



# Flygt Pumping Stations

DESIGN | INSTALL | COMMISSION | MAINTAIN



# Sewers for Adoption Legislation and Adoptable Pumping Stations

As urbanisation increases and we build in more remote and inaccessible areas, the need to pump wastewater to treatment works becomes a key consideration at the planning stage, particularly with developments situated below the gravity sewer, or a considerable distance away. As such, the traditional solution has been to build a pumping station consisting of a chamber constructed with concrete rings and fitted out with pipes, valves and pumping equipment to move the wastewater to the gravity main.

'Sewers for Adoption' (SFA) was first introduced by the Government in 1981. The legislation sets out specifications which need to be adhered to if the pumping station is to be taken over by the local Water Company. Under the more recent Private Drains and Sewers (PDaS) bill, all new pumping will, by law, need to be adopted under the SFA specifications.

These guidelines also mean that many pumping stations requiring full replacement or refurbishment will also have to meet the standards set out by the local Water Company. In designing our range of Packaged Pumping Stations, Xylem has worked closely with a number of Water Companies to create a product that is suitable for adoption.

Working to the standards specified by an individual Water Company, we can design and deliver a PPS that not only conforms to the standards required for pipework, valve layout, pump types, level and control specifications but also benefits from the Flygt patented design and quality assurance.

## Tailored options to suit your development

The answer lies in the simplicity or complexity of your scheme, but you can rest assured that here at Xylem we can provide a solution to your wastewater pumping needs. Our pumping and system engineering experts will advise you through every aspect of your scheme and deliver a solution backed by the knowledge that we only use our very own Flygt pumps.

For simple and smaller applications, look no further than Flygt's prefabricated Packaged Pumping Stations, fully kitted out with pump(s), valves and pipe work, which can be delivered to site and simply placed in the ground. As the market leader in submersible pumps, we have developed a comprehensive range of Packaged Pumping Stations (PPS) that are suitable for single dwellings through to major developments.

For larger and more complex applications, our engineers specialise in the design of bespoke pumping stations which meet the Sewers for Adoption Legislation and applicable local water authority standard. Our highly skilled team is available to help you through every step of your project from pumping station design, through to installation, commissioning and maintenance.

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# The Whole Package

Xylem is more than simply a product manufacturer. We work hard to understand the challenges and demands faced by our customers, and we are proud to offer a turnkey solution, supporting you at every stage of your project: From the design, installation, commissioning and maintenance of new systems to the refurbishment of existing systems, all delivered by our own in-house experts.

## Xylem offers:

- Full compliance with Sewers for Adoption guidelines
- Dedicated design and contracts engineer
- Agreed SLA's and KPI's for your project
- Competitive prices
- Xylem's own Flygt Pumps
- Flygt remote monitoring
- Preventative Maintenance Contracts
- 24/7 nationwide emergency service support
- Remedial work to guarantee adoption



## Concertor™ N

The most intelligent wastewater pump on the market. Suitable for customers operating traditional on/off pump stations who want to benefit from easily adjustable pump performance, soft start and constant power functions as well as motor protection.



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# Design | Install | Commission | Maintain

From concept to completion our experts can help you at every stage of your project. Offering bespoke solutions to suit all applications and budgets, you can rest assured that we will future proof your project by designing to meet your local water company specifications.



## Design

### Meeting the design criteria

We liaise closely with the appropriate water authority at an early stage in every project to ensure that your pumping station will meet the authority's full design criteria and SFA requirements, paving the way for future adoption. At the same time, our expert designers will make sure that we can procure and build the most cost-effective pumping station possible.

Xylem provides a pre-adoption advisory service for UK property developers: We offer this service to avoid the difficulties facing many developers who still have other suppliers' pumping stations among their assets, because they were unable to transfer ownership to the local water authority. Our experienced consultants work closely with developer and local Water Company to guarantee successful adoption and transfer of the asset.

## Install

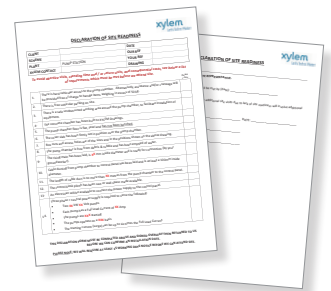
### Installation expertise

On receipt of your declaration of site-readiness document, we will conduct a site visit if required, for a visual inspection prior to installation. This avoids any unnecessary delays. Our experienced and fully certified engineers will then carry out staged electrical and mechanical installation to suit your programme of works.

Our standard operating procedures will give you peace of mind in the knowledge that all relevant ESH regulations are adhered to.

