



# Product Portfolio

LOWARA PROVIDING PUMPING PRODUCTS AND SYSTEMS

# One Xylem

We are united in our focus to be the leading global provider of efficient and sustainable water technologies and applications.

Xylem is a global leader in water technology across both clean and waste water applications, and operates in over 150+ countries.

Xylem is a single company with multiple brands, all focussed on solving the most challenging water issues in multiple industries. Our aim is approach the market as one entity, focused on the best products, application expertise and aftersales support for customers, across all of our core markets within Europe, the Middle East, India, Russia and Africa.

Xylem manufactures a range of products which touch on numerous parts of the building and manufacturing processes. We felt the time was right to bring all of the brands into one single organisation offering customers one contact for all applications. For example, it is entirely possible that a Lowara pump is pumping clean water into the manufacturing process and a Flygt pump is being used to pump wastewater at the other end.

What's more, if the plant is producing a large amount of wastewater it is highly likely that a Wedeco ultraviolet or ozone treatment solution is being used before discharge into the water course. Now that customer can deal with one organisation for all their needs. The brands and their heritage will remain, but we will go to market as one company, Xylem.

## Our customers.

For our customers, our unified approach under the Xylem brands means that they will have one single point of contact. Whereas before they may have had to liaise with a brand representative for each Xylem product used on a project, from now on, all contact will be centralised to make communication much easier. There will be one person with one voice, but with the full support of an array of technical experts behind them.

This new approach allows us to offer customers comprehensive technical advice which draws on the experience and expertise of our technical specialists. The in-depth knowledge we now collectively possess stretches far across the building and manufacturing processes, which means we can consult on an installation within the wider project team and highlight issues which may not have occurred to our customers.

## Our services.

Xylem has always prided itself on offering exceptional levels of service and support to customers across all of our brands.

## Our staff.

The knowledge and expertise of our staff is one of our most important assets and we are constantly continuing our investment in training and development. For instance, all of our customer-facing people are being required to go through a comprehensive training programme covering everything from pump and pumping system basics, through to the technology behind variable speed drives.

The importance of training can be demonstrated by the dynamics of our markets. The transportation, treatment and use of water, be it in the municipal or building services sector is now highly regulated. Environmental efficiency standards, such as the ErP Directive, have placed strict control on the types of pumps that can be manufactured and marketed to end-users, regardless of whether those end-users are operating a sewage pumping station or a modern office block.

## Our biggest opportunities.

One of our big focuses is our ecocirc XL circulator pump. It builds on the technological advancements we made with our original domestic ecocirc, but is designed to be used within the industrial and commercial marketplace. It is a symbol of various parts of Xylem EMEA combining to create a product that can be used by a variety of end-users across several of the company's key markets.

## The complete Xylem brand offering.

Xylem is now offering a single network of sales and service to provide you the best customer experience.

Our mission is to be the best provider of complete fluid handling solutions.



# We span the entire water cycle

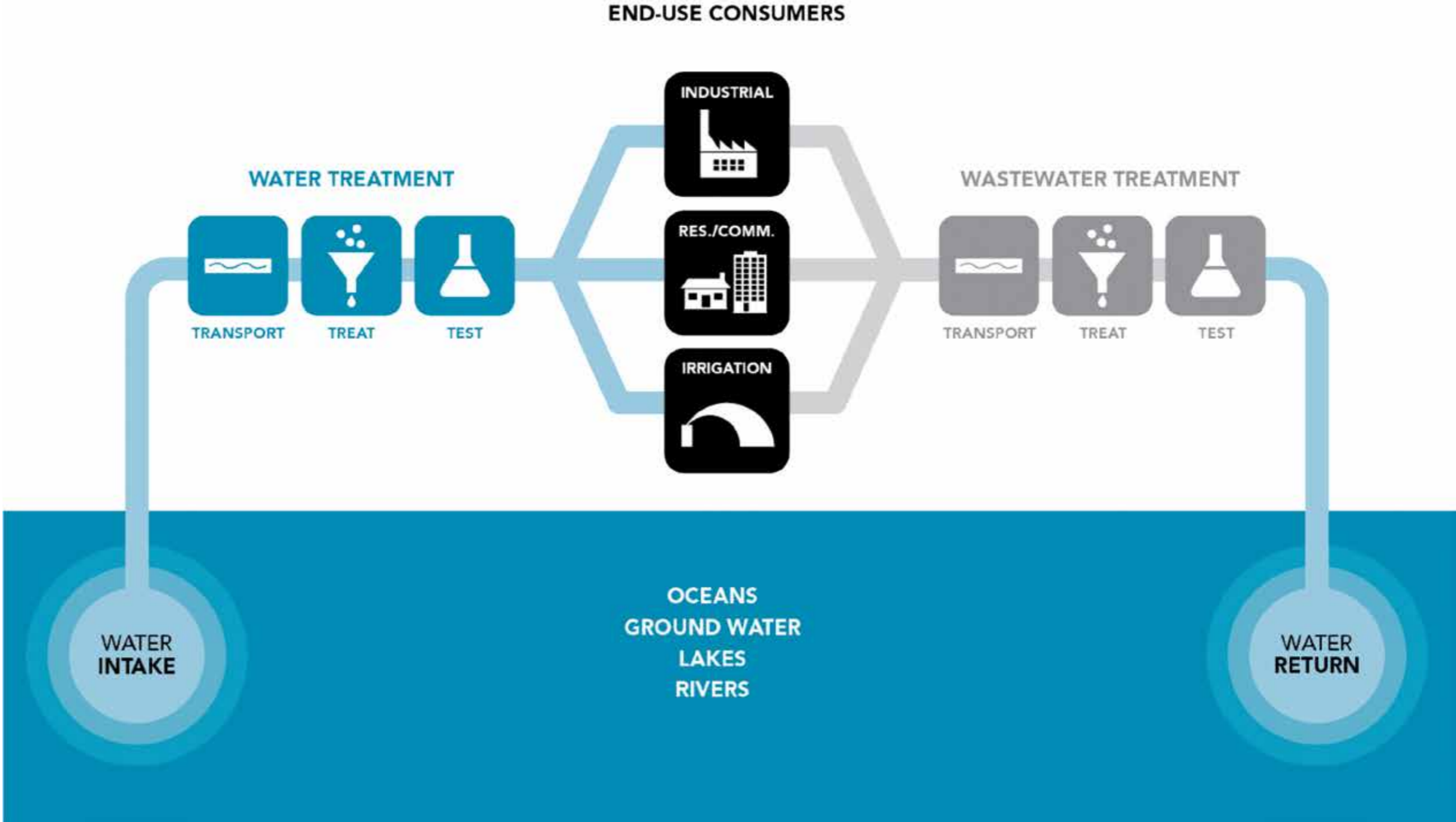
Our industry includes thousands of small companies, none of which have the breadth, scale or experience to address challenges across the complete water cycle. From water treatment – to end-use consumers – to wastewater treatment – the singular pure-play exception is Xylem.

