



AWARDS AND ACKNOWLEDGEMENTS

In the course of 2022, we won several awards and recognitions that gratify us and are an incentive for us to constantly improve our business vision.

Campioni dell'Export: the ranking, promoted and realised by Statista and II Sole 24 Ore, was created to describe the innovation, determination, sustainability and resilience of Italian companies. We were included in the 46th place in the ranking of the 200 domestic companies with the highest level of exports of Italian products (84.16%).

Legality & Profit Award: this award is promoted by the publisher Economy Group and NSA, Italy's leading licensed credit mediation company, under the patronage of the Senate of the Republic. We were included among the 100 business excellences that obtained the Legality Rating and had the best balance sheets for profitability and solidity in 2020.

Leaders in sustainability: the ranking, promoted and realised by Statista and II Sole 24 Ore, has placed us among the 200 Italian companies that have most distinguished themselves on sustainability issues.

Ecovadis: one of the world's most trusted ratings of corporate sustainability, intelligence and collaborative tools for improving the performance of global supply chains. In 2022, we were recognised as **silver level.**

Women Value Company: award established by the Marisa Bellisario Foundation in collaboration with Intesa Sanpaolo for SMEs that invest in gender equality and corporate welfare. For the second year in a row, we ranked among the top 100 companies, receiving recognition for the enhancement of female talent and gender equality in corporate strategies.







1.2 OUR VALUES

"Let us behave in the interest of the Company as if it were our own interest because OSAI belongs to everyone who works there. We work every day with respect for who we are and what we do with passion and dedication, never neglecting details, quality and the pleasure of what is beautiful as well as functional."

"Let us remember that knowledge, experience and skills are personal and corporate assets, and that greater goals are achieved when working together with others in a constructive and collaborative way."

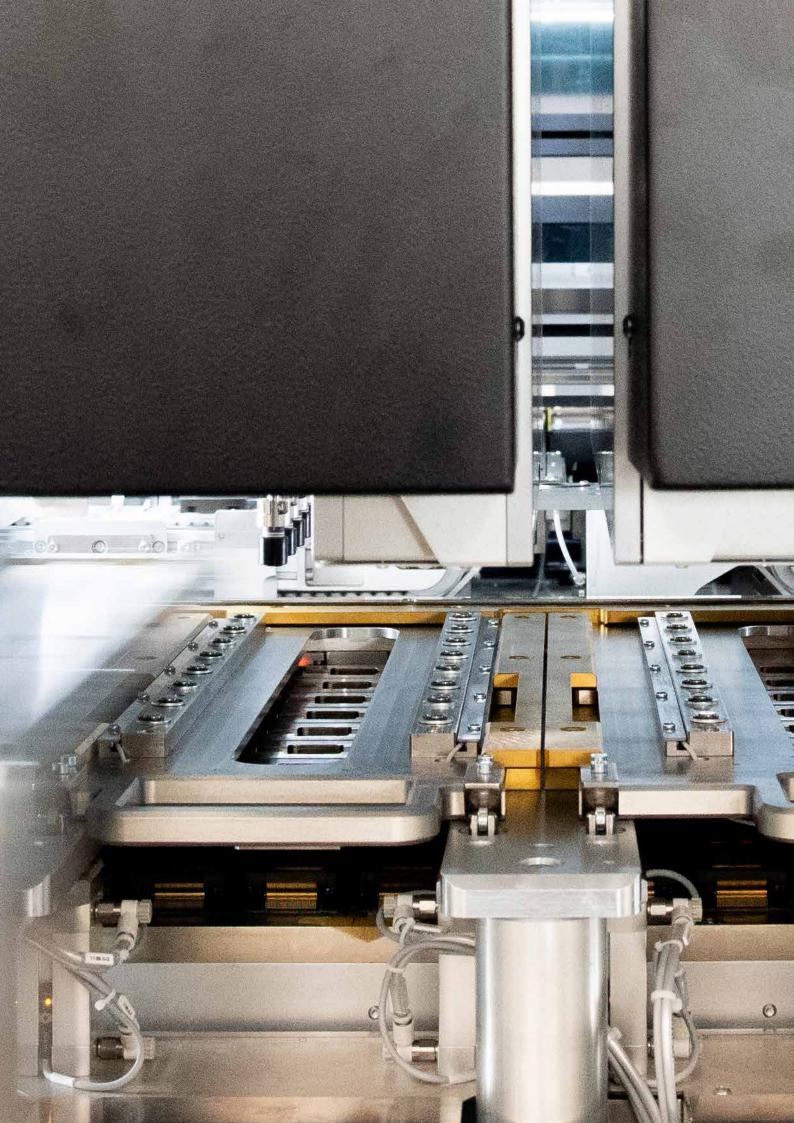
"[...] Quality, passion, dedication and ambition to achieve increasingly challenging goals are our way of doing 'business'"

