

# PUMPS AND PACKAGED PUMPING STATIONS

LOWARA OFFER THE COMPLETE PACKAGE, FOR WASTEWATER IN BUILDING SERVICES









# Introducing our all NEW Pumps and Packaged Pumping Stations

Lowara Packaged Pumping Stations (PPS) use a simple concept designed for situations where civil work and installation time must be kept to a minimum. The stations are prefabricated and available in various sizes, supplied complete with all the necessary equipment to allow ease and speed of installation.

# **Lowara Experience**

At the heart of each PPS is the pump itself. Lowara is a leading supplier of pump technology to the Building Services market, offering a comprehensive range of pumps to suit the most arduous applications.

# **General Applications**

By offering a wide choice of pumps and controls, Lowara/Flygt PPS can be sized to suit most individual requirements. Applications include domestic wastewater for a single household right through to large housing developments, industrial units and commercial premises. Indeed any situation where sewage or surface water needs pumping to a mains connection. The tanks can also be used to increase existing arrangements.

Our know-how and our extensive resources for research and development, as well as our extensive training programs are yours to benefit from.

Find out more on www.lowara.co.uk





# MINIBOX and MICRO 4 Series



MINIBOX Series Prefabricated compact lifting station designed to collect domestic wastewater (excluding toilet waste) where gravity drainage is not possible.

Installed on the ground or buried in a suitable structure.

### Versatile

- 85 litre polythene tank.

## Easy to install

- Complete with: screen and sand filter basin, 1¼" flexible pipe equipped with a check valve; left or righthand connection.
- Three inlet pipe positions.
- Installation is fast and easy, just connect the pipes and plug it in.

# Easy to use

- Minibox is fitted with a screen and sand filter basin for the collection of water infiltration or runoff, as in the case of a garage ramp.



Minibox Series 85 litre tank.

# **DOC Pump Series**

Cellar drainage pumps. Standard or tube float switch available

Capacities to 14m³/h Head to 11 metres Powers to 0.55kW Solids to 20mm





# **DOMO Pump Series**

Drainage/wastewater pumps.

Standard or tube float switch available Capacities to 40m³/h Head to 14.5 metres Powers to 1.5kW Solids to 50mm



# MICRO 4 Series Prefabricated lifting station for clean and grey water according to EN 12050-2 standard.

Free-standing or below ground, works quietly, tank designed in discreet neutral tone.

### Versatile

- 80 litre polyethylene tank, highly resistant to chemical attack and to UV rays.

# Easy to install

- As easy to install as a washing-machine, simple to plumb in (with a choice of drilling points).
- Built-in check-valve device.
- Controls labelled with pictograms.

### Easy to use

- Large usable capacity to reduce number of pump restarts.
- Overall volume allows for 80 litre reserve in case of power-cut.
- Operates fully automatically with low maintenance.
- Cover can be screwed and unscrewed manually.



Micro 6 Series 270 litre tank.

# MICRO 6 Series and MICRO 6+6 Series

# MICRO 6 and MICRO 6+6 Series Prefabricated lifting station for wastewater according to EN 12050-1&2 standard.

# Versatile

- Micro 6 version 270 litre tank (Single pump).
- Micro 6+6 version 550 litre tank (Dual pump).
- Tank made from 100% recyclable polyethylene, highly resistant to chemical attack and UV rays.
- Airtight anti-pollution tank, to according to standard EN 12050.

### Easy to install

- Choice of positions allows best-fit location for inlet connection.
- Micro 6 and Micro 6+6 can be installed on the ground or buried in a suitable structure.
- installation is quick and easy: for the single-phase versions you just connect the pipes and the electrical cables; for the three-phase versions you also need to connect the control panel.
- The Micro 6 and Micro 6+6 are provided with side handles for ease of handling.
- Pre-installed delivery pump and unions.

# Easy to use

- Angled design of tank base makes for less retention and easier cleaning.
- Operates fully automatically with low maintenance.