Our involvement in the water cycle can be broken down into two parts - Water Infrastructure and Applied Water.

When we talk about Water Infrastructure - which encompasses 60 percent of our business - we are talking about helping customers collect water from a source and distribute it to users, and then helping them clean wastewater and return it back to the environment. This involves three closely linked applications - transport, treatment and testing - for two types of customers: public utilities and industrial facilities.

When we refer to Applied Water - which accounts for the other 40 percent of our business - we are focused on all the applications - or uses - of water in our daily lives. The customers here come to us for solutions in three major categories: residential and commercial building service applications, industrial applications, and irrigation and agriculture applications.

Having a huge footprint throughout the water cycle gives us a balanced portfolio and presents opportunities for us to create solutions for customers no matter where they are in this loop.



# And here comes Lowara ...a xylem brand

Founded in 1968 and based in Montecchio Maggiore, near Vicenza in Italy, Lowara has been serving customers and users of hydraulic pumps in various sectors for almost 50 years. In 1986 Lowara was purchased by Goulds Pumps Inc. of Seneca Falls, USA. The purchase in 1997 of Goulds Pumps Inc. by ITT Industries made Lowara one of the world's largest pump manufacturing group. In 2011 Xylem completed its spinoff from ITT Corporation, and began a new chapter as a leading global water technology company.



Innovation has always been one of Lowara's distinctive characteristics, as the offer of quality needs to be maintained and developed over time. Lowara invests economic, human and technological resources in training and research in order to ensure continuous improvements of its products and processes. Lowara uses the most advanced research, design and industrial engineering to enhance its global capabilities. This provide efficient and reliable products, services and solutions for the water supply and water pumping needs in the residential, irrigation, building services and commercial markets worldwide. Lowara holds a comprehensive stock and manufacturing facilities thus enabling a fast and efficient response to customer's needs.

## Applications.

The Lowara offer is a complete range of pumps for residential and commercial building services, agriculture, industrial and public utilities applications. In Building services, Lowara produces pumps for pressurization, conditioning, fire-fighting systems, wastewater lifting stations and dewatering. In irrigation, Lowara produces pumps for agriculture applications, irrigation of gardens and parks. In public utilities, Lowara is committed on drinking water process, on water treatment, and district heating. In industry, Lowara products are used in a wide range of applications from washing equipment and chillers, to heavy industry such as oil & gas, mining, power generation and steel mills.



## You Can Trust Us.

Lowara pumps and solutions are installed all over the world and probably close to you. We've been chosen because we are able to understand and meet the demands from a modern society focusing on cost efficiency and reliability. Our products help creating comfort and safety in people's life whether they are at home, at work, watching a sports game or staying in 5 star hotels and spas.

**Burj Khalifa, Dubai, UAE.**  
Burj Khalifa opened in 2010. Xylem special designed variable speed booster sets distribute 1000 m<sup>3</sup> of water every day all the way up to the top floor of the 800 m building.

Water supply: 6 water transfer sets and 7 pressure booster sets.



**Palazzo della Regione Lombardia, Milan, Italy.**  
The 160 m high building trust Lowara pumps for fresh water and comfortable indoor climate.

Heating and cooling: FC pumps with Hydrovar. Water Supply: GHV booster sets and FH pumps.



**State university library, Moscow, Russia.**  
Since 2004 Lowara products serve the 55.000 m<sup>2</sup> building complex with indoor climate and fresh water.

Heating and cooling: FC pumps. Water supply: SV pumps.



**Municipal water supply, Tulln, Austria.**  
Xylem provided the booster pumps for the grid and the submersible borehole pumps.

Completely automatic Pumpstation with Hydrovar controlled booster and submersible pumps.



# End suction single stage centrifugal pumps.



The centrifugal range is the largest available within the Lowara portfolio and covers a multitude of applications. The Lowara single-stage end-suction products range has a large hydraulic coverage; supported by diverse seal arrangements and material options to satisfy pumping needs from potable water to water with aggressive chemicals. As mandated by the European Union, the applicable series are compliant with the ErP Eco-design directives. Variable speed pumping is available with the addition of the Hydrovar (see page 18).

