



# GV Series

VARISPEED BOOSTER SYSTEMS WITH NEW CONTROLLER SD60



Hoogindsestraat 5  
NL - 5447 PD Rijkevoort  
Nederland  
T : +31 (0) 485 - 371318  
F : +31 (0) 485 - 371918  
info@pompentechiek.nl  
www.pompentechiek.nl

# GV Series

The Lowara Varispeed booster systems are suitable for mains water supply systems in buildings and facilities. They provide constant pressure thanks to the SD60 controller, the new main board that controls the number of pumps running and the speed of each pump. A Lowara Varispeed booster system includes pumps from the high-efficiency SV range and frequency converter in the panel.

The booster set range consists of two to six SV pumps which are fitted on a common base with all components, pipes and fittings assembled. One pressure transducer is connected on the delivery side of the set. A second one is connected but only as a reserve device. The Varispeed system ensures instant control, flexibility, efficiency and energy savings. Thanks to its simple design and shape, the Varispeed booster systems are suitable for all types of installation where space is limited.

Achieving constant pressure in the system ensures low maintenance costs, high quality operation, and cost savings. Lowara Varispeed booster systems establish high quality, value and new technologies that work together in a highly efficient system.





## Benefits.

Water supply applications and irrigation systems

Compact system

High efficiency

Electric pump with motor EFF1 as standard and SD60 controller

Multilanguage menu with 12 languages

Easy to install

Plug and play installation and user friendly start up

Pump rotation on working hours or pump start

Frequency converter rotation on working hours

Easy to set

The oled display on SD60 controller shows the operating values and performance of the pumps

Monitor and control fieldbus communication

Modbus serial interface and Ethernet TCP/IP integrate Varispeed interface with a computer for complete system control

Analogical inputs (0-20 mA, 4-20 mA) and outputs (0-20 mA, 4-20 mA, 0-10 V)

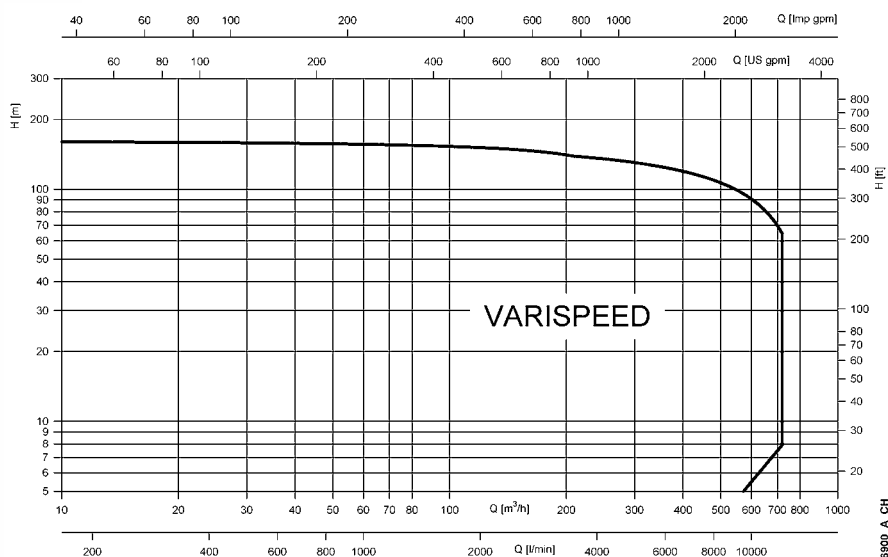
Autotest by a timer

## Specifications.

Lowara Varispeed booster systems are equipped with SV series vertical multistage pumps. These high efficiency pumps with EFF1 motors offer higher efficiency and energy savings. The reliability and efficiency of the SV series, combined with the new SD60 controller, ensures we provide the best solution for our booster systems. Thanks to the SD 60, the brain of the Varispeed booster systems, it is possible to control up to six pumps, their speed and the number of pumps in run.

SD60 is linked with a frequency converter (one for the set or one for each pump) in order to achieve flexibility and full control of performance output. In this way it is possible to ensure constant water pressure all the times.

Varispeed booster systems are used when additional pressure and flow is required. The huge range of Varispeed models is developed in order to meet all customers' demands for performance, control and system monitoring.