(taken from the CODE OF ETHICS of OSAI A.S. S.p.A.)

We believe in the importance of communication to people and among people, and in direct and transparent discussion, as innovative ideas and solutions can arise from different positions. We are committed to maintaining a climate of mutual trust because it is on how we do business that our reputation and that of all those who work with us depends.

We always encourage our resources to have a forward-looking vision as today's choices directly influence business continuity.

Left: Osai employee photo, 2019





VISION AND MISSION

We believe in a business model that is always able to enhance the creativity and excellence of people that can combine both tradition and modernity, inspired by the centuries-old tradition of Italian ingenuity, able to interpret difficulties as challenges, and translate ideas into innovative and sustainable technology.

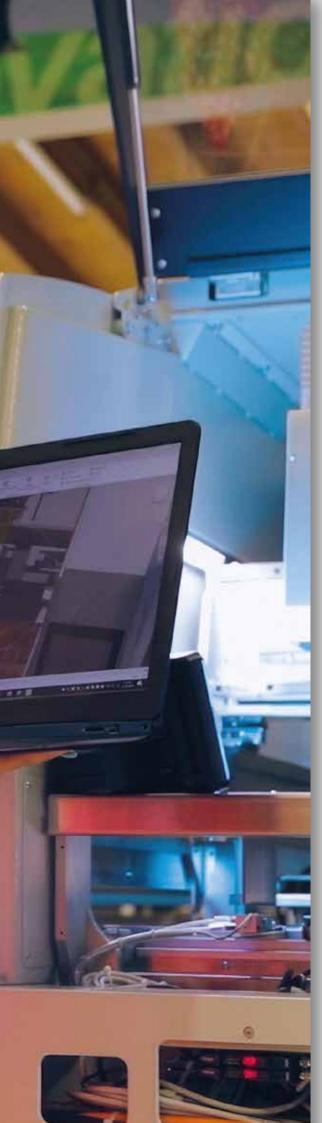
Our mission is to consolidate our position as leaders in the world market of custom-made solutions for the automation of industrial processes, making available to Customers the entire portfolio of technology and experience enriched in more than 30 years of activity.

Our solutions are aimed at the semiconductor, automotive and general electronic component manufacturing industries.

Each system is customized or created ad hoc according to the customers' needs, and is equipped with the latest technologies, such as Laser systems and artificial intelligence systems.

Left: Solution detail Osai Burn-in loader/unloader





PRINCIPLES

Some of the principles underlying our way of doing business are summarised below. More details can be found in later chapters of this report.

CENTRALITY OF THE PERSON

We are committed to valuing the person so that he or she can have the right serenity to express themselves to the fullest.

This is why we devote so much energy to preserving a human and family dimension, attentive to the needs of the individual to generate a sense of belonging and responsibility in our people.

Through work, we want to give everyone the opportunity to realise their personal and professional dreams and thus contribute to building the individual's future.

To make this philosophy a reality in daily life, we are committed to protecting the mental and physical well-being of its people by valuing quality of life and the right balance between work and private life demands. We have implemented specific corporate welfare plans to ensure an adequate, safe and positive work environment with programs that foster both professional and human growth.

INNOVATION AND DEVELOPMENT

Innovation is a strategic and indispensable aspect of our future; ideas and their management are crucial to the long-term success of the company.

This is why we carry out intensive internal awareness and promotion activities to encourage, also through incentive mechanisms and targeted communication campaigns, the proliferation, collection and management of proposals on projects related to strategic themes, and **research** and innovation, product or process improvement and development.

