



# Food and Beverages

SOLUTIONS, TECHNOLOGY AND EQUIPMENT FOR WATER SUPPLY, PROCESS LINES  
AND WASTE WATER

**xylem**  
Let's Solve Water

# Let's Solve Water



At Xylem, our main objective is to help our clients solve the most challenging water-related problems. We offer solutions, technology and equipment that allow water to be transported to wherever it is needed, treating it and making it drinkable, or adapting it for various industrial processes, and purifying it to reuse or return to the environment safely.

For over a century, Xylem's well-known global brands have supplied the water market in more than 150 countries.

Committed to providing excellent support to our customers, at Xylem we offer the food and beverage industry a powerful combination of proprietary products from leading brands, extensive experience in various applications, and an important legacy of innovation. We have a complete range of products and services aimed

at turning water related challenges into business advantages, also ensuring compliance with the most demanding regulations and maintaining quality production at all times.

Our leading brands make more efficient use of water possible in the following sectors of activity, in the food and beverage industry: soft drinks, juices, bottled water, alcoholic drinks, fruit, vegetables, dairy and meat products.

## Xylem's installed global base includes more than 300,000 installations



### MARKETS SERVED

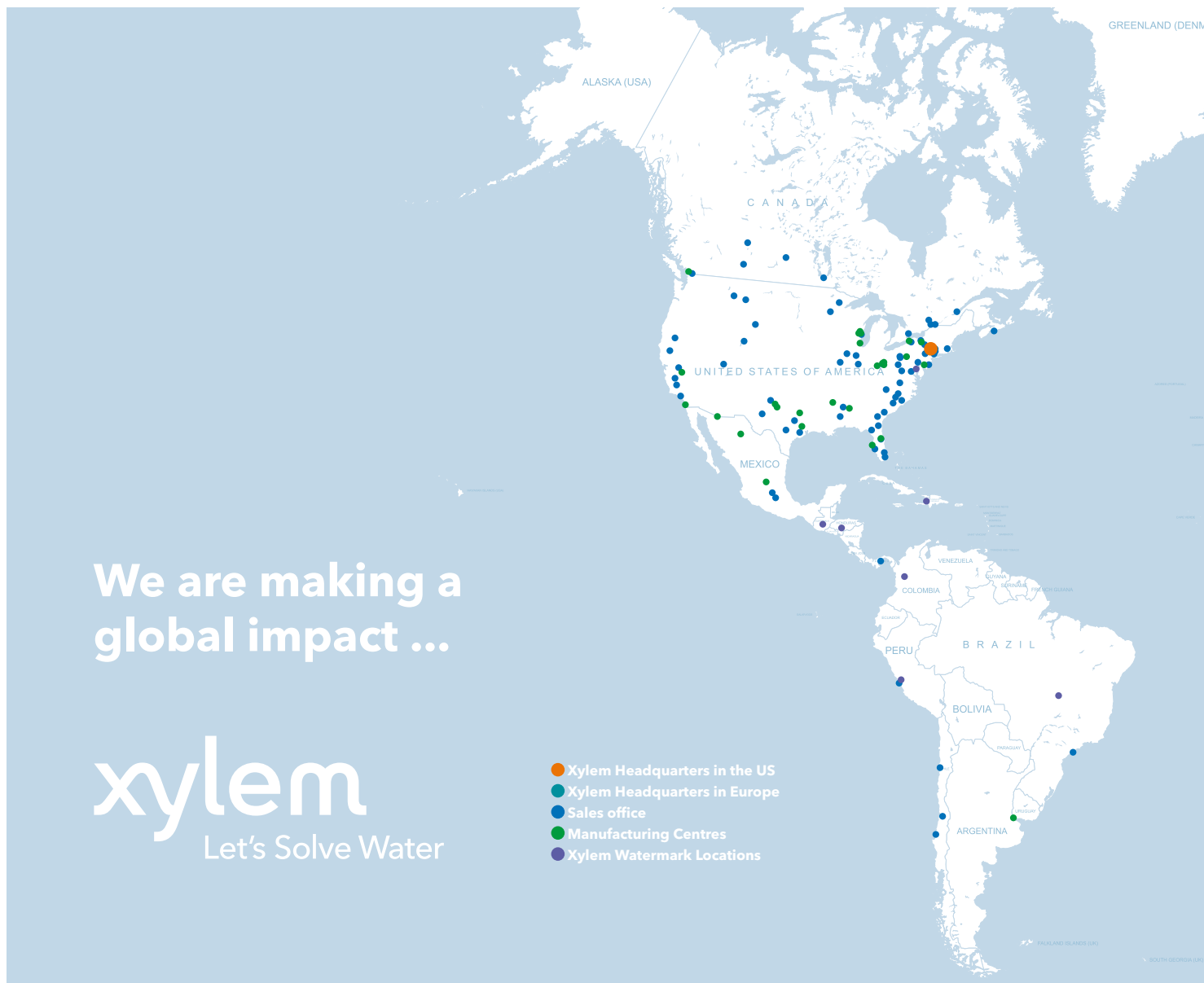


**XYLEM IS A COMPANY THAT PROVIDES HIGH QUALITY SOLUTIONS FOR ITS CUSTOMERS DEALING WITH THE MOST DIFFICULT WATER RELATED PROBLEMS, TAKING ADVANTAGE OF ITS UNIQUE GLOBAL ASSETS AND HIGH-PERFORMING CULTURE**

### Xylem's brands provide the best solutions for water supply

- AADI
- A-C Fire Pump
- Bell & Gossett
- Bellingham + Stanley
- ebro
- Essence of Life
- Leopold
- Flojet
- Flowtronex
- Flygt
- Global Water
- Godwin
- Goulds Water Technology
- Hypack
- Jabsco
- Lowara
- McDonnell & Miller
- mjk
- OI Analytical
- PCI
- Red Jacket Water Products
- Royce Technologies
- Rule
- Sanitaire
- SI Analytics
- Standard Xchange
- SonTek
- Tideland
- Water Equipment Technologies
- Wedeco
- WTW
- YSI

# Xylems Global Presence



## Xylem's Sales offices in Spain:

### -Central Spain

Belfast, 25 - P.I. Las Mercedes,  
28022 **Madrid**.  
Tel: 91 329 78 99 - Fax: 91 329 24 10

### -Catalonia, Aragon, Balearic Islands

Montserrat Roig, 26-28 - Polígon Pedrosa,  
08908 **L'Hospitalet de Llobregat** (Barcelona).  
Tel: 93 232 47 61 - Fax: 93 232 01 68

