



COMPANY PROFILE

July 2026

WHO IS TEORESİ GROUP

Teoresi Group is an international engineering company that supports businesses in developing projects using **cutting-edge technologies**: from **electric and autonomous vehicles** to **AI applied to medical diagnostics**. With strong global expertise in engineering and machine learning, the company focuses on developing the intelligence layer that enables devices to operate autonomously and efficiently. Teoresi Group provides design, development, and technology consulting services, supporting clients from initial analysis through final product realization with a strong focus on innovation in every engineering challenge and specific expertise in artificial intelligence solutions.

TEORESİ: HISTORY AND FUTURE

Teoresi was founded in Turin in 1987 as an IT consulting company. In its early years, it focused on developing software for scientific computing, model-based design, and virtual prototyping. Through collaborations with leading U.S. organizations, Teoresi introduced innovative technologies to Italy and built strong expertise in application services.

In 2002, as a pioneer of **model-based design** in system design, simulation, and validation, the company expanded into the engineering consulting market, with a focus on the **automotive** and telecommunications sectors. In 2008, it developed a strong cross-industry international offering: Teoresi Group was established. Today, Teoresi Group has more than 1,300 employees and a turnover of approximately €91.2 million¹.

Starting in 2023, the Group's growth has also taken place through external expansion driven by strategic acquisitions. HiFuture, specialized in hardware and firmware, and BindingFuture, with solid expertise in web solutions, mobile

¹ updated in December 2024

applications, and cloud technologies. Teoresi initially acquired a majority stake in BindingFuture and, in 2026, Teoresi completed the acquisition of the remaining shares in both companies, gaining full ownership.

The Group also integrated the products of the Milan-based company **IO.T Solutions**, specialized in smart building technologies and solutions designed to improve workplace comfort, optimize building management, and reduce energy consumption. **Teoresi MedTech** was subsequently launched as a result of the Group's investments in the healthtech sector and the 2023 acquisition of the Bologna-based company **MediCon Ingegneria**. **Finally, in 2026, Teoresi DigiTech was established**, an internal division dedicated to the development and integration of digital technologies across the Group's various areas of activity.

With the new acquisitions, Teoresi now has over 1,300 employees across 22 operational offices: 10 in Italy (including Turin, Milan, Bologna, Modena, Rome, and Naples), 6 in the United States (Detroit, Chicago, Pittsburgh, Cleveland, Austin, and Redwood City), 2 in Switzerland (Lugano and Basel), and 4 in Germany (Munich, Berlin, Stuttgart, and Ingolstadt), giving the Group a presence in four countries.

FROM SMART MOBILITY TO LIFE SCIENCES

Teoresi's research and development activities focus on the integration of digital technologies, advanced engineering, and artificial intelligence, with an approach centered on **cross-fertilization** and collaboration with universities and research centers. The Group's cutting-edge technologies are applied across multiple sectors. **The company operates along the entire value chain of future mobility** — from smart mobility to railways and aerial mobility — developing increasingly autonomous, connected, sustainable, and software-defined vehicles, infrastructures, and control systems. At the same time, **Teoresi makes structured investments in the medtech sector**, with solutions that include AI for diagnostic support and telemedicine, medical devices and wearables, robotics for patient assistance, and immersive technologies for medical training. The portfolio is applied across areas ranging from Industry 4.0 to smart building, complemented by **digital technologies** such as IoT, cloud, and data analytics.

R&D PROJECTS AND ACTIVITIES

SMART MOBILITY

FROM AUTONOMOUS DRIVING TO AIR MOBILITY

Teoresi develops advanced solutions for the mobility of the future, **transforming the automobile into a software-defined car**: a vehicle whose functions and

services are primarily managed and updated through software. These systems integrate artificial intelligence, cameras, sensors, and 5G and 6G connectivity, turning vehicles into intelligent platforms capable of understanding driver behavior, preventing drowsiness through biometric monitoring, interacting in real time with the environment, and enabling new digital and proactive safety services. As part of the European **ENVELOPE²** project, which turned Turin into an urban laboratory for autonomous mobility experimentation, **Teoresi contributed to the development of autonomous city car prototypes** equipped with sensors and AI. These vehicles are designed to operate autonomously and, in the future, to communicate with urban infrastructure, sharing data that could be useful for accident reconstruction, obstacle reporting, and traffic management.