CUSTOMER FOCUS

Relations with customers are marked by the full satisfaction of their needs and the maintenance of the highest quality standards, with the aim of creating a solid and lasting relationship inspired by the values of fairness, honesty, integrity, professionalism, transparency, legality and impartiality.

Support in the design phase, innovation in the proposed solutions, and attention to detail and design are the promises with which we present ourselves to our customers as a *solution provider*.

Not only that: wherever possible, we aspire to exceed customer expectations in order to be perceived not only as a supplier but also as a partner for new business. For this reason we are committed to maintaining an open and proactive attitude through **continuous support and listening to requests and reports.**

PRODUCT SAFETY

For us, product safety is not just a regulatory requirement, but rather it represents a **fundamental value of our way of doing business.**

In order to guarantee the desired safety levels, we dedicate specifically trained, qualified and experienced in-house personnel, as well as the necessary economic resources.

Every product that leaves our factories is CE certified according to the Machinery Directive

or according to the regulations in force in the destination countries with special attention to requirements for electrical systems (UL/CSA), and undergoes a careful process of specific risk assessment.

ENVIRONMENTAL PROTECTION

We want to relate to the Community in which we operate by demonstrating the highest level of responsibility towards the health and safety of local communities, respecting the environment, paying attention to energy resources and preserving natural resources.

This is why we favour the use of renewable energy, invest in improving the efficiency of our plants and in research into environmentally friendly technologies.

SUSTAINABLE AND SUPPORTIVE DEVELOP-MENT

We are committed to identifying and monitoring the impact, real and potential, of our products, processes and activities on the social fabric and the local community in particular, presenting ourselves as one of the entities that brings wealth and value to the area.

We believe that promoting sustainable development and a socially-conscious business idea guarantees both greater global competitiveness and the long-term stability of its business.



















1.3 OUR ACTIVITY

WORLD PRESENCE



Our headquarters is in Italy and can count on three subsidiaries in China, the U.S. and Germany, as well as an extensive global network of distributors and several manufacturing and commercial partnerships with leading Italian and international operators that enable widespread coverage of the main geographical areas of interest.

The company's headquarters are located in Parella, in the province of Turin, where most of the production and coordination of all commercial activity takes place. Production activities









will also take place, from 2022, in the Colleretto Giacosa plant, less than 2 km from the main site. We are able to support its customers worldwide even in the phases following the delivery and installation of its products, quickly providing on-site or remote technical assistance through after-sales services, ensuring maintenance of the installed fleet or upgrades on the Systems.