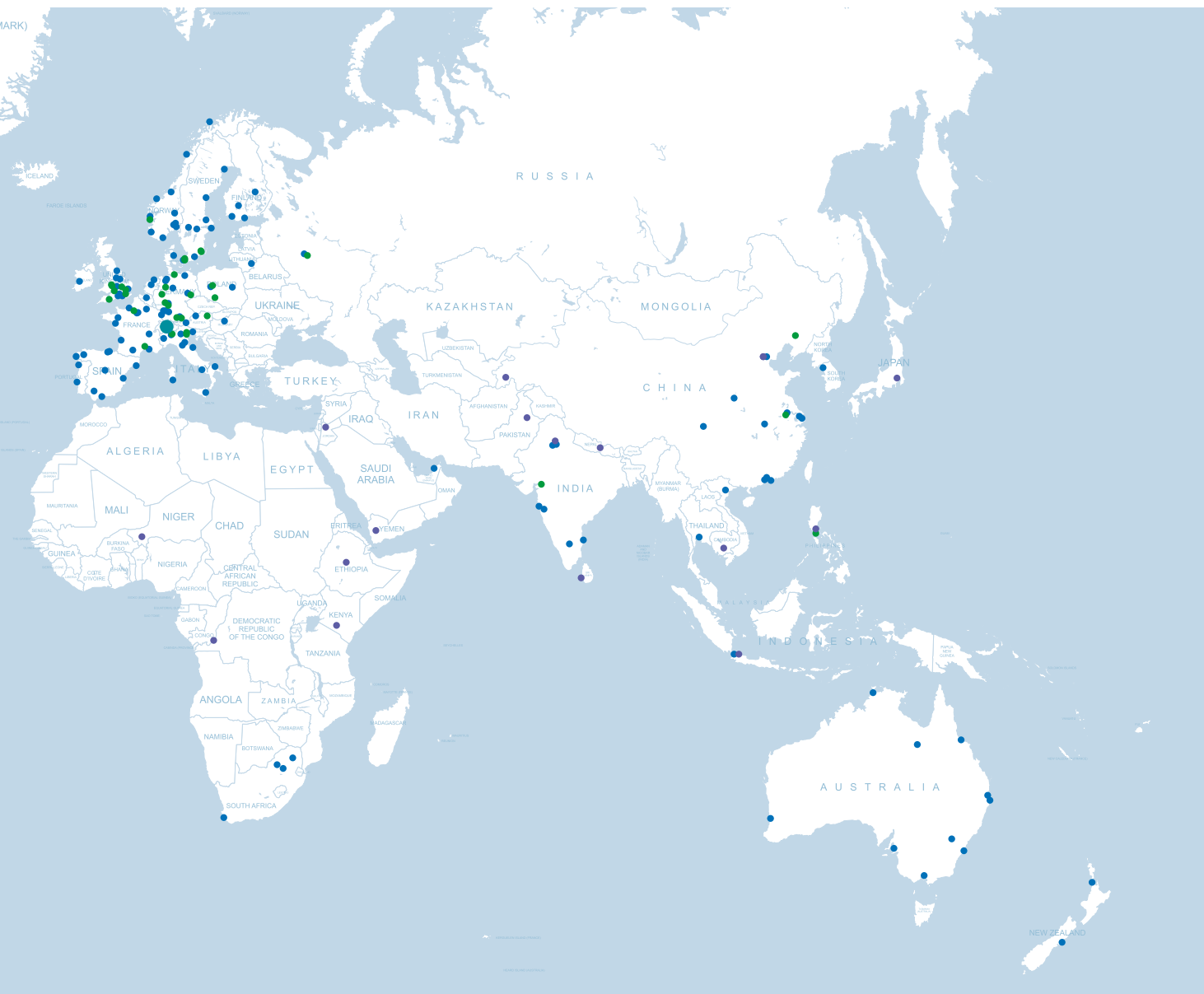
### -Norte-La Rioja

Txorri Herri Etorbidea, 46 - P.I. Berreteaga, Pab. 12-L  
48150 **Sondika** (Bizkaia)  
Tel.: 94 453 01 94 - Fax: 94 453 31 64

### -Valencia

Narciso Monturiol y Estarriol, 17, 2º Piso, Despacho 7  
Edificio AES III Center. Parque Tecnológico  
46980 **Paterna** (Valencia)  
Tel.: 96 152 32 40 - Fax: 96 152 05 14





**-Western Andalusia - Seville**

Encuadernación, s/n, Nave 1 - P.I. La Negrilla  
 41016 **Sevilla**  
 Tel.: 95 467 30 00 - Fax: 95 467 26 55

**-Galicia**

Autovía Vigo-Madrid, 234. Nave 1  
 36318 **Vigo** (Pontevedra)  
 Tel.: 986 48 90 28 - Fax: 986 48 90 33

**-Eastern Andalusia - Malaga**

Orotava, 2, Planta 1, Oficina 6 - P. I. San Luís  
 29006 **Málaga**  
 Tel.: 95 204 08 83 - Fax: 95 204 08 84

**-Asturias**

Peña Mantea, Nave G-7 - P. I. Argame  
 33163 **Morcín**  
 Tel.: 98 573 35 51 - Fax: 98 573 35 52

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[spain@xyleminc.com](mailto:spain@xyleminc.com)

[www.xyleminc.com/food&beverage](http://www.xyleminc.com/food&beverage)

# Food and drink

## Water supply, process lines and waste water

### Welcome

The food and beverage industry is an important driver in the Spanish economy. In the country's industrial sector, it ranks first in turnover and represents 2.7% of GDP.

With increasing difficulties in the supply of natural resources, greater pressure exists related to the efficiency of their use, and increasingly restrictive regulations concerning environmental issues, among other aspects, pose major challenges for the water sector both today and in the immediate future.

The food and beverage industry is a large consumer of water, not only as an ingredient in some manufactured products, but also as an essential element in many operations necessary for the functioning of production plants. To increase company efficiency, sustainability, competitiveness and profitability, it has now become necessary to use more efficient equipment with lower energy consumption, to optimise water usage, and treat waste water from the production process to obtain high-quality, reusable effluent water.

At Xylem we are specialists in water related applications such as pumping, oxidation, dosing, filtration, disinfection, biological treatment, reuse and the measurement of physical and chemical parameters. We have expanded our range of solutions, technology and equipment aimed at the food and beverage industry, with the main objective of helping your company to solve current water related challenges, putting at your disposal innovative and profitable products and services that facilitate the development of your daily operations and improve the efficiency of your facilities. For those unfamiliar with Xylem, they will find that direct access to our employees - expert, customer-oriented technical advisors whose role it is to help you find new and better ways to do your job - is a significant competitive advantage.

Thank you very much for your interest in Xylem and for consulting our catalogue. Please do not hesitate to contact us for any clarifications, or with any questions or queries.



# A complete portfolio of respected brands

Xylem offers the food and beverage industry a powerful combination of proprietary products from leading brands, extensive experience in different applications, and an important legacy of innovation. In order to strengthen our range of solutions, technology and equipment in this sector, collaborations have been established with other world-renowned companies that design and manufacture premium quality products complementary to our own.



**LOWARA** is a specialist in stainless steel pump manufacturing technology and offers nearly 50 years of excellence in the design, development, manufacture and distribution of pumps and pumping systems for water technology applications.



**WEDECO** is a world leader in the design and manufacture of UV equipment and ozone generators for the disinfection and oxidation applications of drinking water, process water and waste water.



**SANITAIRE** supplies solutions for biological wastewater treatment systems, both industrial and municipal. Its offers include fine bubble air diffusers, sequential batch reactors, and advanced process control systems.



**FLYGT** is a world leader in the design and manufacture of submersible pumps, submersible agitators, and related intelligent control systems. These products are mainly oriented to transporting and treating residual water.



**PCI Membranes** offers more than 40 years of experience in supplying tailor-made solutions, based on tangential filtration systems with organic tubular membranes, mainly intended for the treatment of process liquids with high viscosity, pulp and suspended solids.



**LEOPOLD** is a specialist in the design and supply of systems for gravity filtration, clarification, denitrification, sludge removal and backwash water recovery for water and wastewater treatment.



**WTW** has 55 years of experience in the design and manufacture of first class instruments for water quality control. It offers the world's most comprehensive line of instrumentation products for wastewater measurement and control.



**GODWIN** has more than 30 years of experience in the design and manufacture of fully automatic, self-priming pumps, both diesel and electric, for both temporary and permanent water bilge applications.

## COLLABORATIONS



Xylem acts as a distributor in Spain of the following products designed and manufactured by: **GE Water & Process Technologies**: UF Zenon membranes, reverse osmosis spiral membranes, compact reverse osmosis plants and filter cartridges.



Xylem acts as a distributor in Spain of the following products designed and manufactured by: **Amazon Filters Ltd**: cartridge filters, bag filters and high flow filter cartridges.



Xylem acts as a distributor in Spain of the following products designed and manufactured by: **OBL, S.r.l.**: dosing pumps and automatic polyelectrolyte preparation equipment.



Xylem acts as a distributor in Spain of the following products designed and manufactured by: **The Strainrite Companies**: Filter bags.



## Soft drinks, juices and bottled water

The production facilities linked to these activity sectors normally require pump applications for; oxidation, dosing, filtration and disinfection, needed for transport and the necessary water supply treatment for the production process. Depending on the quality of the available water supply and if it is ingredient water, or for other uses, the formulation of the range of treatment can be quite sophisticated.



**"At Xylem, we have the solutions, technology and equipment, suitable for transporting and treating, efficiently and profitably, the necessary water supply for the production process."**



Disinfection of ingredient water is a critical operation in soft drink packaging plants, aimed at preventing the appearance of microbiological contamination in intermediate and finished products. The incorporation of treatment stages with UV equipment is a very widespread solution in this sector because it is a technology that provides a high level of disinfection without altering the taste or smell of the products. Xylem offers **UV equipment** certified by international organisations such as ÖNORM and DVGW, incorporating highly efficient and highly durable ECORAY amalgam lamp technology, ideal for effective disinfection of ingredient water and sugar syrups at low operating costs

At Xylem we have **compact reverse osmosis plants** with the capacity to treat small and medium brackish water flows, allowing us to reduce the conductivity of the water supply and adapt its quality to the specific requirements of the production process. In addition, we offer a very wide range of **reverse osmosis membranes** for brackish water treatment, including high rejection and low energy consumption models specifically designed to obtain ingredient water with a very low level of hardness, alkalinity, sodium and chlorides. We also supply a very complete range of **filter cartridges and filter bags**, together with the corresponding filter bodies, for operations of water filtration, as well as raw materials, intermediate products and finishes.

Xylem's solutions, based on **tangential systems of organic tubular membranes**, are ideal for obtaining clarified fruit juices. They allow the processing of liquids with high viscosity, pulp and solids in suspension because the width of the internal diameter of the membranes prevents blocking. This technology is also suitable for wastewater treatment, with the aim of reusing the permeate and obtaining a concentrate that has commercial value.