The same expertise is also applied to urban air mobility, with advanced simulations for training algorithms for autonomous drones used in cargo transport and public utility services, as well as the development of solutions to increase their autonomy, such as hydrogen fuel cells and mobile charging systems.

SUSTAINABLE VEHICLES AND NEW POWERTRAIN SOLUTIONS

On the path toward more sustainable mobility, Teoresi works on solutions that integrate advanced design, new materials, and alternative powertrain systems, including research activities at the **National Center for Sustainable Mobility (MOST)**. Projects developed include prototypes of **hydrogen-powered commercial vehicles** for urban logistics. These solutions combine advanced sensors, connectivity, and infrastructure-based data exchange to optimize energy consumption, safety, and driving dynamics, integrating technologies such as regenerative suspensions and intelligent energy management systems. At the same time, Teoresi explores fuel cells, mobile charging stations, and battery-swapping models to reduce refueling times and support a more flexible, low-emission energy ecosystem.

THE FUTURE OF RAILWAY

In an increasingly integrated, intelligent, and sustainable railway mobility scenario, Teoresi has developed strong expertise in the development and validation of **TCMS (Train Control and Monitoring System)**, the “brain of the train” responsible for overseeing onboard electronic architectures and ensuring safety, reliability, and operational continuity across high-speed and urban mass transit networks. The evolution toward software-defined architectures, advanced data utilization, and integration with digital platforms enables predictive maintenance, dynamic fleet management, and energy efficiency. **Advanced**

² Below are the project partners: Fondazione LINKS, CTENext, Comune di Torino, TIM, Hewlett Packard Enterprise, Nextworks, Ertico, InCites Consulting, Isfm, Iquadrat, Vicomtech, Tno, Kpn, Siemens, Ude, Lenovo, Commsignia, Iccs, Demokritos, Isi, [OTE Group of Companies](#), [Fogus](#), [eBOS](#).

signaling systems, together with the adoption of the ERTMS standard (European Rail Traffic Management System) represent a cornerstone of the railway sector's transformation. ERTMS is a unified European system for traffic control, management, and safety designed to overcome national fragmentation and ensure interoperability across the European rail network. Integrated with high-efficiency electric traction and hydrogen solutions for non-electrified lines, these systems enable low-emission rail mobility, progressive automation of train operations, and increasingly reliable, efficient, and passenger-centered public transport.

MEDTECH

ARTIFICIAL INTELLIGENCE FOR DIAGNOSTIC SUPPORT

Teoresi is developing and testing an innovation project aimed at transforming the medical imaging sector through the application of artificial intelligence to electrocardiogram analysis (AI ECG), enabling automated detection of specific arrhythmias and supporting clinical diagnosis. This technology has contributed, for example, to the creation of an initial AI prototype capable of assisting healthcare personnel in the automatic recognition of left ventricular hypertrophy. These research areas fall within DSS (Decision Support Systems), which help improve the work of medical staff by reducing human error and providing doctors with guidance on potential issues to investigate more precisely.

TELEMEDICINE AND REMOTE DIAGNOSTICS

Smart Remote Consultation is one of the initiatives in which Teoresi Group is investing in resources and expertise. It is a service that facilitates remote medical consultations, particularly useful for patients with limited mobility or in cases where the healthcare professional operates remotely. The **AI-based Telerehabilitation** system applies artificial intelligence to the digital health sector, enabling patients to perform physical and cognitive rehabilitation exercises remotely via telecommunications, with continuous AI-generated feedback on their performance.

TRAINING OF SURGEONS WITH MR

Within its innovative activities, Teoresi is developing prototypes for interactive and immersive learning in the medical-surgical field, using headsets to train students and doctors in suturing a human limb. This solution is based on immersive **mixed reality (MR)** technologies, which combine the virtual and real worlds: Augmented Reality (AR), Virtual Reality (VR), and Extended Reality (XR). **The virtual limb is generated as a realistic 3D model** from CT (computed tomography) scans, incorporating bone structures and soft tissues to accurately reproduce both the external and internal anatomy.

