TECHNOLOGICAL IMPROVEMENTS AND INNOVATIONS CONTES

ASSESSMENT JURY

CHAIRPERSON

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PRESENTATION OF

smagua 2025

SMAGUA 2025 is a set of first-rate tools for strengthening the competitiveness of companies, presenting all the improvements and innovations that exist in the market, serving as a forum for debate on issues of concern to professionals, bringing together the activities of the various sector associations and, in short, acting as a driving force for development for all companies linked to the water, environment and irrigation industry.

CONTEST PRESENTATION

SMAGUA 2025 is a set of first-rate tools for strengthening the competitiveness of companies, presenting all the improvements and innovations that exist in the market, serving as a forum for debate on issues of concern to professionals, bringing together the activities of the various sector associations and, in short, acting as a driving force for development for all companies linked to the water, environment and irrigation industry.

The aim of the Technological Improvements and Innovations Contest is to recognise the products developed by companies in the sector that invest in R+D+I, selecting the products that stand out for their technological contribution, innovation and results in terms of market needs.

The independent panel of judges is made up of leading professionals from the sector in each edition, and the awarding of the Technological Improvement or Technological Innovation designation is undoubtedly a form of recognition for exemplary work.

The Contest is aimed at exhibitors at SMAGUA and the deadline for submitting nominations was 11:59 p.m. (GMT+2h) on 12 December 2024.

ASSESSMENT JURY MEETING

The meeting begins at 10:00 am with a few words of welcome from Mr Miguel Ángel García Vera, President of the Evaluation Jury, thanking the members for their participation in the jury and their presence at this second meeting. The study of the candidatures will then begin, following the same procedure for each one, which consists in reading the registration form and then studying the documentation required in point 5 of the contest rules.

During the study of the candidacies, the Evaluation Jury will refer to different aspects to be considered for the evaluation of the assessment criteria.

Considering the extensive professional experience, together with the theoretical and practical training of the Evaluation Jury, a series of observations on the finalist candidacies are to be made, and these will be taken into account for the decision taken in the Contest.

CONTEST RESULTS

Once again, in this edition, the high level of the applications submitted, added to the success of the call, is an incentive for the Jury and the organisation of the Contest.

Taking into account the purpose of the Contest, the characteristics of the applications and the documentation provided, the Jury shall decide the winners of the following categories:

TECHNOLOGICAL INNOVATION

ACQUA-SOLFIT, S.L.

Barcelona – Spain

"COMPOSITE KIO MANHOLE COVERS"

The weight of manhole covers has always been a problem for their handling, both due to the need for auxiliary means to open them and the risks to the safety of the workers involved. The manhole cover presented by ACQUA-SOLFIT is an innovative product that largely solves the problems associated with manhole covers by replacing current practice with new materials. The product meets the resistances set by European traffic regulations and provides other improvements such as noise reduction, electrical insulation and others.

AMIBLU PIPES SPAIN

Tarragona – Spain

"AMISCREEN: Solids retention system"

Discharges from unitary systems are the most important sources of pollution in rivers whose basins are equipped with wastewater treatment plants. These discharges carry contaminants and a large amount of dirt that the rainwater has pushed to the collectors. AMISCREEN helps reduce the pollution that reaches our rivers, helps comply with the Public Hydraulic Domain Regulations and prevents the accumulation of dirt on the outside of the spillways by being an element that is installed inside the network. The innovative AMISCREEN product stands out for its practical applicability in new constructions as well as in existing drainage installations, solving the problem in an elegant and efficient way.

DIBITEC - SOCIEDADE DE CONSTRUÇÕES E REPRESENTAÇÕES, LDA

Portugal

"OverWatch® - Direct In-Line Pump System"

The dry well wastewater pumping system, with two pumps in parallel with individual frequency converters and autonomous control algorithms, provides a compact, easy-to-install, energy-efficient solution, which can automatically solve blockages by reversing rotation, is equipped with various impellers for specific conditions, and brings together features not found in other products, thus increasing the reliability and safety of the installation.