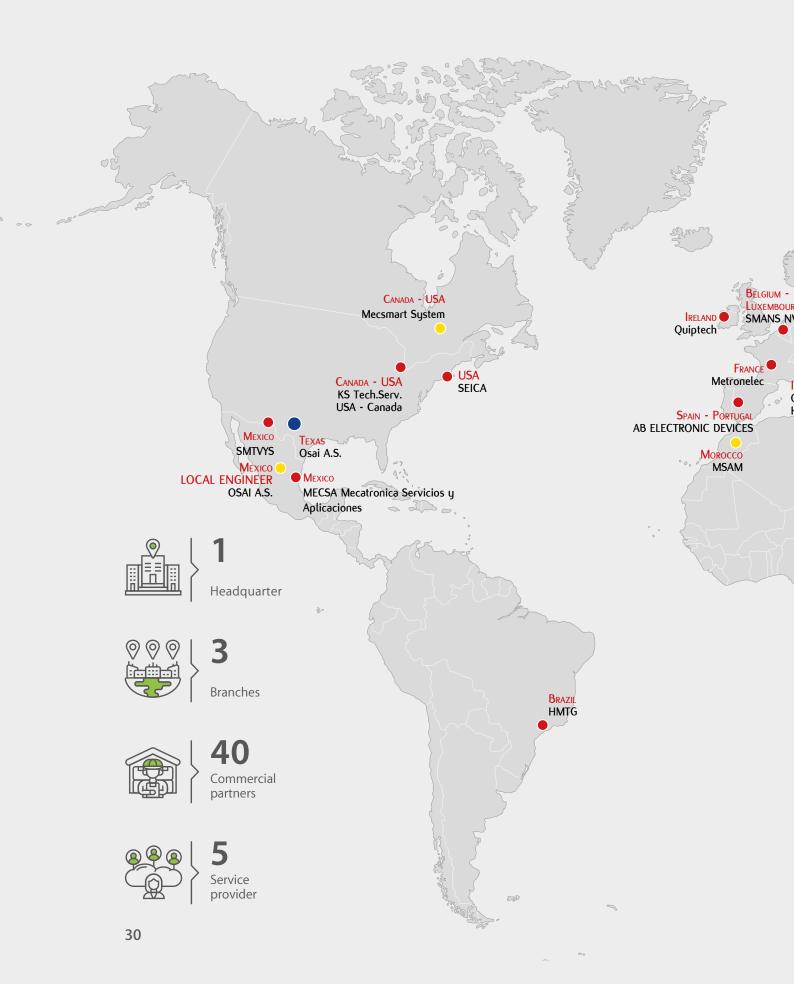


HEADQUARTER

Osai Automation System S.p.A. A) Parella (TO), Italia B) Colleretto Giacosa (TO), Italia

REGISTERED OFFICE

Osai Automation System S.p.A. Torino (TO), Italia





The following table shows the associations of which we are members.



CONFINDUSTRIA CANAVESE

It is the main organisation representing Canavese companies. It promotes the development and progress of the territory, encouraging the exercise of economic activity by local companies and acting as the spokesperson for the needs and proposals of the industrial sector vis-à-vis all the components of society. Our **Chairperson**, **Mirella Ferrero**, is **vice President in office** from 2022 to 2024.



CISAMBIENTE

Association established in 2016 to protect and enhance the value of companies that have always been involved in the urban and special waste management sectors, with the aim of making the principles of the circular economy and their inclusion in the social and production context a reality. Marco Guolo, Chief Technology Officer & Sales Manager in OSAI, is director of the Association.

does not harm freedom, security or human dignity. The Consortium designs and delivers training and employment services that, starting from the clear identification of requirements, realize the expectations and meet the needs of users: public and private principals, learners, families, businesses. Our active support for the initiatives of the association is formalised in our corporate participation, with a capital of 25 shares.

assonime

ASSONIME

Association for Italian Joint Stock Companies since 1910, it has been studying and dealing with problems affecting the interests and development of the Italian economy, specifically: direct and indirect taxation, company law, capital market and listed companies, business activity and competition.

CIAC

CIAC

The Consorzio Interaziendale Canavesano per la Formazione Professionale (CIAC) is a consortium company whose mission is to "form value" for children in compulsory education, employed and unemployed young adults, businesses, the labour market and the territory, contributing to the constant innovation and retraining of skills not in conflict with social utility or in a way that

Right:

Presidential team Confindustria Canavese, 2022

Marco Guolo appointed to the General Council of Confindustria Cisambiente, 2022









BUSINESS MODEL

We are recognised on the market as a **solution provider** capable of designing and manufacturing product lines for customers operating primarily in high technology content manufacturing sectors.

The activities of **co-development** with the customer enables the design and manufacture of advanced components that in terms of performance result in consistent competitive advantages in cost, reliability and flexibility of manufacture.

We oversee the entire value chain and outsources certain low-value-added processes in order to increase **operational flexibility**. This guarantees that we:

- focus on the development stages of technologies and their applications;
- provide support to our customers along all stages of the production process: from customisation of the order to after-sales support and services.

