

Italy's historical heritage has new allies

50
years

Cultural heritage protected thanks to NoViDamp (registered trademark) panels made by Pantecnica and Phononic Vibes



Davide Fatigati, executive chairman of Pantecnica

This is a SME whose cornerstones have always been research and innovation. This company never hesitates to get involved, supporting start-ups and unpublished and promising ideas, in order to transform them into effective and useful solutions for the activity of entire industrial sectors and for the quality of life of communities.

This is the essence of Pantecnica, which since 1981 has specialised in the design, production and supply of systems and components for sealing fluids and isolating and damping vibrations and shocks in every conceivable industrial application, as well as in some civil sectors.

Between 3% and 5% of turnover is the share that Pantecnica invests in Research and Development, believing in new projects and patents, in particular by cooperating with Politecnico di Milano, but also with other research bodies and institutions. The themes of sustainability and the circular economy also play an essential role in the mission

■ ■ ■ THE RESULTS IN FLORENCE

The effectiveness of the solution with NoViDamp anti-vibration panels and underplate vibration damping mats was evaluated by means of the following series of measurements: one comparative measurement point measuring the vibration values in a transit area, but without NoViDamp anti-vibration panels; three measurement points measuring the vibration values upstream and downstream of the NoViDamp anti-vibration panels; for each measurement area at least two measurements were repeated with the passage of heavy vehicles. No significant reductions in vibration between the two measurement points are observed in the transit area without NoViDamp vibration damping panels and underfloor anti-vibration mats. On the contrary, an average of the acquisitions in the presence of the NoViDamp anti-vibration panels and the underfloor anti-vibration mats measured: up to 14 dB of vibrational shear in the Z-direction; up to 10 dB of vibrational shear in the X-direction; a vibrational shear of at least 5 dB in the range 25 Hz - 100 Hz in both accelerometer directions.

and vision of Pantecnica, which has never had any doubts about embracing projects related to environmental protection. "True to our orientation towards research and circular economy, with Phononic Vibes - a Politecnico di Milano start-up responsible for the patent I am going to describe and some other partners - we have developed the innovative NoViDamp (registered trademark) anti-vibration panels suitable for multiple applications, either in infrastructure, civil and industrial environments", says Davide Fatigati, executive chairman of the Rho-based company. These panels were developed as part of the "Simp Tram" project, an innovative system for comfort from vibrations from railway traffic based on periodic metastructures, co-financed by the Lombardy Region, and are innovative because, as Fatigati specifies, "they are easy and quick to install, they are easy to inspect and replace, and they are made of a high and easily separable percentage of recycled and recyclable material".

This solution is highly effective, for example, in protecting cultural assets such as monuments, churches, museums and historical buildings from vibrations caused by vehicular and tram traffic. In a country like Italy, whose artistic heritage is of unparalleled value and vastness, NoViDamp panels have endless applications. In fact, they were recently successfully installed in the square in front of the Basilica of San Marco in Florence. This is a great job, whose remarkable effectiveness has also been appreciated by the Ministry of Culture.

"Technology in Italy has to adapt to various sites under the protection of Cultural Heritage, and in these first applications, our NoViDamp panels have definitely passed the test, bringing benefits to the area of their application", Fatigati emphasises.

This patent also opens up infinite perspectives in Europe and other places around the world. Once again, Pantecnica has demonstrated that it offers highly competitive solutions, not only thanks to its propensity for research and innovation, but also thanks to a structure and a team of remarkable flexibility and unparalleled technical capabilities, whose motto is "on Time, on Quality".

This motto characterises the past and present of Pantecnica, which looks to the future eager to take on new challenges. ■



Ante operam works: excavation for the insertion of NoViDamp anti-vibration panels to protect against vibrations produced by the transit of trams, buses and heavy vehicles in the Basilica of San Marco in Florence



Piazza San Marco (Florence) upon installation completion