## P-PSA-PK SERIES peripheral pumps



Capacities up to  
Head up to  
Powers up to

<b>50 Hz</b>	<b>60 Hz</b>
3.72 m <sup>3</sup> /h	3.9 m <sup>3</sup> /h
82 m	83 m
1,1 kW	1,1 kW

## SP SERIES self priming pumps



Capacities up to  
Head up to  
Powers up to  
Suction head to

<b>50 Hz</b>	<b>60 Hz</b>
2.75 m <sup>3</sup> /h	2.7 m <sup>3</sup> /h
49 m	46 m
0.75 kW	0.75 kW
7 m	7 m

## CEA-CEAN SERIES CA-CAN SERIES closed impeller pumps (AISI 316)



Capacity up to  
Head up to  
Power up to

<b>50 Hz</b>	<b>60 Hz</b>
31 m <sup>3</sup> /h	32 m <sup>3</sup> /h
62 m	46 m
3 kW	3 kW

Various seals options available

## BG SERIES self priming pumps



Capacity up to  
Head up to  
Suction head to  
Power up to

<b>50 Hz</b>
4.2 m <sup>3</sup> /h
53 m
8 m
1,1 kW

## CO SERIES open impeller stainless steel pumps (AISI 316)



Capacity up to  
Head up to  
Power up to

<b>50 Hz</b>	<b>60 Hz</b>
54 m <sup>3</sup> /h	54 m <sup>3</sup> /h
24 m	24 m
3 kW	3 kW

## SHO SERIES open impeller pumps (AISI 316)



Capacity up to  
Head up to  
Power up to

<b>50 Hz</b>
53 m <sup>3</sup> /h
50 m
11 kW

## e-NSCE SERIES Closed impeller pumps, extended shaft According to EN 733



Capacities up to  
Head up to  
Powers up to  
Temp

<b>50 Hz</b>	<b>60 Hz</b>
130 m <sup>3</sup> /h	181 m <sup>3</sup> /h
100 m	100 m
22 kW	22 kW
-25°C to +140°C	

Various materials and seals options available

## e-NSCS SERIES Closed impeller pumps, stub shaft According to EN 733



Capacities up to  
Head up to  
Powers up to  
Temp

<b>50 Hz</b>	<b>60 Hz</b>
1300 m <sup>3</sup> /h	967 m <sup>3</sup> /h
160 m	141 m
90 kW	90 kW
-25°C to +140°C	

Various materials and seals options available

## e-NSCF/C SERIES Closed impeller pumps, frame mounted (elastic or spacer coupling) According to EN 733



Capacities up to  
Head up to  
Powers up to  
Temp

<b>50 Hz</b>	<b>60 Hz</b>
1800 m <sup>3</sup> /h	2200 m <sup>3</sup> /h
160 m	155 m
315 kW	400 kW
-25°C to +140°C	

Various materials and seals options available

## e-SHE-SHS-SHF SERIES Full stainless steel (AISI 316) pumps: extend shaft, stub shaft and frame mounted



Capacity up to  
Head up to  
Power up to  
Temp

<b>50 Hz</b>	<b>60 Hz</b>
240 m <sup>3</sup> /h	240 m <sup>3</sup> /h
110 m	115 m
75 kW (extended shaft version up to 22 kW)	75 kW
-30°C to +120°C	

Various materials and seals options available

## LSB SERIES Single stage end suction pump in close coupled (block) design



Capacity up to  
Head up to  
Temperature  
Size

<b>50 Hz</b>
450 m <sup>3</sup> /h
150 m
140°C
DN 25-150

Various materials and seals options available

## LSN SERIES Closed impeller pumps frame mounted (elastic or spacer coupling) According to ISO 5199



Capacity up to  
Head up to  
Temperature  
Size

<b>50 Hz</b>
450 m <sup>3</sup> /h
150 m
140 °C standard (180°C extended temp available)
DN 25-150

Various materials and seals options available

## LS SERIES Closed impeller 16 bar pumps frame mounted According to ISO 5199



Capacity up to  
Head up to  
Temperature  
Size

<b>50 Hz</b>
4600 m <sup>3</sup> /h
100 m
180°C
DN 150-600

Various materials and seals options available

## LC/LCP SERIES Closed impeller 25 bar pumps frame mounted According to ISO 5199



Capacity up to  
Head up to  
Temperature  
Size

<b>50 Hz</b>
4600 m <sup>3</sup> /h
100 m
180°C
DN 150-600

Various materials and seals options available

# Circulators.



High efficiency circulators range for many applications including heating, air conditioning systems and hot water.

ecocirc SERIES XL and XLplus high efficiency wet rotor circulators

Capacities up to 70 m<sup>3</sup>/h  
Head up to 18 m  
Maximum pressure 10 bar  
Temp -10°C to +110°C



ecocirc PREMIUM SERIES high efficiency wet rotor circulators

Capacities up to 3,2 m<sup>3</sup>/h  
Head up to 6 m  
Maximum pressure 10 bar  
Temp -10°C to +110°C



TLCN-TLCHN Wet rotor circulators for sanitary systems

Capacities up to 12 m<sup>3</sup>/h  
Head up to 12 m  
Maximum pressure 10 bar  
Temp +2°C to +110°C (recommended up to 65°C)



ecocirc BASIC SERIES high efficiency wet rotor circulators

Capacities up to 3,2 m<sup>3</sup>/h  
Head up to 6 m  
Maximum pressure 10 bar  
Temp -10°C to +110°C



TLC-TLCH\* SERIES wet rotor circulators

Capacities up to 12 m<sup>3</sup>/h  
Head up to 12 m  
Maximum pressure 10 bar  
Temp -10°C to +110°C



ecocirc PRO SERIES wet rotor circulators for sanitary systems

Capacities up to 1 m<sup>3</sup>/h  
Head up to 3 m  
Maximum pressure 10 bar  
Temp +2°C to +65°C



# In-line dry rotor centrifugal pumps.



In-line centrifugal pumps with cast iron pump available in the single and twin configurations. Suitable for handling hot or cold moderately aggressive liquids. With wide options both in terms of impeller material and mechanical seals, the e-LNE/LNT is the right solution for 1000's of liquids. Variable speed pumping is available with the addition of the Hydrovar (see page 18).