Left: Optical inspection system

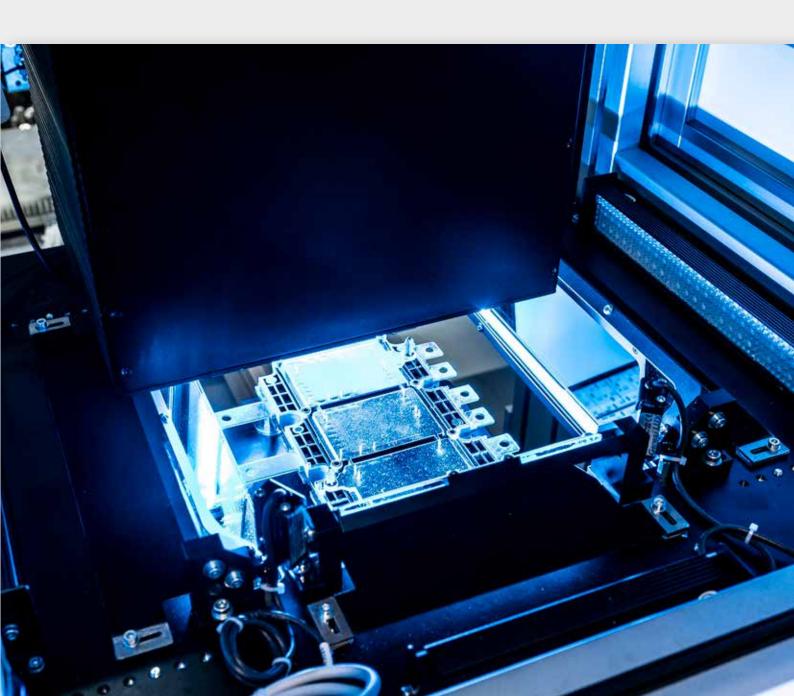
TECHNOLOGY AND SKILLS

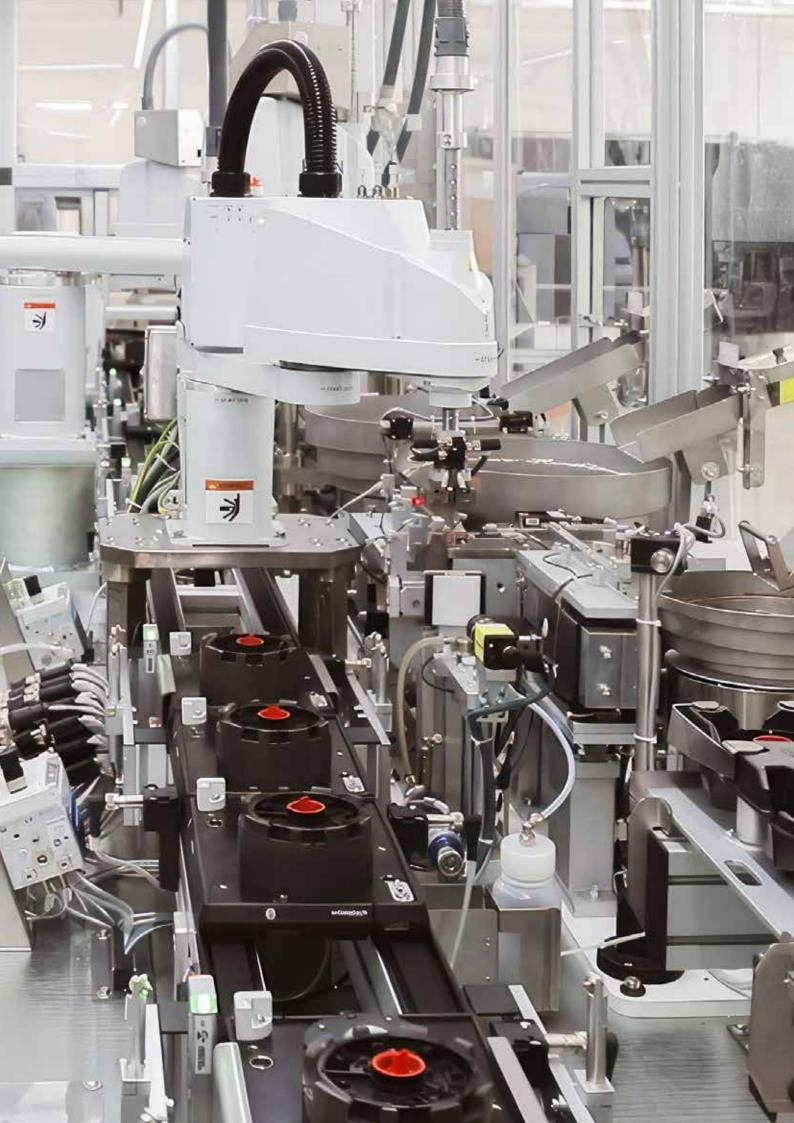
The following are the operational functions performed by automation systems within the production cycle.