# **Dependability and servicing**

- Tried-and-tested pump technology.
- Pump quick and easy to remove with ring nut located near the cover.

# Standard version

- Standard version equipped with sliding device, delivery pipes and ball check valve.

# Accessories

- Alarm kit.
- Manual pump + seal.
- Seals kit.
- Control panel.



**DOMO GRI** 

**Pump Series** 

with grinder device.

Powers to 1.1kW

Capacities to 6.6m<sup>3</sup>/h Head to 25 metres

Drainage/waste water pumps



Drainage/wastewater.
Capacities to 15m³/h
Head to 52 metres
Powers to 5.1 kW
Discharge sizes to DN50
Max. permissible solids to 6mm
Motors 2-4 poles

Micro 6+6 Series 550 litre tank.





# MICRO 10 Series

# MICRO 10 Series Prefabricated lifting station for domestic wastewater and sewage from individual households. Suitable for installation below ground.

### Versatile

- Micro 10, two sizes available: height 1300mm, diameter 1100mm, 1200 litre tank. height 2000mm, diameter 1100mm, 1900 litre tank.
- Wide range of available pumps.
- Polyethylene tank, highly resistant to chemical attack (acids, alkaline compounds oils, dairy products, hydrocarbons).
- Tank designed to withstand soil stress.

## Easy to install

- Drillable inlet surface makes for versatile connection options.
- Drillable planes allow space for cables or air vents.
- Connection to inlet piping via a flexible joint for quick fitting.
- 'All-In-One' kit includes check valve and comes complete with all internal connecting pipes ready-fitted.
- Tank design incorporates a reinforced base with anchoring holes to enhance rigidity and anchoring into the concrete base.
- Lifting tabs make secure installation easier.
- Feet on tank help stabilise the station during the installation process.

## Easy to use

- Cover can be screwed and unscrewed manually.
- Automatic failsafe backup dual-pump system.
- Dual-pump system with control panel offering automatic pump mode setting.
- Can run fully automatically with low maintenance.

# **Dependability and servicing**

- Tried and tested pump technology.
- Fitted mounting base and steering bar specially designed to facilitate pump removal.



# GLS-GLV Pump Series

Wastewater/sewage pumps in cast iron with single channel or vortex impeller.

Capacities to 244m³/h
Head to 41 metres
Powers to 7.4 kW
Discharge sizes to 100mm
Motors 2-4 poles



Micro 10 DN50 version Tank Height 1300mm Tank Diameter 1100mm 1200 litre tank.



Micro 10 DN50 & DN65 version Tank Height 2000mm Tank Diameter 1100mm 1900 litre tank.



# **TOPS™** Series

# **TOPS™ Series Customised** prefabricated PPS for wastewater.

### **Prefabricated TOPS pumping stations**

TOPS Series comes in a range of sizes for depths between 2 and 6 meters, and capacities between 4 and 95 litres per second. Prefabricated TOPS pump stations from Lowara are the perfect choice for situations where civil work and installation time must be kept to a minimum. We assist you in dimensioning your pump station and completing the order, which reduces project planning and installation costs.

### Standardised and prefabricated

Our modules simplify the construction and assembly of a complete pump station. Your TOPS pump station is delivered pre-assembled with your configuration of valves, discharge piping, inlet and outlet connections-and is easily transportable to even remote locations. Once in the ground, the pumps, monitoring and control equipment are fitted, the piping, power and control cables are connected, and the station is ready to start up in minimal time.

# **Cleans itself**

Using submersible pumps reduces the cost of constructing pump stations. But the flat shape of a conventional sump floor still promotes the build up of sludge, which will require regular cleaning. This is not only time-consuming and expensive but also can present safety hazards to personnel. With the TOPS pump sump, you can forget regular, costly maintenance to remove solids. Designed to be self-cleaning, the geometry of the TOPS pump sump floor is hydraulically optimised to increase turbulence during pumping. Settled solids are re-suspended so that they can be pumped away, leaving only a minimum of residue beneath the pumps.