A typical guideline for a 12 week installation programme:

- Week 1** procurement of pumps and ancillary equipment
- Week 5** first fix of ancillary equipment
- Week 10** second fix of pumps and panel
- Week 12** third attendance for final commissioning and hand over



## Commission

### Commissioning expertise

Xylem's commissioning engineers are all approved by the NICEIC and offer a commissioning service for our pumping stations and related control equipment. Our commissioning service not only ensures the correct electrical connection of pumps, floats and ancillaries, but we will ensure that your pumping station is fully functional and optimised to your particular application upon completion.

## Maintain

Xylem in the UK provides a fully comprehensive aftercare service, including 24/7 emergency breakdown attendance, preventative maintenance contracts, workshop repair and pumping station refurbishments. It is our aim to provide customers with the highest possible level of care, from pre-sale and throughout the entire lifetime of the product. Our nationwide network of strategically located service centres is supported by a mobile team, reacting quickly to call-outs.

### Preventative Maintenance Agreements

A Preventative Maintenance Agreement (PMA) is a cost-effective service contract from Xylem TotalCare tailored to meet your specific requirements and budget. A PMA will identify potential weaknesses in your system and provide the opportunity to take action before it leads to a breakdown. Talk to your local sales representative to find out more.



### Monitoring and managing your assets

Xylem can provide each site with remote monitoring functionality. By monitoring your pumping station, it will give you 24/7 operational excellence and proactive service and support. Managing your pumping station, we can report energy usage, hours run, cycles performed, alarms and power failures. This can help you to reduce downtime and the potential of flooding.

### Warranty on repairs

Flygt has confidence in both its products and service skills, and offers a 12 month warranty on the whole pump - not just the repair.



### Nationwide Service Centres

Our nationwide network of strategically located service centres offers a comprehensive pumping station commissioning service, on-site M&E maintenance, 24/7 emergency call-out, workshop repair facilities, and pumping station upgrades and refurbishments.

# Monitoring and managing your assets

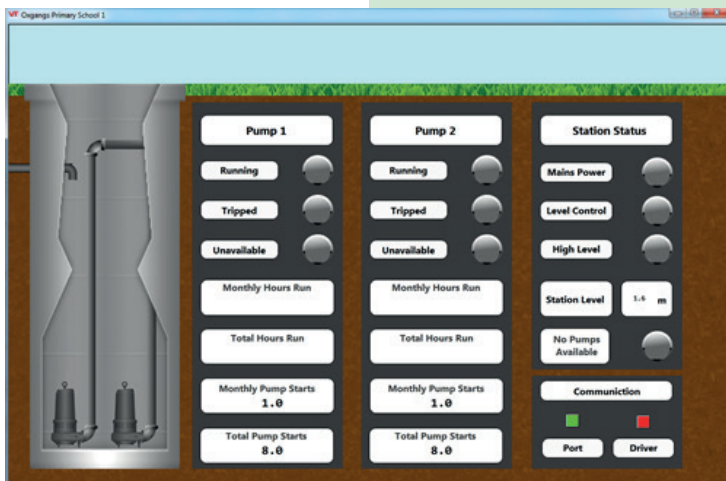
Effective monitoring of your pumping station will give you 24/7 operational excellence and proactive service and support. The main decision to make is whether you manage your own assets, or leave the work to us.

Xylem can provide each site with remote monitoring functionality, delivering alarm notifications direct to your phone or email account. For ultimate peace of mind let our team of monitoring and control experts manage your pump station for you: We can report energy usage, hours run, cycles performed, alarms and power failures. This can help you to reduce downtime and the potential of flooding.

## Data to make your maintenance decisions

Every pumping station has unique characteristics, so if you prefer to manage your own asset it's important to choose the right level of maintenance schedule for that pumping station. Xylem Cloud SCADA can gather data and notify you when maintenance is required, enabling you to make accurate decisions about when to send your maintenance teams, based on:

- Number of pump starts
- Pump runtime
- Number of alarms
- Reduction in efficiency
- Number of call-outs



Remote access to view your sites, with individual site pages and a dashboard to view the current status of each location.

# Quick selection guide and range overview

In many cases consultants and specifiers turn to our team at Xylem for their expertise in designing bespoke pumping systems for specific applications. But depending on the type of project you are working on, one of our Flygt Packaged Pumping Stations may provide a quick, reliable and cost effective solution. They use a simple, minimal design concept that is ideal for civil works where there is a need to reduce labour intensive tasks and a quick installation is required.

Our stations are prefabricated and available in a range of designs and sizes, all supplied complete with the necessary materials and equipment to allow ease and speed of installation and commissioning. Flygt Packaged Pumping Stations can be adapted to suit most individual requirements. Applications include domestic wastewater for a single household, through to large housing developments, effluent and wastewater from industrial units and commercial premises. Indeed, in any situation where wastewater needs to be pumped to a mains connection or where you need to upgrade existing arrangements, Xylem has a solution.

