

Environmental

24hr Storage  
to meet  
Building Regulations



# **Klargester** HillMaster

A Range of Package Pump Systems for  
Residential & Commercial Developments



*Sustainable, Reliable, Affordable*



# **Kingspan**<sup>®</sup>

# HillMaster

A Range of Package Pumping Systems for Residential & Commercial Developments

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HillMaster pumping Systems are suitable for applications where foul drainage by gravity is not possible, including:

- Domestic sewage pumping
- Effluent pumpsets for sewage treatment plants
- Surface water pumping systems
- Septic tank pumpsets
- 24 hour pumped storage chambers
- Bespoke systems

## Features

- Complete package systems delivered direct to site
- Ready for immediate and simple installation
- Factory built and quality assured
- Maintenance free GRP and polyethylene chambers
- High-level alarm fitted as standard
- Full Kingspan Environmental after sales maintenance available
- All Kingspan Environmental products are manufactured under the quality procedures of BS ISO 9001: 2000

## Design

All standard Kingspan Environmental package pump systems are supplied with GRP/polyethylene chambers, pump(s), high-level alarm, pre-set automatic level control, non-return valve, discharge pipe and all connections. Units are supplied with pre-benched bottoms.

## Options

- Wide range of emergency overflow tanks
- 110mm or 160mm inlet connections
- Various invert depths and positions
- Standby replacement pumps
- Internal pipework in plastic, galv or cast iron
- Kiosks with warning beacons
- Telemetry systems

## Bespoke Systems

Kingspan Environmental manufactures pumping chambers of various diameter and depths, with pumps, guide rails and control equipment fitted as per the client's specification. Please contact us direct and we will be pleased to quote against your specific requirements.

## Delivery and Installation

Units are normally delivered by flat bed vehicle and crange facilities should be available on-site for off loading. Installation is quick and economical, the unit requiring only a concrete base and surround. Comprehensive installation instructions are supplied with every unit.

## Advice

The information in this sales literature is, by necessity, brief. For more detailed technical literature and drawings regarding applications, installation, maintenance or specific options, please contact Kingspan Environmental. We have both internal and field sales staff who will be pleased to assist.

## Maintenance

Kingspan Environmental package pump systems are designed for minimum maintenance.

Kingspan Environmental offers a full after sales service involving planned maintenance visits on the U.K. mainland.

## Legal Requirements

Prior to installation, there is a legal requirement to obtain permission from the appropriate agencies (including connection to a public sewer).

## 24hr Storage to meet Building Regulations

**Kingspan Environmental's HillMaster24 pump station range has been designed in accordance with Building Regulations Document H1 Foul Drainage, page 16. (Pumping Installations) Section 2.39. This states:**

*“ Where foul drainage from a building is to be pumped, the effluent receiving chamber should be sized to contain 24 hour inflow to allow for disruption in service. The minimum daily discharge of foul drainage should be taken as 150 litres per head per day for domestic use. For other types of building, the capacity of the receiving chamber should be based on the calculated daily demand of the water intake for the building. Where only a proportion of the foul sewage is to be pumped, then the capacity should be based pro-rata. In all pumped systems the controls should be so arranged to optimise pump operation. The required 150 litres per head per day volume should reflect the storage volume in the station pump or station and overflow tanks. ”*

# HillMaster

The **HillMaster** range offers a competitive solution to the pumping requirements of both domestic and industrial applications. Often it can be preferable to keep civil work and installation costs down to a minimum but such economy should not mean any shortfall in quality.

The 1.0m diameter units are manufactured in tough polyethylene using advanced rotational-moulding technology, while the 1.25, 1.8 and 2.6m diameter units are made from maintenance-free GRP. All units are engineered with the highest quality parts and fittings.

- High-level alarm as standard (optional as marked \*)
- Various invert depths
- Internal lifting chains and guiderails\*\* (as specified)
- Wide range of pump options including macerators/solids handling/vortex
- Pedestrian/vehicle covers

\*\* Please note, guiderails are not standard fitment on effluent pumpsets unless specified.



	1.0m x 2.0m Rotomoulded	1.0m x 2.5m Rotomoulded	1.25m x 2.0m GRP	1.25m x 3.0m GRP	1.25m x 3.5m GRP	1.8m x 4.0m GRP
<b>SINGLE PUMP</b>	✓	✓	✓	✓	✓	✓
<b>TWIN PUMP</b>	✓	✓	✓	✓	✓	✓
<b>SINGLE PUMP</b>	✓	✓	✓	✓	✓	✓
<b>TWIN PUMP</b>	✓	✓	✓	✓	✓	✓
<b>SINGLE PUMP</b>	✓*	✓*	✓	✓	✓	✓
<b>TWIN PUMP</b>	✓	✓	✓	✓	✓	✓

✓ Represents standard models. ✓ Represents special order models. \* Optional High-level alarm.