## Alcoholic drinks

The beer manufacturing process requires the use of large volumes of water. In addition to being the main component of beer, constituting approximately 95% of the product weight, it is an indispensable element for a large number of operations such as conditioning reusable containers, cleaning equipment and facilities, for microbiological stabilisation, the cooling of the must and the lubrication of the conveyor belts on the packaging lines. Although a significant part of the water consumption is incorporated into the finished product, the breweries generate large volumes of residual water which contains suspended solids and a high organic load. It is a highly biodegradable waste water that is normally purified by combining an anaerobic biological process, with another aerobic one. In order to obtain purified, high quality waste water that can be reused, or reach the most restrictive discharge limits for public waterways, it is normally necessary to add a tertiary stage of treatment to the existing biological processes.



**"Xylem offers various tertiary treatment solutions for waste water such as false bottom gravity filtration systems, ultrafiltration systems with submerged or pressurised hollow fibre membranes, and disinfection systems with UV equipment in a closed reactor or an open channel."**



At Xylem we are specialists in the design and supply of complete solutions for beer filtration, after clarification with pre-layer filters that operate with filtration aids such as diatomaceous earth. The combination of our stainless steel filter bodies with polypropylene filter cartridges incorporating a multi-layer design, allow the retention of yeasts and diatomaceous earth in an effective and consistent way. This guarantees the quality of the beer before it reaches the later stages in the production process.

At Xylem we have a wide range of metering pumps for various applications of dosing additives and filtering aids within the manufacturing process of beer and other alcoholic beverages. We offer piston, mechanical diaphragm and hydraulic diaphragm metering pumps with precoated filters, to reliably and consistently resolve applications, such as dosing sulfur dioxide during the winemaking process, or dosing diatomaceous earth in beer and wine clarifying operations. We also supply complete, custom designed metering skids, incorporating premium quality accessories and materials aiming to offer a product with high operational reliability and durability.



## Fruit and vegetables

The implementation of more efficient equipment with less energy consumption has a significant impact on the environmental sustainability of industrial activity, also allowing it to increase its competitiveness and profitability.

Likewise, optimizing water consumption as well as improving the quality of purified waste water to allow its reuse are, among others, very important challenges for production centers in the food and beverage industry.

Reuse solutions that allow to obtain purified waste water with the level of quality necessary to undertake applications such as agricultural irrigation, minimizing the volume of discharge and at the same time reducing the needs of water supply, are an option to keep in mind. account to have a more responsible and sustainable industrial activity in relation to the environment.



**"Xylem's solutions, technology and equipment allow the transport and treatment of the water supply needed for product washing operations in fruit and vegetable processing plants, with high reliability and low energy consumption"**

**UV equipment** supplied by Xylem guarantees the disinfection of the water supply, without generating harmful by-products during the treatment process. This technology allows the effective inactivation of chlorine-resistant microorganisms, such as *Cryptosporidium Parvum* and *Giardia Lamblia*, present in surface and groundwater. Our **ozone generators** allow the oxidation of organic matter present in the water supply, providing an additional disinfection. **Advanced oxidation systems**, which combine ozone and UV technologies, are necessary when it comes to eliminating micro-contaminants, such as pesticides and herbicides present in the water supply.

Xylem's water transport solutions, using **high-efficiency hydraulic pumps and IE3-class motors**, are ideal for reliable, low-energy pumping operations. Also, the incorporation of our frequency inverters and intelligent control systems allow us to further increase the profitability of pumping operations.

At Xylem we have a very complete range of surface pumps, submersible pumps for drilling wells and pressure groups, which allows us to solve a wide variety of pumping applications related to the production process water supply. We also offer energy efficiency studies in existing pumping facilities.





# Dairy products

Regardless of how milk, yoghurt, cheese or other dairy products are produced, most of the water consumption required for the production process in this sector, is converted to waste water because no water is incorporated into the finished product. In the dairy sector, the waste water generated by production plants typically has a high organic load and nitrogen content. The treatment systems used to purify it are normally made up of an initial roughing and physical-chemical stage, followed by an aerobic biological process with nitrification / denitrification. To get purified waste water with a quality level that allows its reuse or to reach the most restrictive limits of discharge to a public waterway, it is usually necessary to add a tertiary stage of treatment to the existing biological process.



**“Xylem offers different solutions, technology and optimal equipment for wastewater treatment systems based on aerobic biological processes. We have submersible pumps, submersible agitators, fine bubble membrane diffusers, air levitation turbochargers, sequential batch reactors (SBR), membrane bioreactors (MBR), moving biological bed reactors (MBBR) and advanced process control systems .”**

Xylem’s membrane solutions, either as [membrane bioreactors \(MBR\)](#) or as [tertiary filtration systems](#), are especially recommended for obtaining high-quality purified waste water, suitable for reuse in various applications. These are systems that take up little space, are fully automated, require minimal user intervention, and can be easily integrated into a production facility’s waste water treatment system, even as a compact containerised system.



Xylem offers [fine bubble membrane diffusers](#) to optimise aerobic biological wastewater treatment processes. With high oxygen transfer efficiency, low pressure drop and minimal maintenance requirements, this aeration system provides a significant reduction in energy usage and running costs. We also supply highly efficient [air levitation turbochargers](#) with an innovative design, enabling the necessary air supply to operate the aerobic biological processes of waste water treatment.

Xylem’s [advanced process control systems](#) allow real-time optimisation of the performance of aerobic biological wastewater treatment processes. Combining the monitoring capacity of the most advanced sensors with control systems for aeration and the retention time of solids, we manage to reduce energy consumption, while stabilising the treatment process and maintaining quality effluent output



## Meat products

Production facilities related to this sector, such as slaughterhouses, butchering plants and processed meat factories, have significant water consumption, mainly due to the need to maintain very high hygiene and sanitary levels. The water supply is basically used to clean the different slaughtered animal parts, equipment, utensils, facilities and methods of transport used. Likewise, part of the water supply is also required for generating steam and operating the refrigeration circuits. Virtually all of the water used is converted to waste water.

The residual water generated by the meat products sector contains a high organic load, nitrogen and phosphorous. The treatment systems used to purify it normally start with a roughing and physical-chemical stage, followed by a combination of biological processes, one anaerobic and the other aerobic, enabling the removal of nitrogen and phosphorous. To obtain purified, quality waste water that is reusable and meets the most stringent requirements for discharge into a public waterway, it is usually necessary to add a tertiary stage of treatment to the existing combination of biological processes.



**“At Xylem we have the appropriate solutions, technology and equipment to transport and treat the necessary water supply for the development of the production process, efficiently and profitably, as well as the waste water generated in the different manufacturing operations to reuse or discharge in accordance with current regulations ”**



For mixing and generating flow in tanks of any size and shape, intended for biological waste water treatment processes, at Xylem we have a wide range of submersible agitators designed to be highly reliable, efficient, durable and easily installed.

Xylem offers **submersible pumps with N impeller technology**, specifically designed to deliver sustained high efficiency in waste water transport operations, even in the toughest applications. The self-cleaning capacity of the N impeller provides lower energy consumption while minimizing downtime and maintenance costs, caused by blockages.

Three different versions of the N impeller are available to suit the demands of different wastewater pumping applications. The hardened cast iron version is recommended for conventional applications, the cut ring version is suitable for operations that require cutting solids or long fibres, and the chrome hardened steel version is for abrasive applications.



## Xylem offers ...

### Transport

Single-stage axial suction pumps

Multistage pumps

Drilling wells pumps

Pressure groups

Frequency variators and pump controllers

Management of pumping systems

### Treatment

UV equipment

Ozone equipment

False bottoms for gravity filtration

Hollow fibre ultrafiltration membranes

Cartridge filters

Bag filters

Self cleaning filters

Filtering cartridges

Filtering bags

Compact reverse osmosis kits

Reverse osmosis membrane

Dosing pumps

Dosing skids

### Water flow and quality control

Flow meters

PH / ORP sensors

Conductivity sensors

Turbidity measurement

Analysers Free and total chlorine

# Xylem water supply

As a leading global water technology company, Xylem is expert when it comes to water supply. Our solutions, technology and equipment allow us to transport water to where it is needed, treating and adapting it to the different production process requirements within the food and beverage industry.

Our high-efficiency motor pumps provide reliable and cost-effective water transport operations, and our UV equipment ensures that ingredient water is effectively disinfected before being used in the production process. Our ozone equipment pre-oxidises water to facilitate the elimination of iron and manganese in later filtration processes, which can operate with our false bottoms specifically designed for open gravity filtration systems.