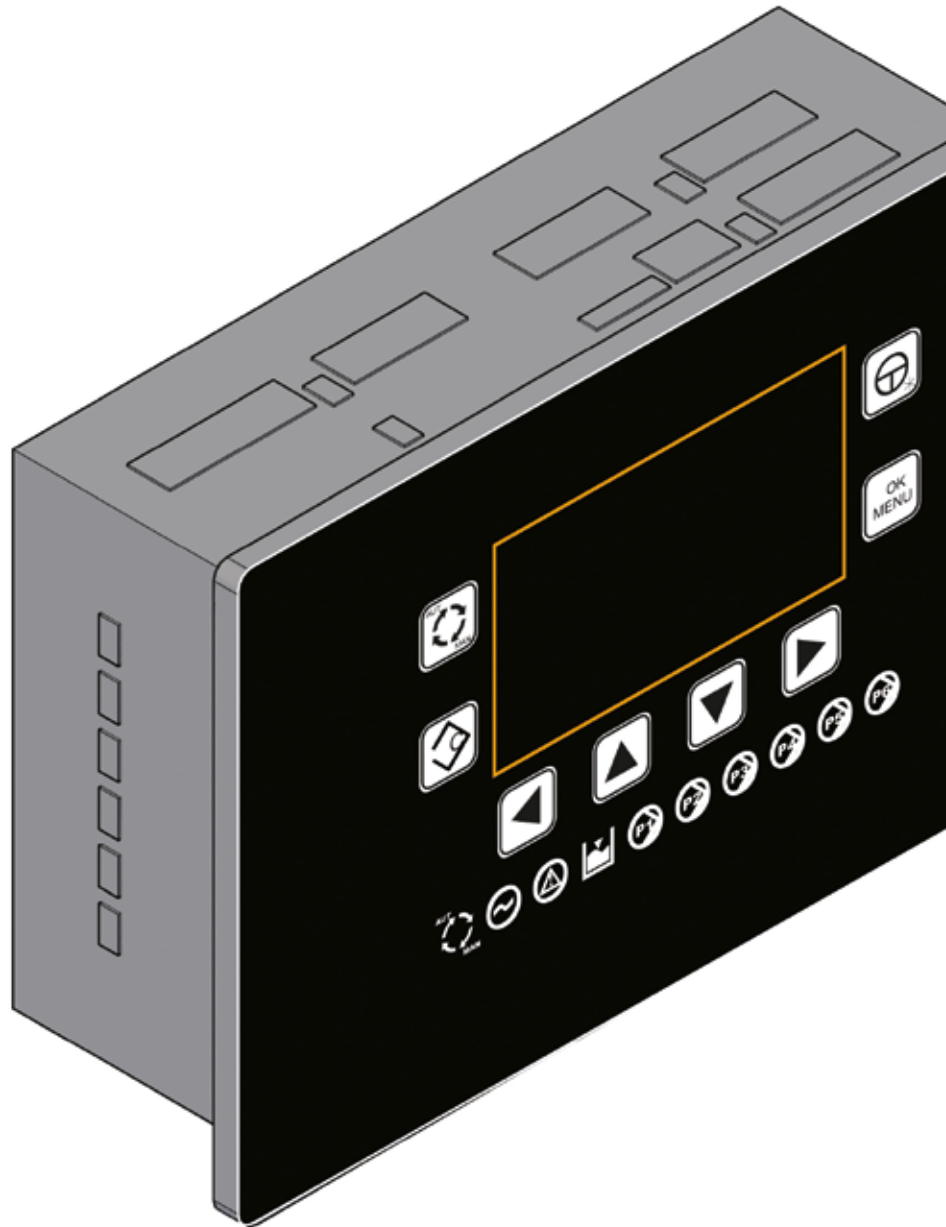
Performances overview

## The new SD60 controller.

The brain of Varispeed booster systems is the new advanced SD60 control unit. The controller has been designed specially for Lowara booster systems, with the latest electronic technologies. It is "user friendly" and guides users through the menu shown in an oled display, allowing you to modify the main parameters and achieve performance according to system demand.

The new SD60 controller was born from the experience of Xylem in pump control and especially in variable speed control, with years of research into such systems. Today the SD60 controller involves all our know how and satisfies all demands placed upon it. Through the SD60 we will improve the performance of our booster systems and simplicity of use for the operator. The navigation in the menu is very easy, with a step-by-step approach to setting the main parameters and obtaining the best performance from the booster system. Following the various steps will ensure that all settings are made in the correct sequence.

Electronic controllers as often seen as complex and elaborate devices and hard to use. However with the SD60 Xylem has created a guided start-up menu which allows the initiation of the set, and making it intuitive and simple to control.