e-LNEE SERIES Extended shaft

Capacities up to 300 m<sup>3</sup>/h  
Head up to 100 m  
Powers up to 22 kW  
Temp -25°C to +140°C



e-LNES SERIES Stub shaft in-line pumps

Capacity up to 400 m<sup>3</sup>/h  
Head up to 100 m  
Power up to 37 kW  
Temp -25°C to +140°C



e-LNTE- LNTS SERIES Extended shaft and stub shaft in-line twin

Capacities up to 800 m<sup>3</sup>/h  
Head up to 100 m  
Powers up to 37 kW  
Temp -25°C to +140°C



\* Only for Extra EEA Countries.  
EEA means: European Economic Area = European Union + 3 of 4 Member States of EFTA European Free Trade Association = EU 27 + Iceland + Liechtenstein + Norway. Swiss, Turkey and Croatia have to be added to EEA list of countries for the observance of the same regulations.

# Multi-stage pumps.



Lowara has an extensive range of multi-stage products that start with the Lowara SV standard product through to the TDB range which are available in various materials including stainless steel, bronze and various iron options. Unique products within this range include the High Pressure e-SV system and a multi-outlet pump used in fire set applications. Variable speed pumping is available with the addition of the Hydrovar (see page 18).



## e-SV™ SERIES vertical multistage pumps

The range of pumps features 11 models and can be specially configured for a wide range of applications.

Capacity up to	160 m <sup>3</sup> /h
Head up to	330 m
Power up to	55 kW
Temp	-30°C to +120°C (high temp versions up to 180°C)
<hr/>	
Capacity up to	160 m <sup>3</sup> /h
Head up to	280 m
Power up to	55 kW
Temp	-30°C to +120°C (high temp versions up to 180°C)

## SVI SERIES immersible vertical multistage pumps



Capacity up to	160 m <sup>3</sup> /h	160 m <sup>3</sup> /h
Head up to	330 m	280 m
Power up to	55 kW	55 kW
Temp	-10°C to +90°C	

## e-HM™ SERIES horizontal multistage pumps



Capacity up to	29 m <sup>3</sup> /h
Head up to	160 m
Power up to	5,5 kW

## VM SERIES High efficiency close-coupled vertical multistage pumps equipped with non-standard Lowara motors



Capacity up to	14 m <sup>3</sup> /h	17 m <sup>3</sup> /h
Head up to	98 m	106 m
Power up to	3 kW	4 kW
Max temp to	up to +90°C	

## e-MP NEW Horizontal and vertical multistage pumps



Capacity up to	850 m <sup>3</sup> /h	600 m <sup>3</sup> /h
Head up to	950 m	900 m
Temp	140°C (optional up to 180°C)	
Size	DN 40-125	

## MP Horizontal multistage pump with closed, radial type impellers and roller bearings on both ends



Capacity up to	340 m <sup>3</sup> /h	360 m <sup>3</sup> /h
Head up to	500 m	500 m
Temp	140°C	
Size	DN 40-125	

## MPA Thrust bearing at drive side and medium lubricated slide bearing on suction side



Inducer optional

Capacity up to	340 m <sup>3</sup> /h	360 m <sup>3</sup> /h
Head up to	500 m	500 m
Temp	140°C	
Size	DN 40-125	

## MPB/TDB Vertical multistage pump with closed, radial type impellers in close coupled (block) design



Capacity up to	200 m <sup>3</sup> /h	240 m <sup>3</sup> /h
Head up to	500 m	500 m
Temp	140°C	
Size	DN 40-125	

## MPV/TDV Vertical multistage pumps



Capacity up to	340 m <sup>3</sup> /h	360 m <sup>3</sup> /h
Head up to	500 m	500 m
Temp	140°C	
Size	DN 100-125	DN 40-125

## MPE Horizontal multistage pump with bearings on both ends. Thrust balancing and seal pressure reduction by balancing drum.



Capacity up to	300 m <sup>3</sup> /h	320 m <sup>3</sup> /h
Head up to	850 m	850 m
Temp	140°C (optional up to 180°C)	
Size	DN 100-125	

## P / MP 300 Horizontal multistage pump with bearings on both ends



Capacity up to	1800 m <sup>3</sup> /h	1200 m <sup>3</sup> /h
Head up to	300 m	300 m
Temp	140°C	
Size	DN 80-300	DN 80-250

## PVa Vertical multistage pump with closed, radial type impellers



Capacity up to	850 m <sup>3</sup> /h	1000 m <sup>3</sup> /h
Head up to	300 m	300 m
Temp	140°C	
Size	DN 80-200	

# Drainage and wastewater products.

The Lowara submersible pumps range is suited for a wide variety of applications such as, for example, drainage of residential sump pits, sewage pumping, emptying of sumps, septic tanks and wastewater discharge tanks.

## DOC SERIES cellar drainage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
14 m <sup>3</sup> /h	13,2 m <sup>3</sup> /h
11 m	11 m
0,55 kW	0,55 kW
20 mm	



## DL SERIES wastewater/ sewage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
42 m <sup>3</sup> /h	42 m <sup>3</sup> /h
21,9 m	22 m
1,5 kW	1,5 kW
50 mm	



## Lowara 1300 SERIES Wastewater / sewage pumps in cast iron with non-clog or vortex impeller

Capacity up to  
Head up to  
Power up to  
Temp



<b>50 Hz</b>
414 m <sup>3</sup> /h
63 m
18 kW
up to +40°C

## BOX SERIES prefabricated lifting stations

Minibox  
Midibox  
Singlebox Plus  
Doublebox Plus  
Maxibox Plus

Volume  
Pumps



up to 1900 liters  
1 or 2

## DOMO SERIES wastewater/ sewage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
40 m <sup>3</sup> /h	40 m <sup>3</sup> /h
14,5 m	14,5 m
1,5 kW	1,5 kW
50 mm	



## DOMO GRI SERIES sewage pumps with grinder device

Capacity up to  
Head up to  
Power up to

50 Hz	60 Hz
6,6 m <sup>3</sup> /h	6,6 m <sup>3</sup> /h
25 m	29 m
1,1 kW	1,1 kW



## DIWA SERIES drainage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
25 m <sup>3</sup> /h	25 m <sup>3</sup> /h
21 m	20 m
1,5 kW	1,5 kW
8 mm	



## DN SERIES drainage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
16,8 m <sup>3</sup> /h	18 m <sup>3</sup> /h
22 m	21 m
0,75 kW	0,8 kW
5 mm	



## SOS FLOODKIT For flooded basements and garages

Pump type DOC 3 with  
10 metres cable

Can be used in or  
outside the box.