IOT AND WEARABLE DEVICES

IoT technologies are set to have a significant impact on the healthcare sector, offering tools for prevention, monitoring/assistance, remote surgeries, online medical consultations, and access to medical records. Among the projects Teoresi MedTech is working on is **the development of the first wearable device for personalized management of elderly or multi-pathology patients**. The device operates via a modular, multi-sensor, multiparametric system that collects clinical information and consolidates it on a single IoMT (Internet of Medical Things) platform. One area where Teoresi is experimenting with wearable devices is Parkinson's therapy: these devices detect arm movement and stimulate muscles to counteract or reduce tremors. A high-impact project is **NanoAnalyzer**, developed by **INTA** with support from **Teoresi MedTech**, which handles hardware and software design, prototype development, and integration with a cloud infrastructure for real-time management of diagnostic data. This portable diagnostic device (based on SAW technology and AI algorithms) can detect biomarkers of traumatic brain injury through a simple blood test, offering a faster and less invasive alternative to traditional CT scans. Additionally, in collaboration with **Tre Esse Progettazione Biomedica**, Teoresi MedTech developed VenCoM, a non-invasive device similar to a blood pressure cuff that estimates central venous pressure in hospitals, clinics, or at home. Using two pneumatic cuffs and a proprietary signal analysis system, VenCoM provides results within minutes.

DEVICES FOR EXTRACORPOREAL BLOOD TREATMENT

In the field of extracorporeal blood treatments, Teoresi designs and develops solutions, assemblies, and components to support clients in the creation and technological advancement of various devices, including blood leak detectors, heparin pumps, and peristaltic pump subsystems. An example of a certified product is **Chiara, a device for blood ultrafiltration in extracorporeal circulation**, notable for its high hardware and software complexity due to the multitude of sensors and actuators it incorporates and designed to meet all the specific safety requirements demanded in the medical field.

ROBOTICS, AI, AND VIRTUAL REALITY SUPPORTING AGING

Teoresi Group operates as a technology partner within the **DAISI&RON³** project, an applied research initiative integrating robotics, artificial intelligence, and virtual reality to support active aging and the cognitive monitoring of frail elderly individuals, both at home and in nursing care facilities. Specifically, Teoresi

³ Funded by the MUR under the Piano Nazionale Complementare (PNC), through a cascade call from the University of Milano-Bicocca, and developed within ANTHEM – AdvANced Technology for Human centERed Medicine, the project is coordinated by the Department of Neuroscience Rita Levi Montalcini of the University of Turin, in collaboration with Intravides Srl (spin-off of UniTo) and NICO – Neuroscience Institute Cavalieri Ottolenghi.

developed the AI architecture and software programming for the assistive robot TEO, designed to move autonomously, interact verbally with users, collect data useful for cognitive assessment, and support caregivers and healthcare professionals in daily activities. The DAISI&RON project tests practical solutions for light, personalized care, with the goal of improving the quality of life of elderly people and contributing to the long-term sustainability of the social and healthcare system through human-centered technologies.

COLLABORATIONS WITH UNIVERSITIES

With the aim of **bridging industry and academia**, Teoresi maintains active collaborations with **14 universities** across Italy, including Politecnico di Torino, Politecnico di Milano, University of Bologna, Sapienza University of Rome, University of Naples Federico II, and UniSalento. Between 2023 and 2025, it funded 4 PhD scholarships and research grants, with a total investment of approximately €150,000.

Among recent projects, Teoresi Group collaborated with the **University of Torino as part of the Students' Indigo Challenge**: challenges on technology and innovation topics involving students from UniTo and PoliTo, supported by companies and research centers. Teoresi also supports scientific education in schools through the **sponsorship of the Summer School of Physics organized by UniSalento**: participants attend lectures, exercises, labs, and experimental activities with the goal of preparing for the Physics Championships (organized by AIF on behalf of the Ministry of Education and Merit) and fostering a passion for STEM subjects.

For over a decade, Teoresi Group was a partner of Formula SAE Italy, the automotive competition open to university teams from around the world. In 2026, Teoresi Group sponsored Torino Future Week and the national final of CyberChallenge.IT in Salerno, continuing its investment in education, emerging talent, and innovation.