TECHNOLOGICAL SKILLS		DESCRIPTION	
(Micro) Mounting / (Micro) Assembly		Techniques that allow for assembling and testing components and systems of varying sizes, including small ones	
LASER MARKING		Techniques used to permanently mark a component in order to ensure traceability in the following production process steps	
Laser Cutting		Set of techniques for precisely cutting different types of materials (metal, plastic, etc.)	
Router / Laser depaneling		Set of techniques that allow for mechanical or Laser separation of even flexible printed circuit board (PCB) panels	
Soldering / Welding selective Laser		Soldering technique used to join different components on a single integrated circuit	
Laser trimming	?	Removal, using Laser technology, of residual materials on integrated circuits/electronic boards and calibration	
Movement and (micro) handling / Handling	}_	Ability to handle small and medium-sized components and systems on production lines quickly and highly accurately, even with automatic vertical feeding systems	
Stimulation and testing (also burn-in)		Techniques by which different stimuli (signal, power, temperature, pressure etc.) are transferred to condition a given sensor, mainly for the purpose of determining its reactions in a testing environment, including developing complex lines for testing "power modules"	

WHO WE ARE AND WHAT WE DO

TECHNOLOGICAL SKILLS	DESCRIPTION	
Software	Software interface design in the individual machine or complete line	
Machine Vision Systems (O.I.S.) Osai Inspection System)	Custom-made development of optical-mechanical assemblies and vision software recipes for the purpose of integrating on OSAI Systems of component verification stations for the electronics, automotive and medical sectors. This is possible through the use of optics, cameras and illuminators specifically chosen and configured to give adequate and stable emphasis to the details of the particular items to be processed. An additional plus is Osai's proprietary software, which ensures that full intervention is possible both in case of reliability problems and new implementations in case of product change.	







AUTOMATION & ROBOTICS

PRODUCT DIVISION

The division has been active since our inception and currently designs solutions that are used particularly in the **advanced automotive sector**.

The focus is on **light automation**, that is, on the automation of small and medium-sized components and systems where we have achieved a **high level of specialisation**. The products produced by this division include, in particular, manual or automatic workbenches and units, tables combining different operations, complete semi-automatic lines, flexible modules and vertical warehouses.