## Specifications

Large oled display in black colour and yellow letters (128x64 pixels)

Push button, backlight type

System status signals

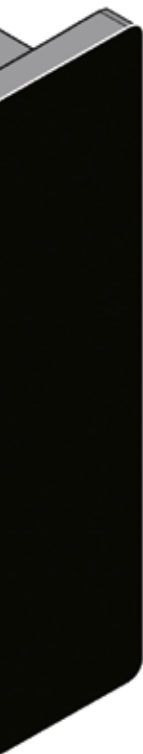
Alarms visualization (automatic or manual reset)

Remote access to controller by PC via RS 232, RS485, USB, back-up data and software

Cascade control

Speed control

Serial communication Modbus RTU and Ethernet TCP/IP



Through the Ethernet connection, the Lowara Varispeed booster system can be linked to a remote computer as part of the BMS (building management system), making it possible to monitor the booster's operating conditions. It is possible to control the booster system performance, change value pressure sets, and start and stop of the pumps. The alarms can be monitored directly on a PC screen or via modem on a mobile phone.

The SD60 controller ensures the optimisation of the Varispeed booster system's energy saving characteristics. It is possible to control the energy consumption through a distribution network analyzer (kWh) linked with the SD60 as an external module.



## Applications.

### Water supply

The Lowara Varispeed booster systems are suitable for water supply systems and for boosting pressure in high-rise buildings, hospitals, schools, hotels, public buildings, industrial premises, theatres and camp sites, where the demands of water change frequently and at different times of the day.

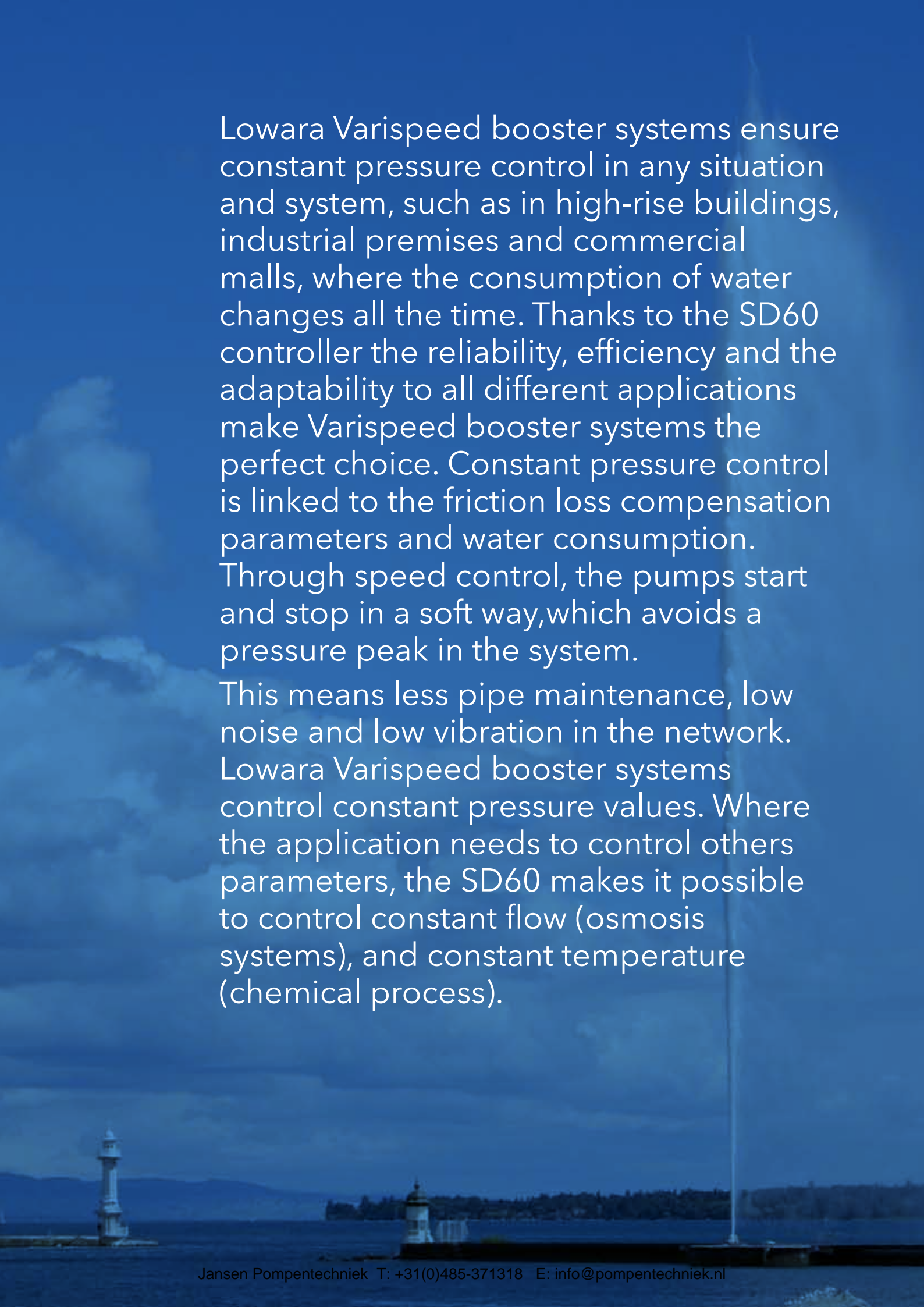
Lowara booster systems ensure the reliability of the system, maintaining constant water pressure for all users and all day.