CORPORATE SOCIAL RESPONSIBILITY

TEORESİ GO!

The Group has developed a comprehensive ESG initiative program within [**Teoresi Go!**](#), aimed at generating a positive, measurable impact aligned with its values. Among the projects launched is the collaboration with **Cartiera**, an organization operating in circular economy, focused on recovering waste materials and creating professional opportunities for vulnerable people, including migrants and at-risk individuals. Another significant initiative is the partnership with **Treedom**, which has led to the planting of 1,621 trees cared for by local farmers.

In addition, through its partnership with **Ogyre** in 2025, Teoresi supported the international "Fishing for Litter" operations, which involved local community fishermen being paid to collect plastic and other waste from the sea, contributing to ocean conservation. This also included activities aimed at preventing litter from entering the environment and promoting the development of infrastructure for waste management and recycling. In 2026, the Group received the "Mattia Serafini" Award for the project "Teoresi x Ogyre. On a Mission to Clear the Ocean", recognized as the best ESG campaign among the digital communication initiatives produced and published by member companies of Unione Industriali Torino.

ETHICAL TECHNOLOGY

For Teoresi, artificial intelligence also serves as a communication tool. The Group engaged employees in a [company-wide contest](#), organized in collaboration with the **AI/CC** creative collective, inviting them to create imaginative **representations of the ideal workplace** in terms of **diversity, inclusion, sustainability, and employee well-being** using text-to-image tools. At the end of the competition, Teoresi rewarded the winners with **free participation in a workshop on the creative use of generative AI**, led by the AI/CC artists.

Since December 2025, Teoresi has organized the **"CTRL + Read" book club** at its Turin headquarters. Novels and essays exploring the relationship between humans, digital technology, and innovation are selected to encourage shared reflections and discussions. The initiative is developed in collaboration with creator and cultural consultant **Stefania Soma**, known online as [Petunia Ollister](#).

TEORESİ GRAND TOUR

In terms of experimentation, **Teoresi Group** is the first engineering company in Italy to have produced a film using a **virtual set** as an internal communication tool, adopting the language of cinema to convey its values through creativity and technological innovation. With **Teoresi Grand Tour**, conceived and written inhouse, and produced in collaboration with Prodea Led Studios in Turin, the Group transformed the traditional corporate event into an immersive narrative experience, involving employees and executives both on set and in the collective viewing of the film in cinemas across Europe and the United States. In 2025, **the film project evolved into a published book** in collaboration with the agency Sixeleven, responsible for creative direction. The book was officially presented at the Circolo dei lettori in Turin during Salone OFF, a satellite event at the **Turin Book Fair**.

BOILERPLATE

Teoresi Group

Teoresi was founded in Turin in 1987 as an IT consulting company. Today, Teoresi Group is an international engineering firm present in four countries (Italy, Germany, the United States, and Switzerland) with a total of 22 operational offices, including Turin, Milan, Modena, Rome, and Naples among the 10 in Italy. The Group supports companies in developing projects using cutting-edge technologies — from autonomous vehicles to AI applied to medical diagnostics. With global expertise in engineering, Teoresi Group offers design, development, and technology consulting, focusing on the innovative aspects of every engineering challenge. It supports clients from analysis to the conception of the final product, from the initial design idea to the prototype, and from the prototype to market. Since 2023, the Group's growth has further accelerated through strategic external acquisitions. HiFuture, specialized in hardware and firmware, and BindingFuture, focused on web solutions, mobile applications, and cloud technologies, joined the Group as part of this expansion strategy. Teoresi initially acquired a majority stake in BindingFuture and, in 2026, acquired the remaining shares and completed its full merger into Teoresi, further strengthening the Group's end-to-end digital capabilities. The Group has also integrated the products of the Milan-based company **IO.T Solutions**, specialized in smart building technologies and solutions aimed at improving workplace comfort, optimizing building management, and reducing energy consumption. It also launched **Teoresi MedTech**, the result of the Group's investments in the healthtech sector and the 2023 acquisition of the Bologna-based company **MediCon Ingegneria**. Finally, in 2026, **Teoresi DigiTech** was established — an internal division dedicated to the development and integration of digital technologies across the Group's various areas of activity.