STANDARD AND CUSTOM PRODUCTS







Workbenches Complete assembly lines Rotating and tables units

TARGET CUSTOMERS

Manufacturers of high-tech components for the mobility industry

MAJOR MARKETS



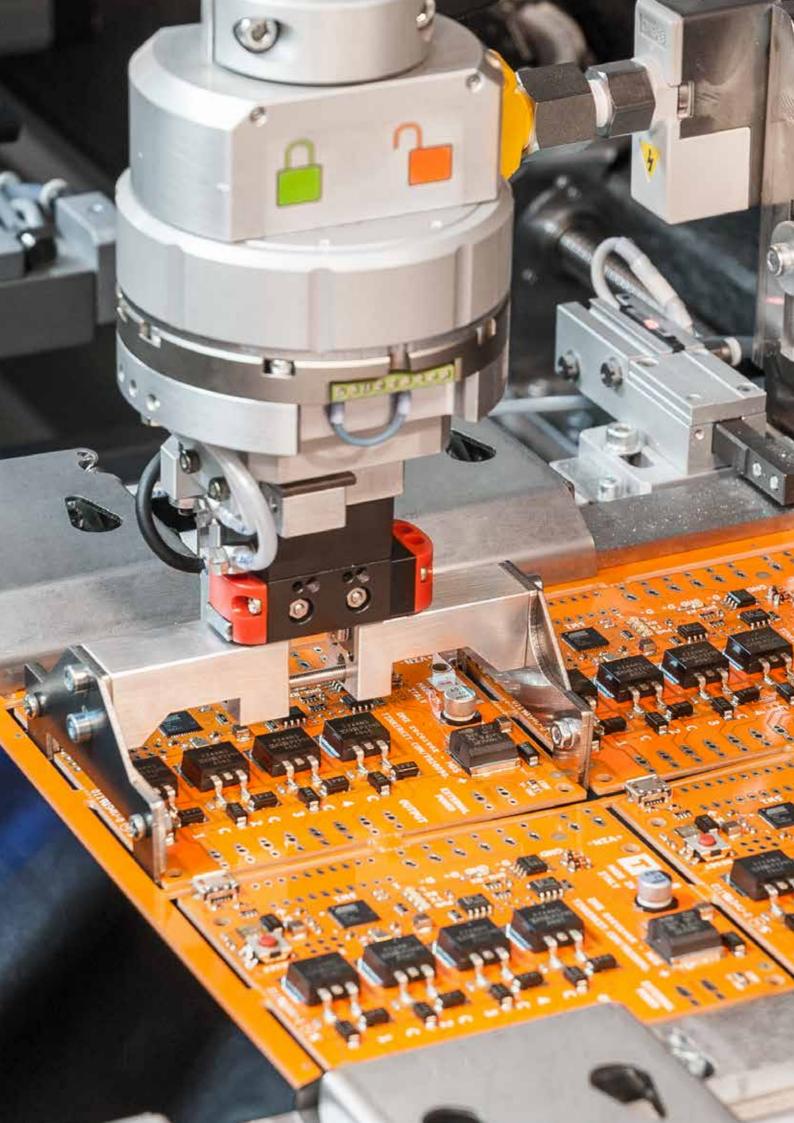




Automotive

Mobility Green

Medical





ELECTRONIC

PRODUCT DIVISION

The division was established in the early 2000s and is dedicated to the neo platform, the first assembly solution for the electronics industry. Neo provides a wide range of systems to improve the efficiency of certain processes such as marking, assembly and separation of electronic boards. The machines are primarily aimed at manufacturers of electronic boards and integrated circuits (stand-alone or integrated on proprietary solutions). The products produced by this division include, in particular, Laser marking machines, complete assembly systems, machines for mechanical and PCB (printed circuit board) panel separation, and Laser separation of PCB panels including flexible PCB panels.