Xylem 's range of solutions provides the following benefits for your daily water supply operations:

- Highly efficient use of resources
- Operational reliability
- Minimal energy consumption

The solutions, technology and equipment provided by Xylem offer the consistency, quality and efficiency that your production plant needs for its water supply, to deliver a continuous, safe and profitable production.





### Single-stage axial suction pumps - e-NSC series



With a new high-efficiency hydraulic design offering Minimum Efficiency Index (MEI) values, well above the level required by the 2015 ErP Directive, and equipped with motors Class IE3, the e-NSC series pumps allow us to provide more efficient pumping solutions with the maximum possible energy savings. They cover flow capacities up to 1,800 m<sup>3</sup> / h and discharge heights up to 120 m. The body construction materials available are cast iron, ductile iron, 1.4401 / 1.4408 stainless steel and Duplex 1.4517. The construction materials available for the impeller are cast iron, bronze, 1.4401 / 1.4408 stainless steel and Duplex 1.4517. They can be supplied in the following versions: free shaft pump, hydraulic part coupled to a standard motor using a rigid coupling, and a design on a bed with a hydraulic part coupled to a standard motor using a flexible coupling.

### Multi-stage vertical pumps - e-SV series



A new generation of multistage vertical pumps offering exceptional performance and reliability, for transporting small and medium volumes of water from different sources. Its new hydraulic design, in combination with IE2 class motors, provides pumping solutions with high energy efficiency. They cover flow capacities of up to 160 m<sup>3</sup> / h and discharge heights of up to 330 m. The available construction materials are AISI 304 and AISI 316 stainless steel.

### Multi-stage axial suction pumps - e-HM series



With a sturdy design, state-of-the-art hydraulics and IE3 class motors, the e-HM series pumps provide reliable and highly energy-efficient pumping solutions for the transport of small volumes of water from different sources. They cover flow capacities of up to 29 m<sup>3</sup> / h and discharge heights of up to 160 m. The available construction materials are AISI 304 and AISI 316 stainless steel. For some models the impeller is supplied in Noryl.

### Large size MP and MPA multistage pumps - Vogel series



The Vogel series MP and MPA Large size multistage pumps are specifically designed for water transport applications, where high flow rates and high discharge heights are required. They are ideal for use in refrigeration circuits, boiler feed, condensate handling, water spray systems, reverse osmosis and ultra filtration membrane feed. They cover flow capacities of up to 340 m<sup>3</sup> / h and discharge heights of up to 500 m.

### Variable frequency drives and intelligent control systems - Hydrovar



These are not only variable frequency drives that can be mounted directly on the pump motor, but also intelligent control systems that are precisely adapted to the needs of the operation, simultaneously offering a multitude of advantages for both the user and the pumping system. For powers from 1.5 to 22 kW they are supplied for direct mounting on a motor, and for powers from 30 to 45 kW they are supplied for wall mounting.



### UV equipment - Spektron series



The series is certified by international organizations such as ÖNORM (Austria) and DVGW (Germany), also validated according to the US EPA UV Disinfection Guidance Manual (UVDGM), suitable for disinfection of medium and large flows of ingredient and process water. The Spektron series UV units incorporate highly efficient ECORAY amalgam lamp technology with high durability, incorporating optimised hydraulics by installing the OptiCone flow distribution system inside the reactors. Optionally, they can be supplied with a power regulation system to adjust the energy consumption to specific disinfection requirements, and with an automatic cleaning system for the quartz liners, to improve operation at low UV light transmission values. They admit a maximum flow of 4,150 m<sup>3</sup> / h.



### Ozone Equipment - GSO series

The GSO Series of Ozone Generators are ideal for oxidation and disinfection applications of ingredient and process water. They have a compact design, low installation and maintenance requirements, are capable of continuous operation, and offer very high ozone concentration yields with very low energy consumption. Additionally, they allow monitoring and displaying of the system's operating parameters to achieve safe and reliable operation. The result is maximum ozone production, minimal operating costs, and unmatched reliability. Fed with oxygen they can obtain ozone productions from 20 to 320 g / h, depending on the model.



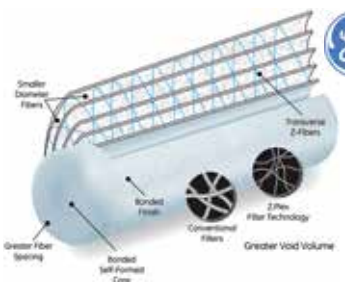
### Cartridge filters - series 61 and 64



Manufactured from AISI 316L stainless steel, with electropolished interior and exterior finish, the 61 and 64 series cartridge filters are available for the installation of 3, 5, 10 and 15 conventional filter cartridges of up to 40 inches in length. Within the 61 series, models can also be supplied with the capacity to install 18, 19 and 22 conventional filter cartridges of up to 40 inches in length. Depending on the model, they accept a maximum operating pressure of 6, 7 or 10 bar and can be supplied with a head closure system using a Rathmann type clamp or folding claws. Series 61 equipment incorporates 180 ° inlet and outlet connections, it is supplied without feet, and has universal seat cups that allow the installation of filter cartridges with DOE, Code 3, and Code 8 ends. Series 64 equipment incorporates 90 ° inlet and outlet connections, it is supplied with legs, and has universal seat cups that allow the installation of filter cartridges with DOE, Code 3, and Code 8 ends. Series 64 cartridge filters can also be supplied with couplings that allow the installation of filtering cartridges with Code 7 ends. The design and manufacture of both series, is in compliance with the European Pressure Equipment Directive PED 97/23 / EC.



### Filter cartridges - series SWRO.Zs



Manufactured from 100% melt blown polypropylene, multi-layered design and incorporating Z.Plex technology, SWRO.Zs series filter cartridges are the ideal solution for water filtration operations for the protection of reverse osmosis membranes. They are available with retention characteristics of 1 and 5 microns nominal and in lengths of 40 and 50 inches. They meet the requirements of NSF / ANSI Standard 61, and the polypropylene used for their manufacture is certified for contact with food products in accordance with US FDA 21CFR 177.1520 and EU Plastics Regulation No. 10/2011.





### Compact reverse osmosis equipment from the PRO EU series

Compact reverse osmosis equipment for brackish water treatment with permeate production capacities from 8 to 112 m<sup>3</sup> / h. They include high pressure pumps, cartridge filters, power supply and control cabinet with Siemens S7- 1200 PLC and TP 277 touch screen, Ethernet communication, the option to display instrumentation information with 4-20 mA output on own instruments or on the touch screen and the option of washing the membranes with 100% permeate using the clean in place (CIP) tank in case of a sudden stop. Standard brackish water membranes can be installed, with low energy consumption and high performance filtration.



### Reverse osmosis membranes - OSMO BEV series

Designed to provide a very high level of total dissolved solids (TDS) removal in brackish water with low energy consumption, OSMO BEV reverse osmosis membranes produce treated water with lower levels of hardness, alkalinity, sodium and chlorides. They are ideal for obtaining ingredient water for the manufacture of carbonated soft drinks and products with or without a very low sodium content. Construction materials are certified to NSF / ANSI Standard 61.



### Dosing skids and dosing pumps

Complete, custom designed, dosing systems specially indicated for use in applications for water supply, such as reverse osmosis treatment or boiler feeding. These are robust devices allowing precise and consistent dosing of chemical products, such as sodium metabisulphite, acids, antifouling, caustic soda, corrosion inhibitors, coagulants and flocculants among others, with flow rates from 50ml / h to 5.5m<sup>3</sup> / h.. They can also be supplied for dosing food additives. They incorporate dosing pumps of the OBL brand (IDEX Group) that can be electromagnetic, piston, mechanical diaphragm or hydraulic diaphragm.



### MagFlux flowmeters

MagFlux bi-directional, electromagnetic flowmeters for conductive liquids are available with carbon steel or stainless steel housing and flanges, with internal coatings of hardened rubber, soft rubber or polytetrafluoroethylene (PTFE). They are manufactured using the latest microprocessor technology to ensure accurate measurements. They are available in a wide range of sizes (DN 15 / 1/2" to DN 1200/48") with EN or ANSI flanges and with a wide variety of installation possibilities (sensor-converter-display).



### Sensolyt 700 and Sensolyt 700 IQ sensors for pH / ORP measurement

A system for continuous pH / ORP measurement with high reliability and safety. These are advanced engineering instruments consisting of a submersible body, with a preamplifier and a combined pH or ORP electrode. Used in conjunction with our range of monitors, these sensors form a robust measurement system incorporating the highest technology in accuracy and immunity to EMC noise. The digital technology incorporated in the Sensolyt 700 IQ sensors allows the calibration values to be stored directly in the sensor itself, so the calibration process can be carried out in the laboratory, before placing the electrode in its field location.