HIDROMEJORAS, S.L.

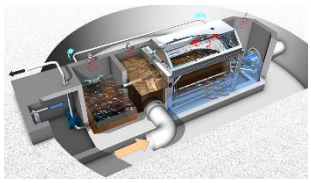
Madrid – Spain

"DIVE-IA®"

The recording of noises pre-identified by sensors as possible water leaks in pressurised pipe networks, and their digital processing for assigning them a sound signature and comparing them by means of AI with other reference sound records allows for automatic and reliable identification and classification of leak alerts, which also frees system operators from routine work and subjectivity. The novel introduction of automatic recognition approaches enhances the capacity of the installed instrumentation and increases the productivity and reliability of management system decisions.

HUBER TECHNOLOGY ESPAÑA S.L.U

Madrid – Spain



"CarbonWin System from HUBER"

Regarding the innovative nature of CarbonWin, the jury has highlighted that it allows the capacity of existing treatment plants to be increased and makes it possible to replace aerobic by anaerobic digestion stabilisation of sludge. The system avoids the construction of large primary decanters in treatment plants, performing its function with a very fine mesh sieve, by means of a deep filtration process. The waste collected by CarbonWin is sent to the digester for treatment. Thanks to CarbonWin, the possibility of using anaerobic stabilisation of sludge in smaller treatment plants reduces the plant's energy consumption by using the biogas generated in the digester.

KAMSTRUP SPAIN, S.L.

Madrid – Spain

"flowIQ 2200 with LoRaWAN®"

This is one of the best meters on the market, manufactured by a specialised company with a high guarantee on the performance of the product. It has been highlighted for being an intelligent ultrasonic meter for the exact measurement of cold water consumption in residential applications. It is interoperable, scalable and safe in its operation. In addition, the screen has 9 digits to record the volume of water as well as a secondary screen that measures the instantaneous flow rate and several decimal configuration options. The screen also shows alarms that warn the user of possible breakages, leaks, manipulation, low battery, etc. All in all, a top-of-the-line product that ensures accurate water measurement.

MEJORAS ENERGÉTICAS, S.A.

Madrid – Spain

"DSU-Control®"

The jury has highlighted this product for being a tool that seeks to provide a solution to the application of the new Regulation of the Public Hydraulic Domain (Royal Decree 665/2023), constituting a great example of the effort on the part of companies to accompany compliance with legal regulations. In this case, a comprehensive solution is offered for monitoring the discharges of unitary systems in rainy weather, by means of the identification and quantification of the relief events and their physical-chemical characterisation. The innovative nature of this product lies in the integration and automation of the set of components and, mainly, in the design of the sampling system for carrying out the analyses.

Metrohm Hispania

Madrid – Spain

"Metrohm Process Analytics 2060 VA"

This product has been highlighted for its practical application and innovative nature. It is a versatile continuous wet chemistry analyser that can perform titrations, standard dynamic addition, differential absorbance colorimetry, and direct measurements (e.g., pH, conductivity, and temperature). It analyses multiple parameters simultaneously and satisfies most online analytical needs. This product's field of application covers very diverse sectors, including wastewater treatment. Its advantages include monitoring and protecting processes 24/7, optimising process efficiency, increasing plant safety and improving the effectiveness and, ultimately, the profitability of its operations.

SENSARA, S.L.

Logroño – Spain

"SN8 ONLINE RESPIROMETER"

The proper functioning of the activated sludge biological reactor is the fundamental principle for most of the treatment plants in Spain and around the world. The treatment plant laboratory analyses the biochemical processes that take place inside the reactor to optimise the treatment process, but this analysis requires a few hours of procedure and action. In contrast, the innovation provided by the SN8 ONLINE RESPIROMETER allows for a continuous control of the process, which makes it possible to adjust it in real time, especially the aeration of the aerobic zone of the reactor, the most relevant and energetically demanding stage of the treatment plant, maximising the treatment, reducing electrical consumption and optimally managing the denitrification process.