# Submersible borehole pumps.



The Lowara borehole range offers products ranging in pump diameters from 4" to 12". Various material options are available including cast iron and various grades of stainless steel. In addition to the products shown, Lowara can offer alternative mounting options of this range including cooling shrouds and pressure shrouds.

## e-GS SERIES 4" borehole pumps



Capacity up to	21 m <sup>3</sup> /h	22 m <sup>3</sup> /h
Head up to	340 m	300 m
Power up to	7,5 kW	7,5 kW

## Z6 SERIES 6" borehole pumps



Capacity up to	78 m <sup>3</sup> /h	90 m <sup>3</sup> /h
Head up to	700 m	700 m
Power up to	55 kW	55 kW

## L6W-L8W-L10W- L12W SERIES Rewindable motors



Powers up to	300 kW	300 kW
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## SCUBA SERIES 5" submersible pumps



Capacity up to	7,5 m <sup>3</sup> /h	7,5 m <sup>3</sup> /h
Head up to	80 m	75 m
Power up to	1,1 kW	1,1 kW

## Z8-Z10-Z12 SERIES 8"-10"-12" borehole pumps



Capacity up to	520 m <sup>3</sup> /h	480 m <sup>3</sup> /h
Head up to	500 m	500 m
Power up to	350 kW	350 kW

## Water and oil filled 4" submersible motors series



Powers up to	7,5 kW	7,5 kW
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# Booster sets.



Wide range of 2, 3 or 4 pump units controlled by pressure switches or pressure transmitter, with constant or variable speed. The Lowara range of automatic booster units is designed to supply water to intermittent and variable demand users, employing centrifugal electric pumps controlled by an electric panel.

Available at 60 Hz on request.

## GXS SERIES SETS

Single-phase power supply, fixed speed and pressure switch control. For BG, CA, CEA, HM and SV series electric pumps.

Flow rate up to  
Power up to



50 Hz / 60 Hz
58 m <sup>3</sup> /h
2 x 1.5 kW

## GTKS SERIES SETS

Single-phase power supply, variable speed and control by pressure transducers and Teknospeed electronic speed controllers integrated with the motor. For BG, CA, CEA, HM and SV series electric pumps.

Flow up to  
Power up to



50 Hz / 60 Hz
52 m <sup>3</sup> /h
2 x 1.1 kW

## GMD SERIES SETS

Three-phase power supply, fixed speed and pressure switch control. For BG, CA, CEA, HM and SV series electric pumps.

Flow up to  
Power up to



50 Hz / 60 Hz
62 m <sup>3</sup> /h
2 x 4 kW

## GHV SERIES SETS

Single-phase or three-phase power supply, variable speed and control by pressure transducers and HYDROVAR™ electronic speed controllers mounted on the motor. For SV series electric pumps.

Flow up to  
Head up to  
Power up to



50 Hz / 60 Hz
640 m <sup>3</sup> /h
160 m
22 kW

## GV SERIES SETS

Variable speed booster sets up to four pumps eSV series.

Flow up to  
Head up to  
Power up to



50 Hz / 60 Hz
640 m <sup>3</sup> /h
160 m
37 kW

## GS SERIES SETS

Fixed speed booster sets, two and three pumps eSV and e-NSC series.

Flow up to  
Head up to  
Power up to



50 Hz / 60 Hz
480 m <sup>3</sup> /h
160 m
37 kW

## FIRE FIGHTING SYSTEMS EN 12845 GEM SERIES

Fire pump package manufactured in accordance to EN 12845. Max. power size for service pump 200 kW. Manifold in painted steel pipe with anchor bolts to fix to a wall or floor.

Flow up to  
Head up to



50 Hz / 60 Hz
766 m <sup>3</sup> /h
146 m

# 5<sup>th</sup> Generation Hydrovar.

Energy is the largest cost of running any pump. Hydrovar Variable Speed Drive (VSD) works with your system to make it efficient.



What is HYDROVAR capable of? HYDROVAR is an intelligent controller that matches pump performance to demand. It controls the speed of a standard IEC motor by converting the fixed voltage and frequency from the power supply line.

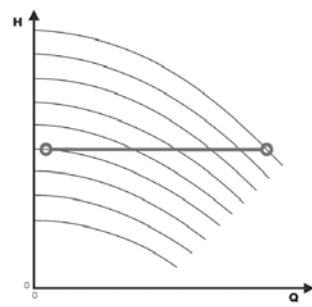
It can be fitted easily to any new pump system or retrofitted to existing pumps using the fast and easy "clip and play" mounting clamps.

Pump systems are very often oversized for the application and therefore using much more energy than needed. With energy savings of up to 70% at partial loads alone, the typical investment payback period is less than 2 years, depending on energy costs and pump operating times.

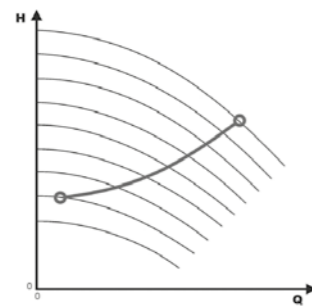
A motor running at 80% of its maximum speed uses 48% less energy and slashes carbon emissions.