## Xylem offers...

### Treatment

Tubular membranes for ultrafiltration, nano-filtration and reverse osmosis.

Spiral membranes for ultrafiltration, nano-filtration and reverse osmosis.

Cartridge filters

Bag filters

Filtering cartridges

Filtering bags

Dosing pumps

Dosing skids

# Xylem process lines

At Xylem we have solutions, technology and equipment for the treatment of food liquids, which allow us to adapt raw materials, intermediate products and finished products to the increasingly high quality requirements demanded by the food and beverage industry.

Our ultrafiltration tubular membranes provide clarified fruit juices as a pre-feeding step for concentration stages by evaporation. Our cartridge filters allow the removal of diatomaceous earths and yeasts present in beer, after clarification with precoated filters. Our UV equipment is capable of reducing the microbiological contamination present in sugar syrups, and our ozone equipment ensures aseptic drink filling.

Our accumulated experience in multiple applications for the treatment of raw materials, intermediate products and finished products, enables us to offer reliable, efficient solutions completely adapted to the specific problems that can arise when processing food liquids.





### Tubular PCI membranes



These are especially recommended for those clarification applications where the liquid to be processed has a high viscosity and / or contains high concentrations of suspended solids. Additionally, the level of pretreatment required in operations involving this type of membrane is minimal. Up to 22 different types of membranes can be supplied for ultrafiltration, nano-filtration and reverse osmosis applications. Configurations for module B1, A19 and A37 are available. In the first case, 18 individual tubular membranes are installed inside the module, and in the other two cases, packages of 19 and 37 tubular membranes, previously formed with the corresponding heads, are installed respectively inside the module. It is an ideal solution for obtaining clarified fruit juices, before starting the concentration by evaporation stages that come later in the process line.



### Series 62 cartridge filters



Manufactured from AISI 316L stainless steel, the Series 62 Cartridge Filters are available for installation of 3, 5, 10, 12, 15, 18, 19, 22, 24, 30 and 40 Conventional filter cartridges of up to 40 inches in length. Models with a capacity of up to 22 filter cartridges are supplied with an electropolished surface finish, both inside and out, and models with a capacity of 24 to 40 filter cartridges are supplied with a surface finish that has been stripped and passivated inside and blasted with glass micro spheres on the outside. Depending on the model, they accept a maximum operating pressure of 6, 7 or 10 bar, and can be supplied with a head closure system using a Rathmann type clamp or folding claws and incorporate the inlet and outlet connections located at 90 ° or 180 °. All models have an operating temperature range from -10 ° C to 150 ° C. They are supplied with legs and have universal seat cups that allow the installation of filter cartridges with DOE, Code 3 and Code 8. The design and manufacture of the equipment complies with the European Pressure Equipment Directive PED 97/23 / EC and the ATEX Directive 94/9 / EC, level CE Ex II 2 GD c X. The cartridge filters of series 62 can be customised to suit the specific technical requirements of particular applications.



### Series 73 sanitary cartridge filters

Manufactured from AISI 316L stainless steel and incorporating an internal surface finish with a roughness  $R_a \leq 0.8$  microns, the Series 73 sanitary cartridge filters are available for installation of 3, 5, 8 and 12 conventional filter cartridges of up to 30 inches in length. They accept a maximum operating pressure of 10 bar, and they are supplied with a clamp head closure system and incorporate Tri-Clamp inlet and outlet connections located at 180 °. All models have an operating temperature range from -10 ° C to 150 ° C, and they are supplied with legs and have seat cups allowing the installation of filtering cartridges with Code 7 ends. The equipment design and manufacture complies with the European Pressure Equipment Directive PED 97/23 / EC and the ATEX Directive 94/9 / EC, CE level Ex II 2 GD c X.



### Filter cartridges - Zcore series

Manufactured from 100% melt-blown polypropylene, with a multi-layer design, incorporating Z.Plex technology and a separate central core, the ZCore series of filter cartridges are the ideal solution for a multitude of filtering operations aimed at ensuring the quality of raw materials, intermediate products and finished products. They are available with retention characteristics from 0.5 to 200 microns nominal, and in lengths from 10 to 40 inches. They can be sanitized with hot water at 95 ° C for a maximum time of 2 hours, as long as a pressure difference of 1.0 bar is not exceeded. They meet with the requirements of NSF / ANSI Standard 61 and the polypropylene used for their manufacture complies with US FDA 21CFR 177.1520 and EU Plastics Regulation No. 10/2011. They can be supplied with a wide variety of coupling options.



### Filter Cartridges - Absolute.Za series

Absolute.Za series filter cartridges are recommended for those filtration operations where it is critical to ensure the retention of particles of a certain size and where filter cartridges with nominal retention characteristics are not a valid option. They are made of 100% melt-blown polypropylene, and have a multi-layer design, incorporating Z.Plex technology and also an independent central core. They are available with retention characteristics from 0.5 to 30 absolute microns, offering an efficiency of 99.9% (Beta Ratio 1000), and in lengths from 10 to 40 inches. They can be sanitised online with hot water at 95 ° C for a maximum time of 2 hours, as long as a pressure difference of 1.0 bar is not exceeded. They meet with the requirements of NSF / ANSI Standard 61 and the polypropylene used for their manufacture complies with US FDA 21CFR 177.1520 and EU Plastics Regulation No. 10/2011. They can be supplied with a wide variety of coupling options.



### Filter cartridges - Flotrex FN series

The Flotrex FN series filter cartridges have a high filtration surface thanks to their depth filter designed with folds. As a consequence of its graduated density design, based on thermally bonded polypropylene fibers, it offers reliable retention characteristics, and excellent particle retention capacity, allowing operating with very low pressure difference values. They are available with retention characteristics from 0.2 to 30 nominal microns. They can be supplied in lengths from 10 to 40 inches and with a wide variety of coupling types. The polypropylene used for its manufacture complies with the requirements of US FDA 21CFR 177.1520.

**WEDECO**  
a xylem brand

### Compact ozone equipment - OCS series

Designed to meet the requirements of ready-to-install ozone equipment, highly reliable and easy to operate, the OCS series compact ozone equipment allows aseptic packaging of drinks without the use of aggressive chemicals. It complies with DIN 19627, CEEMVG and ZH 1/474. It is individually tested prior to shipment, and all components are mounted on a stainless steel rack and delivered ready for process connection. It has a maximum ozone production capacity of 46/100 g / h.







### Bag filters - series 84 and 85

Manufactured from AISI 316L stainless steel with an electropolished interior and exterior finish, the 84 and 85 series bag filters are available for the installation of 1 conventional size 1 and 2 filter bags. They accept a maximum operating pressure of 10 bar, an operating temperature range from -10 ° C to 150 ° C and can be supplied with a head closure system, or a Rathmann type folding claw. The series 84 units are supported on an inverted base and incorporate the 180 ° input and output connections. The series 85 units have legs and incorporate input and output connections at 90 °. Volume reducing elements are an accessory that can be incorporated into equipment when required. The equipment is designed and manufactured in accordance with the European Pressure Equipment Directive PED 97/23 / EC and the ATEX Directive 94/9 / EC, level CE Ex II 2 GD c X. The series 84 and 85 bag filters can be customised to suit the specific technical requirements of particular applications.



### Bag Filters - series 88

The Series 88 Bag Filters are made of AISI 316L stainless steel and allow the installation of 4 conventional size 1 and 2 filter bags. They incorporate an interior surface finish and an exterior surface blasted with glass micro spheres. They take a maximum operating pressure of 10 bar, an operating temperature range from -10 ° C to 110 ° C and are supplied with a head closure system using Rathmann type folding claws. The series 88 units have legs, include a head lifting arm and incorporate 90 ° inlet and outlet connections. Volume reducing elements are an accessory that can be incorporated into the equipment when required. The equipment is designed and manufactured in accordance with the European Pressure Equipment Directive PED 97/23 / EC and the ATEX Directive 94/9 / EC, level CE Ex II 2 GD c X. The series 88 bag filters can be customised to suit the specific technical requirements of particular applications.

### Classic Felt and Sure-Weld series filter bags



The Classic Felt series filter bags are made of perforated polypropylene or polyester filter, and incorporate a support ring that can be supplied in galvanized steel, stainless steel or polypropylene. They are available with retention characteristics from 0.5 to 200 nominal microns and in sizes 1, 2, 3 and 4. For those applications where it is admissible to operate with filter bags that have a support ring in polypropylene, we offer Sure-Weld series filter bags. They are also made of polypropylene or needle punched polyester and their execution is 100% with thermal welds, also incorporating a support ring specifically designed and shaped to ensure correct installation in the corresponding equipment, offering greater consistency in filtration operations.