## Flygt TOPS Series

- For sewage, effluent and stormwater applications
- Incorporates the patented self-cleaning TOPS benching unit which reduces accumulation of solids in the sump of the chamber, ensuring the pumps do not get clogged
- Reduced servicing and unplanned maintenance
- The TOPS pumping station can be fully adoptable under the 'Sewers for Adoption' (SFA) standards
- Can be installed without a concrete surround (dependant on ground conditions) due to its robust construction and wall thickness

## SPS Series

- For Sewage, effluent and stormwater applications
- Designed as a cost effective alternative GRP option for Builders/ Contractors
- Suitable as a single or dual pumping station

## Micro Series

- For domestic wastewater and sewage from individual households
- Poly-Ethylene construction
- Suitable for installation above or below ground

## Compit Pumping Station

- Single or dual pump configuration
- Poly-Ethylene construction with Self Cleansing sump
- Applications include small housing developments, toilet blocks and commercial extensions

	TOPS 80	TOPS 100	TOPS 150	TOPS 150XL	SPS 1000	SPS 1250	SPS 1500	SPS 1800	SPS 2500	Micro 3	Micro 4	Micro 5	Micro 5G	Micro 6+6	Micro 7	Micro 7G	Micro 10	Compit
Single Pump		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Twin Pump	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓			✓	✓
Pump kW	1.3-4.4	1.3-7.4	1.5-22	1.5-22	0.75-7.4	0.75-7.4	0.75-7.4	0.75-22	0.75-45**	0.25	0.25	0.55-1.1	0.55-1.1	0.75-2.4	0.75-2.4	0.75-2.4	1.5-2.4	1.5-2.4
Phase	1 or 3	1 or 3	1 or 3	1 or 3	1 or 3	1 or 3	1 or 3	1 or 3	1 or 3	1	1	1	1	1 or 3	1 or 3	1 or 3	1 or 3	1 or 3
Pipework ø	50-80 mm	50-100 mm	50-150 mm	50-150 mm	40-65 mm (80 Outlet)	40-80 mm	40-100 mm	40-150 mm	40-200 mm	1.25"	1.5"	1.5"/DN50	1.5"/DN50	DN50	DN50	DN50	DN50/DN65	DN50
Floor Mounted										✓	✓	✓		✓	✓		✓	
Below Ground	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓*		✓	✓	✓
Chamber Depth (approx)	2.1-4m	2.1-6m	2.4-6m	3-6m	1.5-2.5m	2-4.5m	2-4.5m	2-4.5m	2-4.5m	0.4m	0.6m	0.7m	1m	0.85m	0.7m	1m	1.3m	2m

The above are standard models. Bespoke designs are also available. \* Buried in a suitable structure \*\*For surface water applications

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# Packaged Pumping Station Questionnaire

Please complete as much of the below as possible and email to us at [fgb.pps@xylem.com](mailto:fgb.pps@xylem.com)  
Any queries, please contact us on 01252 513 366

## Pumping Station - Design Questionnaire Page 1 of 2

Essential information required

### Company Name & Full Postal Address for Quotation

[Redacted]	
[Redacted]	
[Redacted]	
Postcode:	[Redacted]
Phone:	[Redacted]
Fax:	[Redacted]
Contact name:	[Redacted]
Email:	[Redacted]

### Site Name & Full Postal Address including POSTCODE

Project name:	[Redacted]
Project Address:	[Redacted]
[Redacted]	
What liquid will the pumps be handling ?	[Redacted]
Number of Dwellings ?	[Redacted]

### For Sewage or Effluent Pumping Applications

Incoming flow rate (if known) or number of properties or number and type of sanitary appliances feeding into the pump station.

Is your pumping station private or will it be adopted, if so, please name the adopting authority

Are there any pump discharge restrictions ?

[Redacted]	
[Redacted]	
[Redacted]	L/Sec (Maximum)

### For Surface or Storm Water Pumping Applications

Total wetted area in square metres or the known peak inflow ?

Are there any pump discharge restrictions ?

If restricted discharge, state top water level of attenuation.

[Redacted]	Sq.m or L/Sec
[Redacted]	L/Sec (Maximum)
[Redacted]	m

### Other pumping applications ( i.e. nuisance / ground water etc. )

Pump discharge rate (If known)

[Redacted]	L/Sec
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### General Information required for all pumping applications

Pump/s in GRP or PC Concrete Chamber ? \*

Number of pumps required ? - (Single or twin for 100% backup) \*

Electric supply available ? (230v single phase or 400v three phase)

Planned location of the control panel ?

Control panel distance from the pump chamber ?

Is a weatherproof enclosure required for the control panel ? \*

If so, floor or wall mounted ?

Is extra kiosk space required for an electricity meter ?