# **Quality Construction**

Because of its self-cleaning design, you can fit a TOPS pump station and then virtually forget it. The station is made of Glass Fibre Reinforced Polymer (GRP) - a strong, lightweight material with superior resistance to corrosion, guaranteeing your pump station a long life. All raw materials used in it's manufacture meet ISO 2797 and ISO 2559. All stations are batch tested to BS EN 12050. Combined with Lowara submersible pumps and other Lowara Accessories to improve performance, your TOPS station will rarely require maintenance.





# **GLS-GLV Pump Series**

Wastewater/sewage pumps in cast iron with single channel or vortex impeller

Capacities to 244m³/h Head to 41 metres Powers to 7.4 kW Discharge sizes to 100mm Motors 2-4 poles



# Control panels and monitoring

We have developed for the UK markets a comprehensive range of pump control panels with basic start and stop functions to highly sophisticated, intelligent Smart panels using state-of-the-art control systems and monitoring.

Incorporating Lowara pump controllers into our panels, we have utilised our wealth of knowledge with regards to pumps and fluid handling to produce an intelligent product that ensures your pump station is working to its optimum performance, monitoring, recording and alerting you to any potential issues.

With the advanced Smart Control panel we have built in variable frequency drives that are managed by our patented software PumpSmart. This will not only monitor your pump stations performance but accurately match the Variable Frequency Drives (VFD) to the hydraulic system so that you have improved efficiency and reduced energy consumption. Here at Lowara, we have the experience and knowledge to supply you with the right monitoring and control equipment, to make your pump station function optimally with your pumps and for your applications.

# Control

Our Basic 'Compact' control panel has the start/stop function activated by floats or level switches. Moving up to the Standard 'iCompact' control panel with a state-of-the-art Lowara pump controller which can operate from level switches or an analogue level sensor. The pump controller offers a range of flexible control systems and is capable of providing logged data including; pump status, number of pump starts, pump run time and local alarms; up to highly sophisticated monitoring and control systems with advanced data logging to provide statistics and trend reports. In addition, all Standard 'iCompact' control panels can be configured to run regular cleaning cycles automatically.

Our Advanced 'SmartCompact' control panel is tailored to incorporate Variable Frequency Drives (VFD) and provides the complete solution for connection to your pump.

PumpSmart software provides motor operating and control characteristics for driving wastewater pumps at optimum efficiency in wastewater applications.

# Communication

Lowara Control Panel Range\* offers a range of options for communication links with a remote operator and/or SCADA system using industry standard protocols including WITS, MODBUS, COMLI over dedicated or dial-up phone line, Ethernet (IP), radio link or GSM/GPRS (mobile phone) systems.

# Monitoring

By using Lowara pump controllers in your control panel, without any additional equipment, you can accurately and efficiently monitor the status of the pump station through pump status, number of pump starts, pump run time, pump capacity, operating trends, pump station inflow, outflow and overflow.

\* The Basic model provides only limited communications









# **Pumps and Tanks**

The range offers complete flexibility enabling the product to be tailored precisely to your application. The range is constructed using high quality components whilst following strict manufacturing standards therefore delivering an extremely reliable and robust product.

S		MINIBOX	MICRO 4	MICRO 6	MICRO 6+6	MICRO 10 1300mm	MICRO 10 2000mm	TOPS 80	TOPS 100	TOPS 150
PUMPS	Single Pump									
	Twin Pump									
PIPE WORK Ø										
	40mm									
	50mm (2")									
	65mm (2.5")									
	80mm (3")									
	100mm (4")									
	150mm (6")									
	Suitable for floor mounting									
CHAMBER DEPTH	0.60m									
	0.84m									
	1.30m									
	2.00m									
	2.10m									
	2.40m									
	3.00m									
	4.00m									
	5.00m									
	6.00m									

The above information shows the standard tank options available, however the TOPS package station can be bespoke manufactured to suit specific requirements. Please contact the Lowara sales office.