The controls available include constant pressure, system curve, constant flow or via an external signal. In addition to these functions HYDROVAR can do things that are normally only performed by the most advanced computerized control systems such as: stopping the pump or pumps at zero demand; stopping the pump or pumps in case of water failure; allowing protection against dry running; a standard feature of a 2<sup>nd</sup> required input value that allows change over between two different pressure settings via an external switch; sensor failure and over temperature of inverter and motor which protects the pump and motor from under or overvoltage.

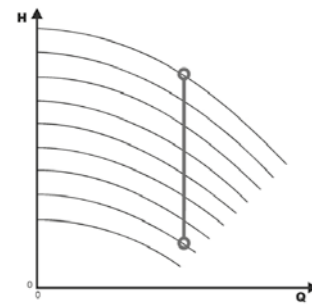
Other features include: automatic test starts; auto cyclic change of lead and lag pump units; a memory for any inverter fault signals; an operating hours run counter; two levels of password protection if required.



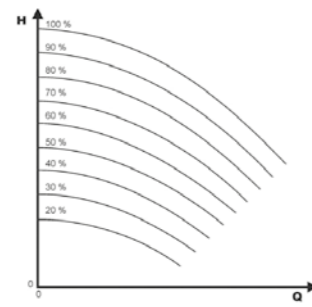
Control for constant pressure



Control to match a system curve



Control for constant flow



Control according to an external signal

# HYDROVAR product overview.

Available from 1.5 to 22 kW in single or three phase, pump or wall mounted.

Pump mounted version will fit on any standard IEC motor. Optimised cooling of the HYDROVAR depending on the power and the speed of the pump is guaranteed by the motor fan.

Easy to commission, easy to setup and operate with the easy start up menu allowing you to walk through every step. New features include a larger screen display.

No external control panel needed.

No water hammer. The steady operation of the pump in partial loads also prevents water hammer, which normally arises in the start/stop operation of full speed pumps.

Lower starting current. High current peaks are prevented by adjusting the start ramp times as you can in a soft starter.

Multi-pump capability comes as standard which allows control from 1 to 8 pumps. Communicating with a central control system is also possible via an RS485 interface, and each HYDROVAR contains an individual microprocessor which operates independently if a failure occurs. Modbus and BACnet protocol fitted as standard.

Lower noise from the pump because of lower speeds during operation. There is less noise in the pipeline and valves because of pump performance to the actual demand, and control along the system curve.

Less wear and less mechanical stress because of lower speed of the pumps during operation and no additional load in the starting moment because of the soft start feature.



**Energy savings of up to 70%, depending on energy costs and operating times; payback is normally within 2 years.**



### Retro-fitting.

The HYDROVAR™ speed controller can be mounted or retro-fitted to any existing centrifugal pump manufacturer's unit, which has a standard IEC motor. The units are available in powers from 1.1-22 kW. The units can be mounted directly on to the pump motor (horizontal or vertical) or can be wall mounted. The HYDROVAR can

also be connected by cable to another control system with microprocessor, using the RS-485 database located on the main terminal board under the cover. This enables the HYDROVAR system to send information about the system conditions to an external unit, and to be controlled from a distance.

### HYDROVAR Smart.

The HYDROVAR Smart device includes all control functions of a HYDROVAR and can be combined with all standard frequency converters, regardless of the power range and the available supply voltage range. The inbuilt microprocessor manages all pump specific control requirements including cascading of up to 4 drives in multipump systems. The patented HYDROVAR controller ensures an immediate stop of the pump at zero demand.

### Advantages.

- Patented HYDROVAR Control System.
- Integrated multi pump controller.
- No external power supply required (24V AC/DC output of the VFD can be used).
- Enclosure IP55 for panel or wall mounting.
- Suitable for combination with all standard frequency converters.
- No limitation of the power range.
- HYDROVAR controlled variable speed drive
- for any supply voltage range possible.
- RS485 interface input included as standard.



## Lowara e-SM (Smart Range)

Xylem Lowara's most energy-efficient permanent magnet motor with integrated variable speed drive taking motor efficiency to a new level.

Power up to 1.5 kW

Can link up to 3 pumps

Can be coupled with most Lowara pump units

Reduced energy / CO<sub>2</sub> / life cycle / running costs

Easy to commission

Less wear and less mechanical stress to the pump unit

Works with your system to make it efficient

BACnet and Modbus as standard (card required for multi-pump)

Wi-Fi controlled as option

Compact design

Single phase input

Sensorless version for e-LNE pump

IES2 compliant when fitted with IE3 Lowara Motor



# ResiBoost Variable Speed Drive.

Capacities up to  
Head up to  
Powers up to

**50 Hz**  
7.2 m<sup>3</sup>/h  
65 m  
1,5 KW 1~ phase  
2,2 KW 1~3 phase



### Pump mounted version.

Turns a fixed speed pump to a variable speed.

- Easy to set up and operate, just select the required pressure "Plug and Play"
- Built-in dry run protection
- Compact design
- Built in pressure transducer with digital indicator
- Control and panel with LCD display
- Stored information of operated hours, number of starts, connections to the power supply, register of alarms
- Built in protection of over current, incorrect supply voltage and short circuit



### Wall mounted version.

Wall mounted Variable speed pump driver. Single or three phase pumps.

- Control and information panel with LCD screen
- Cooling by natural or forced convection depending on model
- Aluminum heat exchanger
- 4-20 mA, 0-10 Bar external pressure transducer supplied (0-16 bar supplied as option)
- Stored information of operated hours, number of starts, connections to the power supply, register of alarms
- Automatic restore system in case of water of power supply failure
- Built-in dry run protection
- Electronic input for detection of water level in tank; this system is independent of the dry run protection

Clever and simple, ResiBoost is a variable speed drive inverter for constant pressure systems. ResiBoost automatically controls the speed of the pump while keeping the pressure in the system constant in relation to the signal of the electronic pressure transmitter.