Access cover wheel loading required ? (See next page for details)

Xylem's after-sales maintenance services details required ?

Is Telemetry system required ?

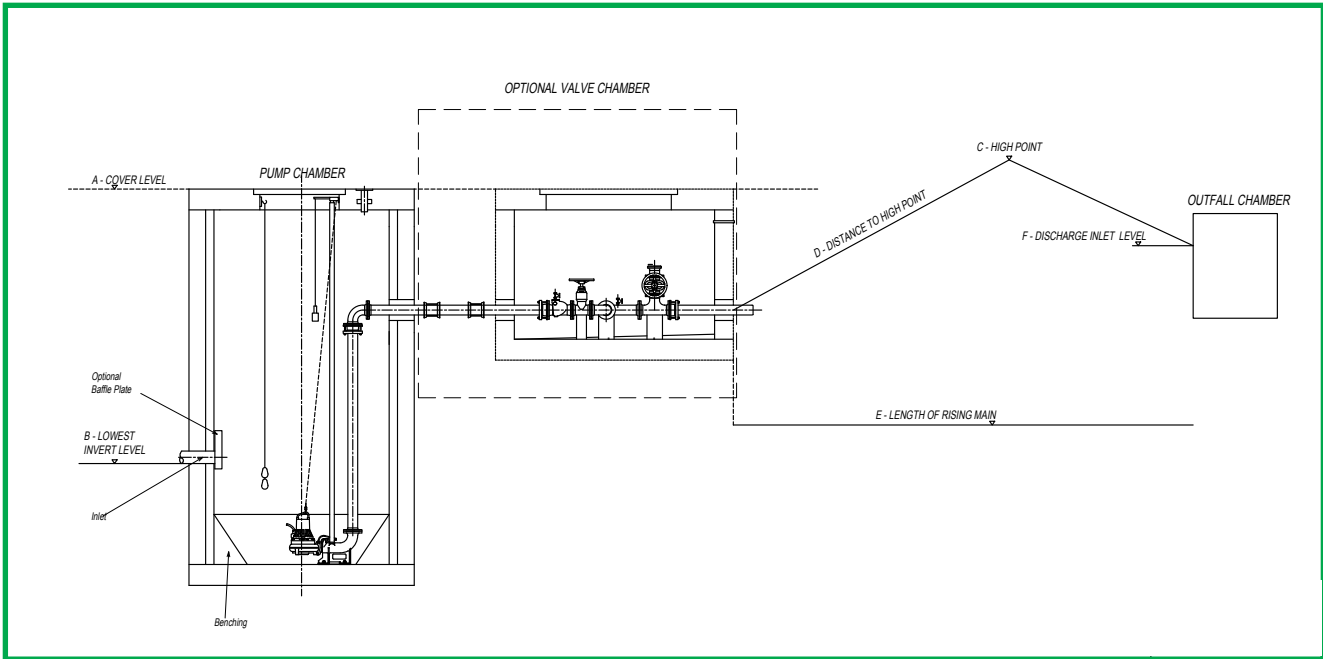
[Redacted]	
[Redacted]	
[Redacted]	
[Redacted]	
[Redacted]	Metres
[Redacted]	
[Redacted]	
[Redacted]	
[Redacted]	Tonnes
[Redacted]	
[Redacted]	

\* We will advise if not known.



**Pumping Station - Design Questionnaire Page 2 of 2**

Please complete as many boxes as possible, if you have any difficulties please contact our Estimating Department



A:

B:

C:

D:

E:

F:

Any bends on the main ?  
If so, number of LR or SR bends

Lowest Private Lateral  
(SFA Storage)

# Number of Inlets

Outside Diameter Inlets

Xylem Pumps GRP Tank Range

Diameter (mm)

1200

1500

1800

2500

1200

Access Cover Rating Required

1 Tonne for pedestrian use

7.5 Tonne for cars, light vehicles

15 Tonne for HGV, dustcarts etc

**Please duty select as required**

We can supply special covers for paved areas, blockwork etc -

Details on request

PLEASE SUPPLY MANHOLE SCHEDULE, DRAINAGE LAYOUT and RISING MAIN LONG SECTION, if available

24-Hour Emergency Storage of foul flows as recommended with the 2010 Building Regulations

If required state volume in  Litres (*only applies to foul applications*)

Alternatively contact us for further advise.

Additional Information

# Our packages can be equipped with as many inlets as practically possible enabling them to be used in place of intercepting manholes if required. They are also available in various depths and expandable by 0.5M increments - Please contact our Estimating Department for details or visit our website on [www.xylem.com/uk](http://www.xylem.com/uk)

# 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 [xylem.com](http://xylem.com)



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APPROVED CONTRACTOR



UTILITIES VERIFICATION & ASSESSMENT SCHEME