### Monofilament Mesh series filter bags



This series of filter bags are made of a mesh of individual nylon filaments and incorporate a support ring supplied in galvanized steel, stainless steel or polypropylene. They are available with retention characteristics from 1 to 800 nominal microns and in sizes 1, 2, 3 and 4. These elements are especially recommended for viscous liquid filtration operations, and for applications where a very high level of purity is required and it is not acceptable to work with filter bags susceptible to any fibre loosening. In some applications, used and clogged Monofilament Mesh series filter bags can be cleaned and recovered for reuse.

## Xylem offers ...

### Transportation

Submersible pumps

Frequency variators and pump controllers

Management of pumping systems

### Treatment

Submersible agitators

Vertical agitators

Mechanical aeration systems

Fine bubble membrane diffusers

Coarse bubble diffusers

Air levitation turbochargers

Advanced process control systems

Sequential discontinuous reactors (SDR)

Membrane Bioreactors (MBR)

Biological moving bed reactors (MBBR)

Dosing pumps

Automatic polyelectrolyte preparation equipment

False bottoms for gravity filtration

Hollow fibre ultrafiltration membranes

UV equipment

Ozone equipment

Advanced oxidation

### Water level and quality control

Transmitters level, hydrostatic and ultrasonic

Dissolved oxygen sensors

Turbidity and suspended solids sensors

Ammonia sensors

# Waste water and water reuse

At Xylem we offer solutions, technology and equipment for the purification of waste water generated in the daily operations of production plants, related to the food and beverage industry.

Our submersible pumps allow residual water to be transported reliably, our fine bubble diaphragm diffusers combined with our air levitation turbochargers, are the ideal solution to aerobic biological processes with high oxygen transfer and high energy efficiency. Our hollow fibre ultrafiltration membrane solutions are the perfect solution for when high quality, purified waste water for reuse is necessary. Our UV disinfection equipment is essential to ensure the microbiological quality of the purified waste water, before its reuse or discharge into a public waterway.

By implementing our solutions, technology and equipment, your waste water treatment systems will operate reliably and with low energy consumption, allowing the effluent discharge quality to be maintained above the established limits of current regulations, while guaranteeing the availability of purified waste water for reuse in various applications.





### Series 3000 submersible pumps

Designed to provide efficient, reliable and trouble-free pumping over long periods of service, the 3000 Series Submersible Pumps are the ideal solution for transporting wastewater from different sources. The submersible design reduces the investment costs associated with the construction of pumping stations, while reducing the operating costs associated with energy consumption and maintenance of the pumps. They cover flow capacities of up to 1,000 l / s and discharge heights up to 100 m. The standard material of construction is cast iron and impellers in hardened chrome steel or stainless steel for some models are available. Part of the 3000 series submersible pump range incorporates N-impeller technology, with its self-cleaning capability offers sustained high efficiency in wastewater transport operations, even in the toughest applications.

### Frequency inverters and SmartRun intelligent control systems for submersible pumps



SmartRun devices, an integral part of the Flygt Exuperior product range, allow the 3000 series submersible pumps to release dirt and unblock jams when necessary, always setting the optimal speed for energy efficient operation and communication with external monitoring equipment, for user peace of mind. Different models are available for powers from 4 to 75 kW. By combining these frequency inverters and smart control systems with 3000 series pumps, featuring N-impeller technology, savings of up to 50% can be achieved in the energy consumption of wastewater pumping operations.

### MultiSmart intelligent control systems for pump stations



MultiSmart devices provide an advanced level of functionality in the control of submersible pumps that previously could only be achieved by using custom Programmable Logic Controllers (PLCs). These intelligent control systems capable of handling up to six submersible pumps, provide hundreds of features that, in addition to maximizing the efficiency of pumping stations, save the user time and money. These features include complex alternation systems, well and pipe cleaning, pump inversion, pump insulation measurement, different operating profiles, automatic incident management and also connection possibilities to SCADA systems. MultiSmart devices allow optimising the energy efficiency of a pumping station, by calculating the actual energy consumption of each one of the submersible pumps in use.

### Compact 4600 series submersible agitators



It is ideal equipment for agitation applications connected with biological processes, equalisation tanks, or sludge tanks. Designed to provide flexibility, versatility and ease of installation, it offers highly efficient agitation solutions, for tanks of any size and shape. The main external parts are made of stainless steel for excellent protection against corrosion. The installation accessories are sufficiently rigid to support the weight and reaction forces, exerted by the agitator throughout its service life. The channeling ring option increases hydraulic efficiency by reducing energy consumption. 8 sizes are available with powers from 0.9 to 25 kW.



### Jet Aerator mechanical aeration systems

These are mechanical aeration systems especially indicated for oxygen transfer and agitation applications, in small or medium-sized wastewater tanks. They can be installed without prior emptying of the tank and are ideal for those situations where it is important to have simple installation and maintenance, as well as operational flexibility. Unlike other aeration systems on the market, they do not require the installation of turbochargers, air distribution pipes, control valves or related equipment. The systems consist of the combination of a 3000 series submersible pump with one or more ejectors.



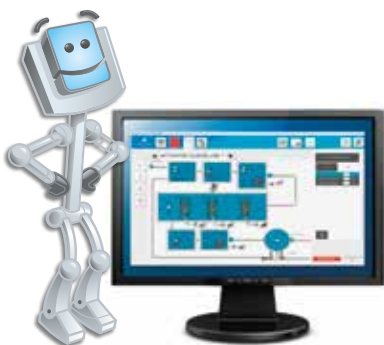
### Silver II Series fine bubble membrane diffusers

These allow reliable oxygen transfer, with high, sustained efficiency and low operating costs in aeration applications in biological wastewater treatment processes, including both intermittent and continuous aeration. The design of the fine bubble membrane diffusers allows air to be dispersed in a uniform pattern of extremely fine bubbles that offer optimal oxygen transfer. Likewise, the low loss of load generated in the system, results in operations with very low energy consumption. They require very little maintenance and the service life normally exceeds 10 years. The fine bubble membrane diffusers are installed on PVC supports, with their corresponding air distribution pipes and can be adapted to tanks of different sizes. They require the installation of turbochargers to supply air to the system.



### Air levitation turbochargers

Our high-efficiency turbochargers enable us, with minimal energy consumption, to supply the air needed to operate aeration systems based on fine bubble membrane diffusers, in biological waste water treatment processes. The core of the system is a permanent magnet synchronous motor capable of very high rotational speeds, without loss or wear due to mechanical friction (which eliminates the need for lubrication) because the shaft is levitated, thanks to the use of aerodynamic type bearings, developed by NASA for the aeronautical industry. The air generated by the rotor turning makes hydrodynamic pressure that produces the levitation of the shaft on the bearings. The service life of the bearing surface in contact with the air curtain is about 28,000 starts / stops. The flow control is carried out through an integrated frequency variator, to which an oxygen probe can also be incorporated directly. This provides a very wide operating range, both in pressure (0.29-1.96 bar) and in flow (720-26,400 m<sup>3</sup> / h). The turbochargers are protected in a cabin with a sound pressure level of 80 dBA according to ISO 3744: 1994.



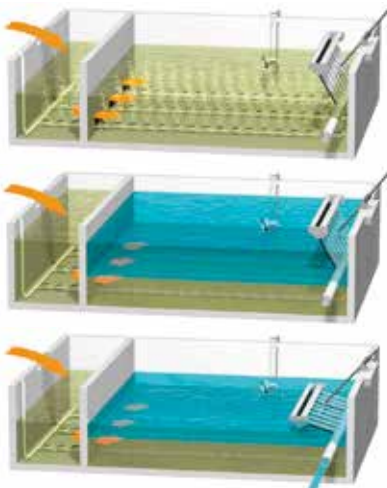
### Advanced OSCAR process control systems

These provide real-time measurement and control of biological processes, aiming to improve the operation of wastewater treatment systems. Combining the monitoring capabilities of the most advanced sensors with control systems for aeration, and solids retention time, the advanced OSCAR process control systems reduce energy consumption, while stabilizing the biological process and maintaining the output fluid quality. Its reporting capabilities provide the tools to take biological process analysis to a higher level, identifying trends, and allowing further optimisation of waste water treatment systems.