### Irrigation

Lowara Varispeed booster systems are able to satisfy the demand from an irrigation system, such as in agriculture, public parks and green areas, where constant pressure is required. They are especially suited to irrigation golf systems. In line with irrigation software, they can optimise the flow demands for each zone and the pressure value to sprinklers during the irrigation cycle.

Through the SD60 controller it is possible to integrate with irrigation software in the user's PC to control performance and adjust parameters when necessary.



The background is a blue-tinted photograph of a coastal scene. On the left, there is a small lighthouse on a rocky outcrop. In the center, a larger lighthouse is visible. On the right, a tall, thin tower rises from the water. The sky is filled with soft, white clouds. The overall tone is serene and professional.

Lowara Varispeed booster systems ensure constant pressure control in any situation and system, such as in high-rise buildings, industrial premises and commercial malls, where the consumption of water changes all the time. Thanks to the SD60 controller the reliability, efficiency and the adaptability to all different applications make Varispeed booster systems the perfect choice. Constant pressure control is linked to the friction loss compensation parameters and water consumption. Through speed control, the pumps start and stop in a soft way, which avoids a pressure peak in the system.

This means less pipe maintenance, low noise and low vibration in the network. Lowara Varispeed booster systems control constant pressure values. Where the application needs to control other parameters, the SD60 makes it possible to control constant flow (osmosis systems), and constant temperature (chemical process).

# Constant pressure and high adaptability for all application



If the brain of Varispeed booster system is the SD60 controller, the SV vertical multistage pumps are the heart of the booster sets. High tech pumps with high efficiency motors give Varispeed booster systems the highest level of quality. The SV pumps used in the Varispeed booster systems are easy to install and to replace.

Thanks to their simple maintenance, the mechanical seal can be replaced very quickly without removing the electric motor. High level of performance, high efficiency, stainless steel technology and a wide range of models enables many booster system combinations for any application.

Multi-pump control ensures a balanced system, with drive rotation for each pump. With high quality Lowara motors fitted on SV pumps, Varispeed booster systems ensure low noise and the best comfort for all users.

Varispeed booster systems provide suitable water supply for every occasion, and, if the frequency drive is in fault, the SD60 controller ensures the control of the system in automatic way.

# Xylem, Solution Provider



Thanks to our experience and know how in water supply systems, we develop products for any type of use. New technologies allow us to improve product efficiency, and to continue the challenge to enhance "energy savings" - a committed Xylem mission for the future. The SD60 controller is an example how Xylem is moving ahead with new advanced solutions. We provide our advice, support and assistance in projects our customers.

Involving Xylem as a partner will generate the best results for your project.

Be sensitive to the needs of customers: a constant commitment and mutual trust.




Xylem is committed to developing new products, new technologies and systems adjustments to improve the quality and reliability of our products.

This commitment stems from a culture of excellence as measured by high-level metrics. This has resulted in products that are developed to meet the demands of our customers.

Varispeed booster sets are part of the combination of our experience, technology and research to save energy.

The system is intelligent and simple to use. Through the SD60 control unit, the opportunity to adapt the system to various demands places this product alongside the most advanced water distribution systems.

See Xylem not only as suppliers, but as new partners for the realisation of complex systems our customers wish to develop.



Xylem's philosophy focuses on water as source of life, not on water consumption. Xylem is involved in the research and development of products that are able to reduce waste and to generate the best benefits for the users. Thanks to the new SD60 controller a water supply system is under control at all times, and water consumption and energy consumption comply with the real demands of the users. Thinking our way will improve the quality of our lives.

# Water for life



Water distribution systems - whether simple or complex - must cope with variable water consumption during the day depending on activities and use. This can create frequent pumps start-ups, resulting in considerable energy use even in the largest buildings, such as a hospital.



Furthermore, the pressure of the system varies according to its demand for water, causing pressure spikes damaging the system.

For these reasons Varispeed ensures that pumps operate according to the specific demands for water, avoiding wasted energy and unnecessary start-up or use.



With the help of the SD60 controller, the speed of the pump motors is adjusted, in order to have soft starts that reduce energy consumption.

The SD60 is an advanced intelligent system, which maintains a constant pressure in a water distribution system, providing comfort for the end user.

The plant itself will be subject to less maintenance.

With the new SD60 control units Xylem has turned its attention to systems more in line with the needs of the environment and quality of life.

For Xylem the challenge of saving energy is the goal of the future, and in combination with reducing water wastage we can maintain the precious life of our planet.