STANDARD AND CUSTOM PRODUCTS



- PCB Laser



Assembly



Laser Depaneling



Router Depaneling

TARGET CUSTOMERS

Manufacturers of electronic boards and integrated circuits

MAJOR MARKETS



Automotive



Medical



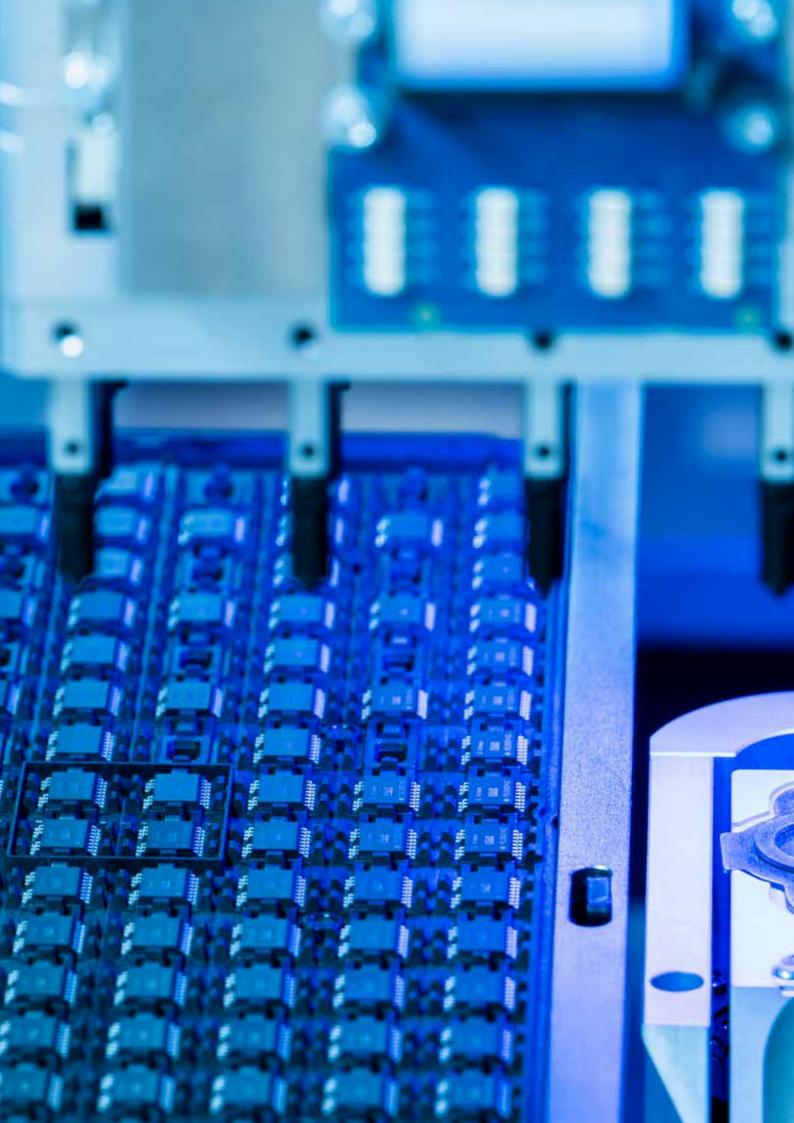
Telecommunications



consuming



Energy Green



Semiconductor

PRODUCT DIVISION

In 2011 we developed **new solutions dedicated to the semiconductor sector**, which is rapidly expanding thanks to the technological progress fostered by large multinationals that manifest the need to find partners in the market that can respond to their needs with flexibility and speed.

In 2013, we delivered the first machine of the test handler family, solutions that move and test MEMS sensors through one or more stimuli, defined according to the specific application for which the sensors are intended. The solutions implemented are mainly aimed at semiconductor and sensor manufacturers.

The division has also developed complex power module test lines, consisting of the integration of standard or customised systems.

The products produced by this division include, in particular, machines for testing and calibration

of MEMS sensors and power devices; machines for final testing and acceptance of power modules; burn-in-test automation systems with loading, unloading, pre-testing and visual inspection functions; systems for automatic assembly of power modules, including Laser marking; and compact conditioning chambers.

STANDARD AND CUSTOM PRODUCTS



MEMS Test Handler



Burn-In



Test handler for power modules



Power devices packaging

TARGET CUSTOMERS

Semiconductor Manufacturers

MAJOR MARKETS



Automotive



Green Mobility



Telecommunications



ΙοΤ





Laser Micro-machining

PRODUCT DIVISION

The division was established in the late 1990s to provide industrial laser and micro-mechanics applications, originally to the automotive sector and then to a variety of fields, in particular the medical sector.

The solutions were developed from experience gained in industrial laser applications especially in **cutting**, welding, drilling, and marking of small metal or plastic components that require extreme precision for processing the final product.

Products in this division include, in particular, laser marking and cutting machines, as well as for welding of different types of components.

STANDARD AND CUSTOM PRODUCTS







Laser Welding



Laser Cutting

TARGET CUSTOMERS

Manufacturers of micromachining, with a need for a high level of precision, even for small components

MAJOR MARKETS



Jewelry and fashion



Medical



AFTER SALES

Our AfterSales Division supports customers in the post-installation phase of Osai Systems with regard to troubleshooting reported faults, carrying out preventive maintenance and training line operators.

Compared to other companies, Osai benefits from the experience gained in the development, construction and commissioning of the products it sells; therefore it is **able to intervene more quickly and effectively.**

The technical assistance service at the customer's premises or remotely is guaranteed by the Service technicians working in the Aftersales department, by the specialised personnel belonging to the mechanical, electrical and software assembly departments operating at the headquarters, or by the intervention of the global network of service providers summarised in the table below.

Compared to the past, the use of new technologies and digitization makes access to the division's services simple and immediate.

The online service platform serves as a single, priority channel for all needs related to after-sales service and ensures a quick and efficient response to customer inquiries.

The Osai Augmented Support Technology is the set of technologies adopted and developed for an effective remote support through augmented reality, which is now possible through the use of:

- Tablets, smartphones, and smart-glasses: a new way of providing customer service and support through the use of devices that enable technical staff to operate autonomously;
- Dedicated software and App: our technicians are able to guide the operator on site, thanks to projections and visual cues transmitted directly by to the devices;
- Osai Augmented Support: field staff will have the ability to activate an audio/video streaming session and share their views with the operator remotely.

REGION	COUNTRY	RESIDENT ENGINEERS*	SERVICE PARTNER**
	China	4	-
APAC	Taiwan	-	1
	Philippines	-	1
	Thailand	1	-
	Malta	-	1
	Morocco	-	1
EMEA	United States	-	1
	Mexico	1	-

^{*} Technicians directly employed by OSAI A.S. S.p.A. and residents of the country indicated

^{**}Companies located in the indicated country with which contracts have been signed for assistance on behalf of OSAI A.S. S.p.A.