The ResiBoost is specially designed for maintaining constant pressure independent of flow for maximum comfort. Energy saving is the result of the precise speed control. Top quality components guarantee high reliability and a trouble-free life. The inverter has inbuilt protection against various system and electrical faults. Smooth operation and soft starting ensure silent running and an extended pump life. With pipe or wall mounted versions together with ready built, the quick set up means easy installation.

### Find your ResiBoost solution.

#### e-HM



#### Scuba



#### BG



#### VM



# Variable speed drives... Teknospeed.

## Series of Variable Speed Electric Pumps and Pressure Booster Units.

The single-phase Teknospeed variable speed electric pumps and pressure booster units are designed for residential applications as they provide all the comfort and advantages of constant pressure in the home. The Teknospeed series comprises a frequency converter integrated into the pump which adjusts motor speed so as to constantly provide users with the same pressure, even when demand for water changes. The main applications for which the Teknospeed series offers elevated comfort and benefits are: home pressurisation, irrigation, greenhouses, light industry, fountains and creative water displays.



The range features a large number of models and pump types.

Horizontal and vertical pumps:  
TKS/HMZ, TKS/BG, TKS/CA-CEA, TK/SV.  
Single pump or two-pump pressure booster units:  
GTKS20/HMZ, GTKS20/CA, GTKS20/SV

## Specifications.

- Delivery: up to 16m<sup>3</sup>/h
- Head: up to 75m
- Power supply: single-phase 50 and 60Hz
- Power: from 0.3kW up to 1.1kW
- Temperature of pumped liquid: to 80°C

## Applications.

- Water distribution
- Industrial washing equipment
- Pressure boosting
- Irrigation
- Water treatment
- H.V.A.C.
- Cooling and chiller accessories



# Genyo

The Genyo is designed to replace traditional pressure boosting systems in domestic applications; it offers the advantages of smaller overall dimensions and no maintenance is required. Genyo provides the electric pump with adequate protection against dry running.

GENYO 8A



GENYO 16A



Suitable for use with both surface and submersible electric pumps

- Two models: Genyo 8A and Genyo 16A
- Maximum current 16 A
- Maximum pressure 10 bar
- IP 65 protection
- Delivery up to 170 l/min (10 m<sup>3</sup>/h).
- Maximum liquid temperature 60°C
- Low friction loss

## Benefits.

- Protection against dry running integrated in the device
- No maintenance required (a convenient alternative to traditional diaphragm surge tanks)
- Quick and easy installation
- Compact size
- Stable pressure without fluctuations at constant operating point
- Back-up tank to compensate for small leaks or drips in the hydraulic system (patented system)
- Limited flow resistance

For genyo 16A model only:

- Automatic restart in case of water failure
- Adjustable starting pressure

## Applications.

- Domestic pressure boosting (single and multi-family dwellings)
- Small irrigation and gardening
- Civil water systems (bathing establishments, campgrounds, sporting facilities)

# Q-Smart Single phase electronic control panel.

Q-Smart single-phase electronic control panel intended to be used with 1 or 2 single phase electric pumps within different fixed speed systems. Over 50 different combinations available within this one product that can be used for controlling pressure boosting or sewage applications.

**Q-Smart 10: One Pump Control**

**Q-Smart 20: Two Pump Control**

## Ease of Use.

- Pre-programmed packages that decrease installation and commissioning costs
- Illuminated coloured LED status lights



DRAINAGE/ SEWAGE PUMPS

PRESSURE BOOSTING PUMPS



## Control Boxes.

A range of control boxes suitable for use with both submersible and surface pumps.

## Versatile.

- Ideal for use in various water and wastewater applications
- Manages up to 2 pumps (booster sets)
- In case of control board failure, pumps can still be operated
- 5 digital inputs for pressure switch or floats, external on/off, min/max, pressure/level alarms, 1 analogue input for sensor, 5 inputs for sewage application probes

## Specifications.

- Built in overload circuit breaker(s)
- Power Size up to 1.5kW (power output for pump up to 12A)
- 4 Push Button Key Pad
- Auto Test Function
- Pump Rotation Option
- Real Time Clock with Hour Counter
- Dry run, overload and shortcircuit protections

## Option extras.

- ModBus RTU module
- Programmable free voltage contacts module



### Accessories.

An extensive range of accessories is available to complement the pump range illustrated in this brochure. This includes:

- Pressure switches
- Pressure gauges
- 5 way connector
- Flexible connector
- Float switches
- Flow meters
- Direct on line starter
- Non return valves, strainers and hosetails.
- Water softners
- Motor filters
- Cables and junctions
- Temperature sensors
- Pressure vessels
- Cooling and pressure shrouds



THERE ARE  
PEOPLE WHO DO,  
AND PEOPLE WHO TEACH.  
**WE DO  
BOTH!**

**Exclusive training programme.** Xylem provides complimentary training in selection and use of all Xylem products at its training centers in Europe. The courses are designed to be practical as well as theoretical, preparing delegates with skills to size and specify the correct pumps and related technologies for a range of applications and systems.