**Need Help? Call the HillMaster Hotline on 028 302 66799 or complete our online Package Pump Enquiry Form at [www.kingspanenv.com/pollutionirl/hillmaster](http://www.kingspanenv.com/pollutionirl/hillmaster)**

# HillMaster24

The **HillMaster24** range has been specifically designed to meet the requirements of Building Regulations Document H1 Foul Drainage. This regulation recognises the need for pump stations to have a 24hr storage capacity in case of a disruption in service (such as a power failure).

This comprehensive range offers an advanced solution to larger domestic and industrial applications. For large-capacity flows (such as stormwater run-off from hard-standing areas), horizontal holding chambers are available in a comprehensive range of sizes.

- High-level alarm fitted as standard
- Various invert depths
- Internal lifting chains and guiderails fitted as standard
- Wide range of pump options including macerators/solids handling/vortex
- Combined chamber capacity up to 90,000 litres
- Pumping distances up to 1000 metres
- Pedestrian/vehicle covers
- Kiosks with warning beacons (option)
- Telemetry systems (option)



1.25m x 3.5m GRP	1.8m x 3.0m GRP	2.6m x 3.3m GRP	2.6m x 4.0m GRP
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓

**Need a larger pumping system?**  
 Our Pumpstor24 range goes up to 75,000+ litres.  
 Ask for a brochure.

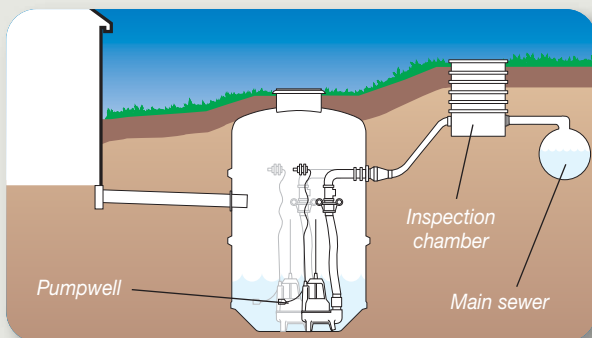
✓ Represents standard models. ✓ Represents special order models.



## Domestic Sewage Pumpsets

If the main sewer is accessible but at a higher level to (or some distance from) the domestic foul drain, then a domestic sewage pumpset may be used to pump unsettled sewage directly to the main.

Whilst single pump units are acceptable for individual houses, it is recommended that twin pumping systems be used for multiple dwellings.



## Key Points to Consider

Firstly, don't worry. Kingspan Environmental have a team of pump experts on hand to advise you on the correct product for your site. All we need from you is information on key factors such as:

- Application: e.g., domestic residential / commercial
- Sewage, effluent or surface water?
- Inlet depth (below ground level)
- Pumping distance and lift
- Electrical supply

Simply give us a ring or log on to our website to download our **Package Pump Enquiry form**. This form will guide you on what measurements you will need and any additional data. Once completed, phone, email, fax or post it back to us and our team will provide you with a solution.