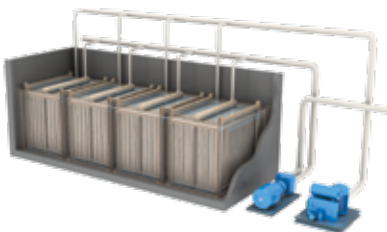
### ICEAS Sequencing Batch Reactors (SBR)



ICEAS SBR do not require primary and secondary settling tanks as in a conventional biological treatment system for activated sludge residual water, thus reducing the complexity of mechanical equipment, piping and control required. They can be designed to improve the removal of nutrients from wastewater. This is achieved in a single tank by alternating periods with and without aeration during the reaction phase, so that aerobic, anoxic and anaerobic conditions are generated sequentially to promote nitrification / denitrification and improve the biological elimination of phosphorus. The ICEAS process improves the performance of conventional SBR treatment systems, providing substantial advantages at the operational level, in maintenance and costs. Its design allows continuous feeding, so a single set of tanks is required, compared to conventional SBRs. Continuous waste water feeding, under the same design conditions allows up to 30% less volume in the tanks to obtain the same operational performance as with conventional SBRs. This has a direct impact on lowering investment costs by reducing excavation work, the use of concrete and required land space. The ICEAS process can handle wastewater flows from 100 to 300,000 m<sup>3</sup> / day.



### Low Energy Advanced Performance (LEAP) Membrane Bioreactors (MBR)



The LEAP MBR consist of a waste water treatment system which incorporates hollow fibre ultrafiltration membranes, immersed in a biological reactor, eliminating the need for the additional clarification stage existing in conventional biological treatment systems of residual water for activated sludge. In the plant, this treatment system occupies between 2 and 5 times less space than a conventional biological treatment system for activated sludge, and provides a higher and more stable quality of already purified waste water. With a nominal pore size of 0.04 microns, the hollow fibre ultrafiltration membranes effectively separate suspended solids and microbiological contamination from the waste water. They consistently obtain an effluent quality equivalent to a tertiary treatment, regardless of changes in the waste water quality at the beginning of the treatment system. In addition, hollow fibre ultrafiltration membranes can operate with levels of solids in the biological reactor of up to 10-15 g / l, which increase the purification capacity. This treatment system is especially recommended for the reuse of waste water, for new facilities with space limitations and for existing facilities where the treatment capacity must be increased. At the core of the system, there are ZeeWeed 500 hollow fibre ultra filtration membranes, with their sturdy design, optimised flux and permeability, and high durability, enabling efficient operation with very low operating costs. Besides that, the LEAP MBR incorporates an innovative aeration system, with very low energy usage, which allows air to accumulate on the surface of the membranes and has a high drag capacity. Compact containerised facilities can be provided, integrating all of the components necessary for the operation and control of the biological process.



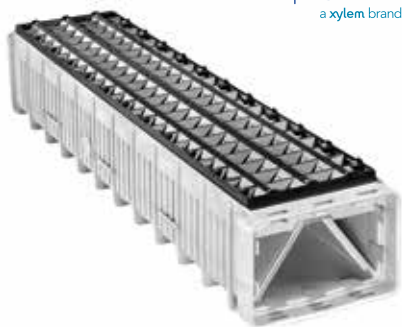
### Automatic polyelectrolyte preparation equipment of the Polisol series



Automatic equipment for the continuous preparation and dosing of diluted dry polymer, intended for conditioning sludge from biological wastewater treatment processes. They have a forced dissolution mechanism that works through a funnel with an integrated venturi system. It measures from 450 to 10,000 l / h, with two or three compartments, available for the preparation of the diluted polymer formula. We offer a full version in AISI 304 stainless steel and a version with a polypropylene tank and hopper in AISI 304 stainless steel. They have a sturdy design for reliable and long-lasting operation.



### S and SL series false bottoms for gravity filtration



These have false bottoms for gravity filtration of residual water from biological treatment, with sand or activated carbon. Its design incorporates a water recovery channel and holes with less space in between, providing a uniform distribution of air and water during backwash operations, which improves the cleaning of the filtering medium and increases operating periods, resulting in reduced operating costs. They allow filtration speeds of up to 25 m / h and offer a wide range of air speeds in backwash operations (19 m / h to 90 m / h). They are made of HDPE to offer good mechanical characteristics as well as resistance to corrosion, and have a smooth surface to reduce the potential for encrustation. At the installation level, they are more tolerant to unevenness in the tank bottom and their handling is simple due to the low weight of the individual elements. Optionally, an I.M.S. layer can be incorporated in the top part of the false bottom to change the function of the initial layer of gravel support.



### Hollow fibre ultrafiltration membranes



The solutions with ZeeWeed 1000 and ZeeWeed 1500 series hollow fibre ultrafiltration membranes, are ideal for tertiary filtration treatments designed to reliably and consistently obtain high quality, purified waste water, suitable for reuse in various applications. They also guarantee adequate quality for feeding a subsequent treatment with reverse osmosis spiral membranes, to obtain purified waste water with a lower conductivity. The quality of the waste water treated at the outlet of the ultrafiltration membranes remains stable and is not affected by occasional deterioration in the waste water quality from the previous biological treatment. ZeeWeed 1000 membranes are designed for submerged installation and ZeeWeed 1500 membranes are designed for pressurised installation. The latter are perfect for supplying compact systems that have a short delivery time and are quick to install.



### LBX series UV equipment



A series designed to offer a reliable process of disinfection of residual water in a wide range of UV light transmissions. The LBX series UV units incorporate ECORAY lamp technology, highly efficient and highly durable, as well as optimised hydraulics by installing deflector plates, or the OptiCone flow distribution system inside the reactors. Alternatively, they can be supplied with a power regulation system to adjust energy consumption to specific disinfection requirements, and with an automatic cleaning system for quartz liners, to improve performance at low UV light transmission values. They admit a maximum flow of 2,121 m<sup>3</sup> / h.

### TAK Smart series UV equipment



An open channel UV equipment series ideal for disinfecting small and medium volumes of waste water in a wide range of UV light transmissions. It has been extensively tested according to the most recent IUVA protocol for disinfecting wastewater from biological treatment and meet the most stringent validation requirements specified in the US EPA UVDGM 2006. The TAK Smart series UV equipment incorporates ECORAY lamp technology to offer highly reliable operation, minimizing energy consumption and maximizing lamp life. 10 sizes are offered, which can be customised with the arrangement of one or two banks, with an automatic cleaning system for quartz sleeves, in the design of the electrical panel and with sophisticated characteristics of monitoring and control of UV light. For flow rates up to 250 m<sup>3</sup> / h, there is the possibility of providing the prefabricated channels in stainless steel or high-density polyethylene (HDPE) prepared for connection to the pipeline. They admit a maximum flow of 1,030 m<sup>3</sup> / h.



### LTU hydrostatic level transmitters

Transmitters designed for immersion in open tanks and wet wells that can withstand harsh operating conditions, high concentrations of biofouling and suspended solids. They have a robust design with a reinforced plastic or stainless steel casing, polyurethane insulated and steel reinforced cables to achieve very high tensile strength and membranes made of ceramic or stainless steel. The outputs can be 4-20 mA analogue, voltage or Modbus RTU digital. The available measurement range is from 30 cm to 300 m with 0.1% / 0.25% measurement accuracy and is derived from long-term precision. Any length of cable can be supplied.



### FDO 700 IQ sensors for dissolved oxygen measurement

Digital optical sensors for on-line measurement of dissolved oxygen concentration in biological waste water treatment processes. To ensure efficient operation of waste water treatment systems, it is absolutely necessary to have precise values of dissolved oxygen in real time, allowing the control and monitoring of biological processes. The optical method provides highly accurate measurements without the need for incident flow to the sensor, and is unaffected by the presence of bubbles.



### VisoTurb 700 IQ and ViSolid 700 IQ sensors for turbidity and suspended solids measurement

Optical sensor series for online measurement of turbidity and suspended solids, incorporating an ultrasonic cleaner to ensure low maintenance and long stability. The measurement of turbidity in aqueous media with the VisoTurb 700 IQ is carried out using the nephelometric method of EN ISO 7027. In the measurement of high concentrations of suspended solids, the ViSolid 700 IQ uses an alternative method with light scattered at 60°. Due to the extensive measurement range of the VisoTurb 700 IQ (0-4000 FNU) and ViSolid 700 IQ (0-300 g / l SiO<sub>2</sub>), the best resolution of each value is selected with an AutoRange function. Thus virtually all applications are covered with just two sensors.



### Ammolyt Plus and Ammolyt 700 IQ sensors for ammonia measurement

Sensors for ammonia measurement with potassium compensation directly in the process. They complement the measurement of dissolved oxygen in biological waste water treatment processes and allow more efficient control of aeration systems. They are prepared for connection to reference electrodes, for measurement of ammonia and for dynamic potassium with measurement of ammonia. They incorporate an electrode cleaning head using compressed air. Ammolyt 700 IQ sensors are designed to be used in conjunction with IQ Sensor Net multi-parameter measurement systems.



# Rental service



## Flygt submersible pumps

At Xylem we have a wide range of Flygt submersible pumps for rent. This allows us to offer temporary pumping solutions to resolve situations in which the fixed pumping equipment installed in a facility, for the transport of supply or waste water, is out of service due to breakdown or some other circumstance.