# Applications.

	PUBLIC UTILITIES (MUNI)	RESIDENTIAL BUILDING SERVICES	COMMERCIAL BUILDING SERVICES	INDUSTRY	AGRICULTURE
<b>END SUCTION CENTRIFUGAL PUMPS</b>					
P-PB-PK Series					
SP Series					
CEA-CEAN Series					
BG Series					
CO -COF-SHO Series					
e-NSCE, e-NSCS Series					
e-NSCF Series					
e-SHE, e- SHS, e,SHF Series					
LS-LC-LCP-LSN-LSB Series					
<b>CLOSE COUPLED IN-LINE PUMPS</b>					
ecocirc XL e XLplus Series					
ecocirc BASIC and PREMIUM Series					
ecocirc PRO Series					
TLCN-TLCHN Series					
TLC-TLCH Series *					
e-LNEE, e-LNES, e-LNTE, e-LNTS Series					
<b>MULTISTAGE</b>					
e-HM™ Series					
VM Series					
e-SV™ 1-125 Series					
SVI Series					
MP Series					
MPE Series and e-MP Series					
P/PVa Series					
<b>SUBMERSIBLE, DRAINAGE &amp; SEWAGE PUMPS</b>					
DOC Series					
DOMO Series					
DOMO GRI Series					
DIWA Series					
DN Series					
DL Series					
Lowara 1300 Series					
Minibox, Midibox, Singlebox Plus, Doublebox Plus Series					
Maxibox Plus					
SOS Floodkit					

	PUBLIC UTILITIES (MUNI)	RESIDENTIAL BUILDING SERVICES	COMMERCIAL BUILDING SERVICES	INDUSTRY	AGRICULTURE
<b>BOREHOLE</b>					
e-GS Series					
SCUBA Series					
Z6 Series					
Z8-Z10-Z12 Series (TVS Series)					
40S-L4C Motors					
L6C-L6W Motors					
L8W-L10W-L12W Motors					
<b>BOOSTER SETS</b>					
GXS Series					
GTKS Series					
GMD Series					
GHV Series					
GV Series					
GS Series					
GEM Fire Fighting Systems EN 12845					
<b>MONITORING &amp; CONTROLS</b>					
Hydrovar 5 <sup>th</sup> generation					
e-SM drive					
Teknospeed					
ResiBoost					
Genyo					
Q-Smart					

\* Only for Extra EEA Countries.  
 EEA means: European Economic Area = European Union + 3 of 4 Member States of EFTA European Free Trade Association = EU 27 + Iceland + Liechtenstein + Norway, Swiss, Turkey and Croatia have to be added to EEA list of countries for the observance of the same regulations.

# Xylect



Xylect™ is pump solution selection software with an extensive online database of product information across the entire Xylem range of pumps and related products, with multiple search options and helpful project management facilities. The system holds up-to-date product information on thousands of products and accessories. The possibility to search by applications and the detailed information output given, makes it easy to make the optimal selection without having detailed knowledge about products.



The search can be made by:

Application

Product type

Duty point

Xylect™ gives a detailed output:

List with search results

Performance curves (flow, head, power, efficiency, NPSH)

Motor data

Dimensional drawings

Options

Data sheet printouts

Document downloads incl dxf files

*The search by application guides users not familiar with the product range to the right choice.*



The best way to work with Xylect™ is to create a personal account. This makes it possible to:

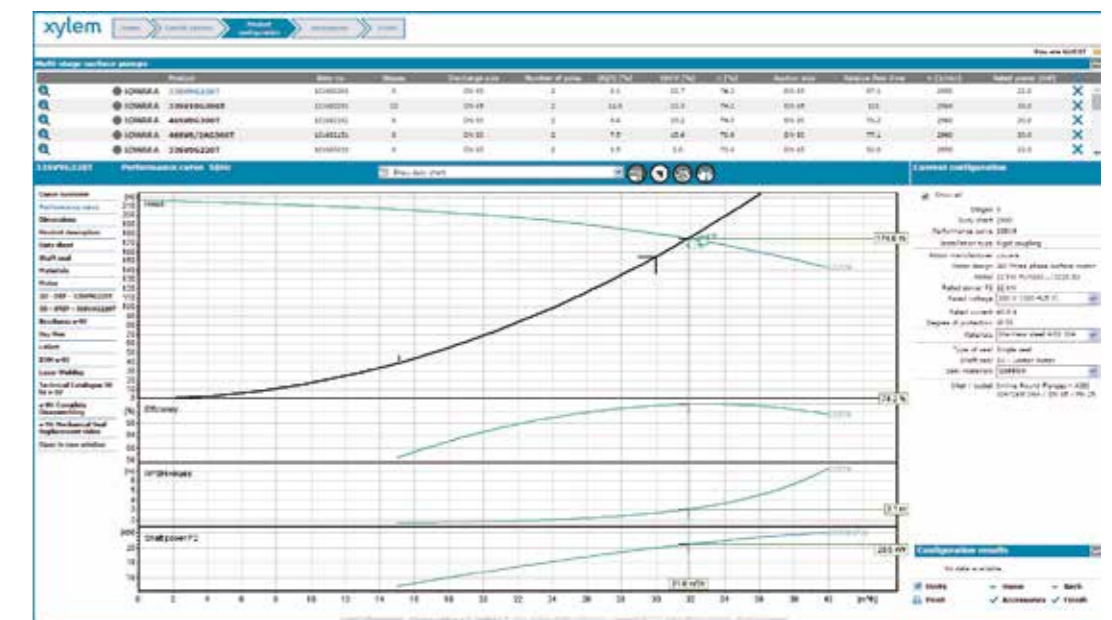
Set own standard units

Create and save projects

Share projects with other Xylect™ users

Every user has a My Xylect space, where all projects are saved.

For more information about Xylect™ please contact our sales network or visit [www.xylect.com](http://www.xylect.com).



*Dimensional drawings appear on the screen and can be downloaded in dxf format.*

**For more information on how Xylem can help you, please visit: [www.buildings.xylem.com](http://www.buildings.xylem.com)**



# 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, and agricultural settings. With its October 2016 acquisition of Sensus, Xylem added smart metering, network technologies and advanced data analytics for water, gas and electric utilities to its portfolio of solutions. 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](http://www.xylem.com)**



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