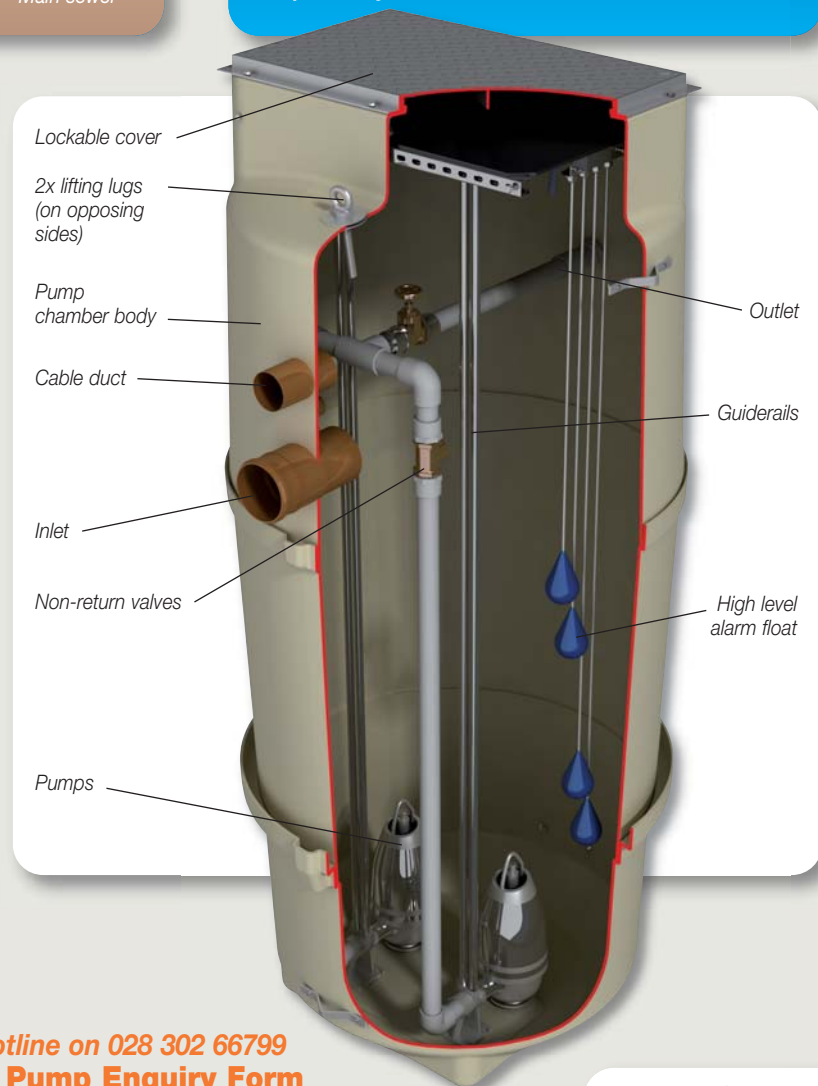
## Effluent Pumpsets

A septic tank or treatment system pumpset can be used to disperse settled effluent when a site has a high water table or adverse invert levels. Installed after the septic tank or treatment system and pumping settled effluent up to an inspection chamber, flow to the drainage system then takes place by gravity in the normal way.

## Surface Water Pumpsets

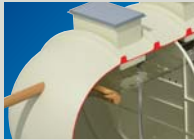
Due to the amount of rainwater that can fall in a short time period, Surface water run-off is often the most demanding of all applications, whether hard-standing or roof areas.

Kingspan Environmental offers a comprehensive range of packaged pump systems in both standard form or manufactured to bespoke specifications. Careful calculation of the run-off areas is essential when sizing these pump systems.



**Need Help? Call the HillMaster Hotline on 028 302 66799 or complete our online **Package Pump Enquiry Form** at [www.kingspanenv.com/pollutionirl/hillmaster](http://www.kingspanenv.com/pollutionirl/hillmaster)**

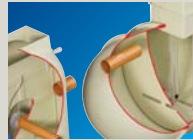
# Kingspan Environmental Solutions



Commercial Sewage Treatment Plants



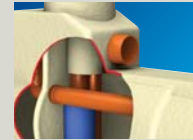
Large Capacity Pumping Stations



Stormwater Attenuation Systems



Residential & Commercial Rainwater Harvesting



Oil/Water Separators



Domestic Sewage Treatment Plants



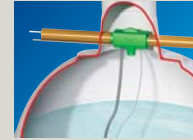
Packaged Pump Systems



Reed Beds



Domestic Rainwater Harvesting



Garden Watering Systems



Septic Tanks



Below Ground Storage Tanks



Grease & Silt Traps



Packaged Drainage Systems

## Klargester Environmental Approved Installers

Strategically located throughout the UK and Ireland, Klargester Environmental Approved Installers are appointed following a selection process which assesses their installation expertise, reputation and financial status.

These performance criteria, together with their design skills and knowledge of Klargester Environmental products are also reviewed to ensure that the highest levels of professionalism are maintained.

## Other Applications

As specialists in wastewater we are able to provide solutions for many different applications. Please contact us for further information.

## Kingspan Environmental Service

Who better to look after your wastewater product than the people who designed and built it?

Kingspan Environmental have a dedicated service division providing maintenance for wastewater and rainwater products.

Factory trained engineers are available for site visits as part of a planned maintenance contract or on a one-off call out basis.

To find out more about protecting your investment and ensuring peace of mind, contact us on **(NI) 028 302 54077, (IRL) 048 302 54077** or visit us online at **www.kingspanenvservice.com**



Accredited to  
**BS EN ISO 9001: 2008**  
**BS OHSAS 18001: 2007**



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Visit our website **www.klargester.ie**, or our company website **www.kingspanenv.com**

*Klargester is part of Kingspan Environmental.*

*In keeping with Company policy of continuing research and development and in order to offer our clients the most advanced products, Kingspan Environmental reserves the right to alter specifications and drawings without prior notice.*