SOLCOV

Barcelona – Spain

"AquaSmart"

This product has been selected because it represents an evolution of the water filling stations for vehicles with the incorporation of modern smart techniques. The hydrant connects to an online platform that controls access to authorised users, monitors consumption, automates billing and even optimises routes by quickly identifying available charging points. This is an innovative solution offered to cleaning companies, water distributors, fleet managers and public entities to contribute to reducing costs, eliminating losses and optimising processes, protecting the environment by promoting efficient use of water and improving management by offering transparency and total control.

TECHNOLOGICAL IMPROVEMENT

CONTAZARA

Zaragoza – Spain

"CZUS ultrasonic meter with pressure sensor and NB-IoT communications technology"

The meter submitted represents a technological improvement over the existing one, resulting in a product that is at the forefront of the latest developments in this type of product by measuring water volumes based on ultrasound with sustainable and durable materials, boasting an autonomy for 12 years of continuous operation. In addition to the above, it incorporates the additional measurement of water pressure and gives rise to a very diversified use, having potential applications in the supply sector for populations and industries as well as irrigation, which represents a significant technological improvement. It also integrates perfectly into smart environments, which gives it very broad possibilities as regards the challenges faced by current efficient and digital water management.

ITM FILTERS

Huesca – Spain

"New Generation of ROTARY-500-L Filters"

Filters are necessary in raw water networks to prevent the entry of solids that can damage other elements such as valves, pumps, etc. The operation of filters has a significant impact on pressure losses in pipes due to the filters that accumulate inside them. In general, filters require disassembly for maintenance, and in certain conditions, water transport must be stopped during the filter cleaning process. In response to this, the technical improvement provided by the ROTARY filter system allows for fast and efficient cleaning with lower water consumption, the sectorised mesh reduces the consumption of energy and raw materials in repairs, and its optimised maintenance allows maintenance to be carried out without disassembling the part.

RADIOPOINT SYSTEMS SL

Madrid – Spain

"vLoc3-RTK-Pro"

The system for detecting the position and layout of underground metal cables and pipes is of interest to the water sector as it uses metal, generally cast iron, pipes in medium and large diameters, and generally plastic ones in smaller diameters. The need for locating cables and pipes, especially those with small diameters, with sufficient accuracy is met by this contribution, which improves the performance of the existing product, adding an internal module that introduces the necessary corrections to increase geolocation accuracy.

VONROLL HYDRO SL

Madrid – Spain

"LEAKAPP"

The in-situ management of leak detection requires listening, analysing, measuring, recording, planning, repairing and verifying all these different processes on site and in the office. The use of software for the development of such activities, which has traditionally relied on bulky hardware that made on-site tasks difficult, is now improved by introducing an APP that can be run on compact and light mobile devices, which facilitates tasks and integration.

AWARD CEREMONY

The award ceremony for the winners of the Technological Improvements and Innovations Contest will take place at Feria de Zaragoza, located at A-2 Km 311 – 50012 Zaragoza, Spain.

The event will take place during the first day of smagua 2025

The definitive time will be duly communicated to the winners by means of an official invitation to the awards ceremony.

Representatives of Feria de Zaragoza, the entire Evaluation Jury, companies in the sector, civil, institutional and academic authorities and the sector press will participate in the awards ceremony.

NEXT EDITION

Following the success of the call and considering the positive impact that the Technological Improvements and Innovations Contest has had within the trade fair sector, the Contest Organisation and Evaluation Jury have decided to call the next edition for 2027.

All the details of the call will be revealed at the Awards Ceremony for the winners of the Technological Improvement and Innovation categories.

For more information, Feria de Zaragoza makes the website www.smagua.es available to interested parties, where they will find detailed information about the event.