



Press Release

Healthcare 4.0 from Italy: Teoresi's new MedTech division bring innovation to medical device manufacturers with its competencies

Cutting-edge technologies for wearables, AI, VR and AR

Turin, 13 May 2024 - The Teoresi Group (Teoresi) is bundling its life science activities under the name Teoresi MedTech. The new division of the Turin-based engineering company supports manufacturers of medical technology from the design to the production of innovative devices and digital applications with cutting-edge technology. The aim is to create solutions that meet the needs of medical staff and thus improve patient health.

The new division is the logical result of Teoresi's recent investments in the life science sector. Last year, the company MediCon Ingegneria (MediCon), which is based near Bologna and brings expertise in the research and development of innovative biomedical devices to the Group, was acquired. Under the new name, Teoresi Medtech now operates supplemented by Teoresi's previous life science activities. Teoresi MedTech's entire innovative offering also includes wearables for monitoring elderly and chronically ill patients, AI developments for analyzing electrocardiograms and supporting arrhythmia diagnosis as well as VR and AR-based solutions for the field of tele-rehabilitation.

Leading provider in a leading global market

With Teoresi MedTech, Teoresi is pooling its expertise and strengthening its position in the industry. The new division also recognizes the fact that the life science sector plays a key role in Italy's innovation industry, as Beatrice Borgia, Chief Corporate Development Officer of Teoresi, explains: *"The ever-increasing number of scientific publications and patented technologies shows that Italy is an international leader in the field of medical technology. This is confirmed by the market figures, where the medical devices segment alone accounts for 17.3 billion euros¹. MedTech is a vertical activity in which Teoresi has been investing in R&D projects for years and implementing the company principle of cross-fertilization. The creation of the new division is also linked to a sustainable growth strategy,*

¹ [Centro studi di Confindustria Dispositivi Medici](#)

which includes collaborations with universities and research institutions as well as the recruitment of new talents."

Diverse competencies for holistic development

Guido Comai, Operations & Corporate Development Manager of Teoresi MedTech, adds: *"Teoresi MedTech plays a key role within the Teoresi Group, bringing together multiple competencies for the development of medical devices, from research and design to prototyping and related certifications. Taken together, this enables Teoresi MedTech to take on even the most specific challenges in the life sciences sector, making Teoresi a reference partner for companies in the healthcare sector."*

At a glance: Innovation from Teoresi MedTech

- Remedy is the first *wearable* for personalized monitoring of elderly or polyopathic patients; the device works via a modular multi-sensor and multi-parameter system that collects clinical information and feeds it into a single IoMT platform.
- Another area in which Teoresi is testing the use of *wearable devices* is Parkinson's therapy. The devices recognize the movement of the arm and stimulate the muscles to counteract or reduce the tremor.
- With an algorithm for an AI based ECG, AI is to be utilized for *medical imaging*, specifically the analysis of electrocardiograms. The aim is to automate the detection of certain types of arrhythmias and support diagnosis.
- Another key focus is on *AI-based telerehabilitation*, which enables patients to perform physical and cognitive rehabilitation exercises remotely, with the AI providing continuous feedback on their performance.
- A further development of this technology is *computer vision* for observing frail patients, the elderly or newborn babies in the cradle.
- In terms of *VR and AR*, the focus is on cognitive therapy for Alzheimer's disease: specially developed games inspire patients to recognize objects and colors or to interact in simulated environments through micromobility exercises.
- Chiara is a *device for the ultrafiltration of blood* in the extracorporeal circuit, which is based on a complex hardware and software structure as well as a large number of sensors and actuators.
- Teoresi has also been involved in R&D projects for many years. These include *in-silico models* for simulating organs or bodily functions or for testing drugs.
- *Nanotechnology-based devices* for precision medicine are also being developed, such as the EU-funded Nanocan solution, which uses optical fibers to combine oncological diagnosis and therapy in a single device (theranostics in vivo).

About the Teoresi Group

Teoresi was founded in 1987 in Turin as an IT consulting company. Today, the Teoresi Group is an international engineering company with a total of 27 offices in four countries. In addition to its 15 offices in Italy - including in Turin, Milan, Modena, Rome, Naples - Teoresi has four German locations in Munich, Stuttgart, Berlin and Ingolstadt.

Teoresi helps companies to develop projects with cutting-edge technologies. These range from self-driving cars to nanotechnology for the life sciences sector. Based on its comprehensive technical expertise, the group offers design, development and technology consulting services focusing on the innovative aspects of each project challenge. Teoresi supports customers from the analysis to the final product concept, from the design idea to the prototype, from the prototype to the market launch.

The group has also been growing externally since 2023: In January 2023, the two Italian companies HiFuture (hardware and firmware) and BindingFuture (web, app and cloud applications) were acquired. MediCon Ingegneria, a boutique company based in Bologna that develops complex solutions for the production of medical devices, from design to certification, followed in September 2023. Finally, in October 2023, the products of the Milan-based company IoT Solutions, which specializes in smart building technologies and solutions to improve working comfort, optimize building management and reduce consumption, were integrated into the Group.

Press contact

Sven Hauser | +352 691 229345 | sh@pr-from-luxembourg.com