Our rental service is also ideal for specific tank emptying operations, related to a production centre's waste water treatment system. This may be required for cleaning, new equipment installation, repair work, or miscellaneous modifications.

At Xylem we also rent flexible discharge hoses and all the necessary accessories to keep a temporary pumping installation in perfect working order.

Equipment and materials for rent are offered for days, weeks, months or by project.

With a large rental estate spread throughout the Spanish geography, at Xylem we offer our clients the most suitable equipment and materials for a given application at very short notice. For those who need it, we also offer the installation service of the equipment and materials, as well as the start-up of provisional pumping.



Highly qualified and present at a local level, our staff offer advice swiftly on the most suitable temporary pumping solution for each particular problem.

**“At Xylem we solve emergency cases swiftly and professionally, delivering, installing and implementing temporary pumping systems”**



Flygt 3000 Series submersible pumps



Flygt 2000 Series submersible pumps.



## Godwin pumps

At Xylem we have a wide range of Godwin portable, self-priming pumps for rent, they have solid handling capacity, powered by diesel or electric motors. This allows us to offer temporary pumping solutions for when the equipment installed in a production facility, for the transport of supply or waste water, breaks down or has power failure or any other problem.

Our rental service is also ideal for specific tank emptying operations, related to a facility's waste water treatment system. This may be required for cleaning, new equipment installation, repair work, or miscellaneous modifications.

These types of pumps are also used in pipeline cleaning operations, tank leak testing, support of fire fighting systems, and water distribution systems

The Dri-Prime series of self-priming diesel-powered pumps, can dry prime up to 8.5 metres in suction and can operate dry without suffering any damage, due to the mechanical seal's closed cooling circuit. All models with a diesel engine are available with an acoustic protection cab, to reduce the noise level.

The following options are available:

- CD: High flow rate and medium lift height
- HL: Medium flow rate and high lift height

At Xylem we also rent flexible discharge hoses and all necessary accessories to keep a temporary pumping system in perfect working order. Equipment and materials for rent are offered for days, weeks, months or by project.

With a large rental estate spread throughout Spain, Xylem offers our clients the most suitable equipment and materials for a given application, at very short notice. For those who need it, we also offer an installation service of equipment and materials, as well as starting up the provisional pumping.



**“At Xylem we supply the appropriate pumping equipment solution to a temporary power failure, allowing the transport of water in your facility”**



# After Sales and Service

## Original spare parts



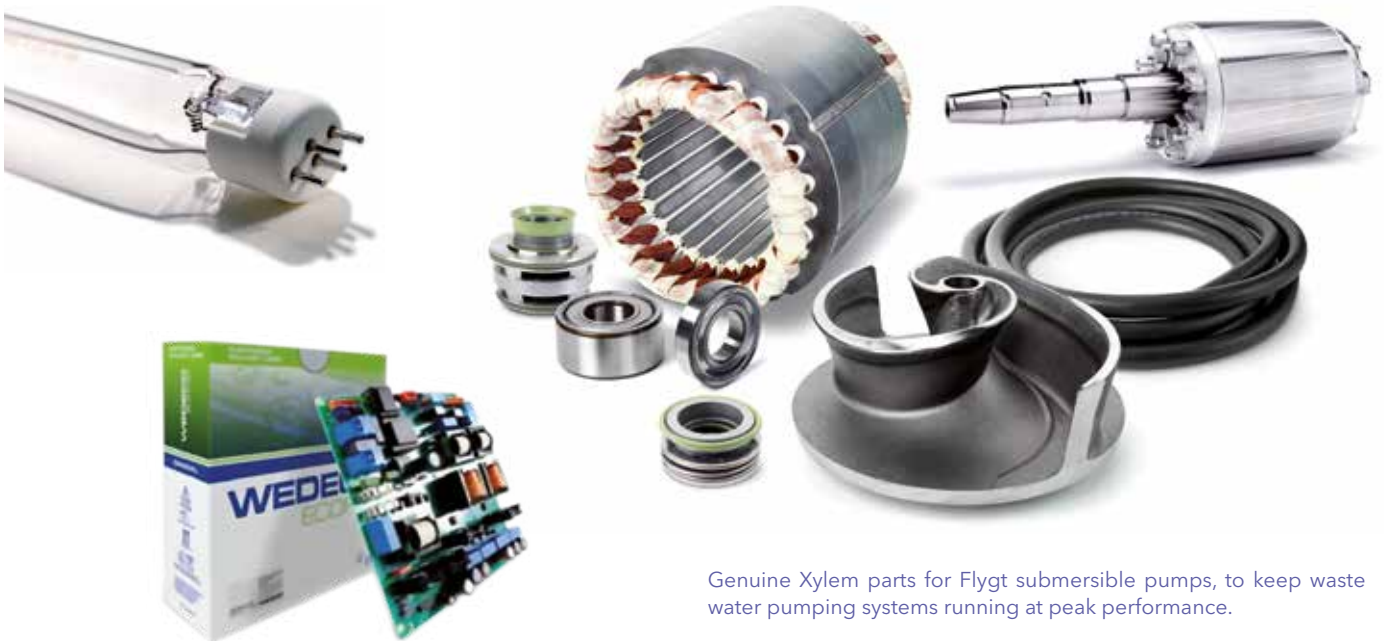
Our commitment to quality does not end with the sale of specific equipment for a particular application. This is just the beginning of a solid commitment to professional, long-term care and service to our clients.

At Xylem we have a wide network of after-sales and service centres, both our own and our associated companies, spread throughout the national geography, as well as a deep knowledge of our equipment and the applications for which they are intended. It is for all these reasons that we have the capacity to offer a swift, high quality, proximity service. So, in the event of an emergency situation, qualified technicians can quickly arrive at our clients facilities

and work to reduce equipment downtime and minimise the impact of breakdowns, or incidents, on the production process or the transport and treatment systems for water and waste water.

For our clients' equipment to maintain its initial performance, we quickly supply all the original Xylem spare parts necessary for proper maintenance, repair and operation. Our equipment offers optimum performance, consistent with the original application requirements, only when using original Xylem spare parts, which due to their high quality, ensure reliable, long-lasting and trouble-free operation.

**"Quality products deserve the use of original spare parts"**



Genuine Xylem parts for Flygt submersible pumps, to keep waste water pumping systems running at peak performance.

Genuine Xylem spare parts for Wedeco UV equipment, to maintain an effective disinfection process for water destined for the production process.



## TotalCare Services

Our TotalCare offer is a complete and integrated portfolio of services, designed to ensure that our clients' equipment, for water transport and treatment for the production process and waste water, operates in the best possible way.

Besides our perfectly defined and standardised service packages, we also offer tailor-made solutions on request, to suit specific needs.

We have a highly qualified team of expert technicians to help our clients optimise operations and the functioning of their equipment, providing the most appropriate solutions and recommendations in each particular situation.



## Range of Totalcare services by Xylem



Maintenance contracts



Spare Parts and Logistics



Equipment renewal



Repair and Maintenance



Installation and commissioning



In plant Rent and Services



Inspection and Audits



Monitoring and Control



Training and Technical



Design and Consulting

# Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) A leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

**For more information on how Xylem can help you, go to [www.xylem.com/uk](http://www.xylem.com/uk)**



**Xylem Water Solutions UK Ltd.  
Main Office**

Private Road No.1  
Colwick, Nottingham NG4 2AN  
Tel 0115 940 0111  
Email [fgbsales@xylem.com](mailto:fgbsales@xylem.com)  
[www.xylem.com/uk](http://www.xylem.com/uk)

**Axminster Office**

Millwey Rise Industrial Estate  
Axminster, Devon EX13 5HU  
Tel 01297 630 230  
Email [lowaraukenquiries@xylem.com](mailto:lowaraukenquiries@xylem.com)  
[www.xylem.com/uk](http://www.xylem.com/uk)

**Farnborough Office**

106 Hawley Lane  
Farnborough, Hampshire GU14 8JE  
Tel 01252 513 366  
Email [ukservicesales@xylem.com](mailto:ukservicesales@xylem.com)  
[www.xylem.com/uk](http://www.xylem.com/uk)

**Xylem Water Solutions Ireland Ltd.**

50 Broomhill Close  
Airton Road, Tallaght, Dublin 24  
Tel (+353) 01 4524 444  
Email [flygtlRL@xylem.com](mailto:flygtlRL@xylem.com)  
[www.xylem.com/ie](http://www.xylem.com/ie)

**Xylem TotalCare/Maintenance Contracts UK**

Tel 0800 009 3611

**Xylem Service & Rental UK**

24/7 Rental & Service Call Centre  
Tel 0845 707 8012

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