www.ttpumps.com / T: +44 (0) 1630 647200



PUMPING STATIONS 01

U4

06

07

- 00

10



# PUMPING STATIONS INDEX

		APPLICATIONS								
PUMPING SYSTEM	SHOWER	WASHING MACHINE	BIDET	BATH	WASH BASIN	DISH WASHER	TOILET	DOMESTIC WASTE WATER	PAGE	
T-T UTILITY BOX	<b>~</b>	<b>~</b>	×	<b>~</b>	<b>~</b>	<b>~</b>	×	×	318	
BLUE BOX	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>v</b>	319	
LOOPAK	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	<b>~</b>	<b>v</b>	<b>~</b>	320	

	APPLICATIONS									
PUMPING SYSTEM	DOMESTIC WASTE WATER	DRAINAGE WATER	FOOD PROCESS	SEWAGE & TREATMENT WORKS	SCHOOL/ HOSPITAL	HOTEL/ NURSING HOME	HOUSING	WASTE WATER	PAGE	
TROJAN	<b>~</b>	~	×	<b>~</b>	~	<b>~</b>	<b>~</b>	V	323 – 326	
INDUSTRIAL BLUE BOX	×	•	×	<b>~</b>	×	×	×	×	327	
PLUT0	<b>~</b>	<b>~</b>	×	×	×	×	×	<b>v</b>	329	
PLANET RANGE	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	V	330 – 331	
XL & XXL	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	V	332 – 333	
ADOPTABLE	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	V	335 – 338	
LARGER / BESPOKE	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	V	339	
READY SUMP	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	V	340 – 341	

		APPLICATIONS							
PUMPING SYSTEM	INDUSTRIAL	HOUSE	GARDEN	TOILET	WASHING MACHINE	PAGE			
RAINCYCLE	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	342 – 345			

	APPLICATIONS								
PUMPING SYSTEM	DOMESTIC WASTE WATER	DRAINAGE WATER	FOOD PROCESS	SEWAGE & TREATMENT WORKS	SCHOOL/ HOSPITAL	HOTEL/ NURSING HOME	HOUSING ESTATE	WASTE WATER	PAGE
PUREFLOW	<b>~</b>	×	×	V	<b>~</b>	<b>~</b>	<b>~</b>	<b>v</b>	346 – 347

For selection questionnaires please refer to pages 349 – 351.

T-T reserve the right to amend product pricing and technical specifications without prior notice. Please refer to our website or contact our sales team for accurate information. ©T-T PUMPS Ltd. 2016. All images are for illustration purposes only.



### INTRODUCTION

T-T Pumping Stations boasts more than 55 years in providing pumping systems from the smallest to largest schemes, from a simple system to a highly complex scheme requiring many disciplines.

Over our many years in the industry we have worked hard to collect some of the best knowledge in the design and provision of pumping stations. This has enabled us to form six strong divisions of expertise. The collective divisions under one roof, which do not rely on subcontractors, have the expertise you can trust and rely upon. Quality products and engineering are essential in a demanding industry where reliability and efficiency are paramount.

T-T also offer a range of Planet® Package Pumping Stations, which are BBA accredited. Additionally our Uniqa® range of pumps has ATEX approval and attains the IE3 rating for efficiency.

Adoptable Pumping Stations have been a main activity of the company since the privatisation of the Water Companies of England and Wales, we work closely with all these companies to ensure that all pumping stations obtained Adoption at the earliest practical date.

At T-T we are always looking to innovate and provide pumping solutions that provide rapid, economic and safe installation. In this 4th edition catalogue you will find a range of new products including:

#### - The Ready Sump®

A sewage, drainage and effluent pumping station precast sump designed with benefits including reduced health and safety risks on site, reduced construstion time and economic installation.

#### - The T-T Trojan®

A range of compact above ground package pumping stations, that are suitable for surface water, sewage and drainage applications where a conventional below ground pumping station is not a viable option. These fully assembled lifting stations are manufactured in single or dual options, and come complete with vortex or grinder pumps and control equipment fitted as standard.

#### **Important**

The information given is for your initial guidance. For each scheme, general arrangement drawings are issued on receipt of order. For your further assistance, more comprehensive details are available and we will be pleased to provide additional information and advice.

Our aim is to provide you with a completely satisfactory solution for your pumping needs.

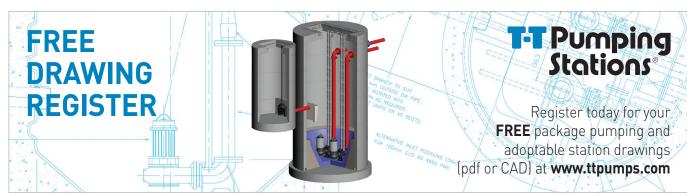
















## T-T UTILITY BOX

The T-T Utility Box is a high quality polypropylene tank intended for collecting water exclusively from domestic drains, including washing machines, showers and sinks.

Neatly constructed and with a small footprint, the Utility Box is a versatile and easy to install.

#### **APPLICATIONS**

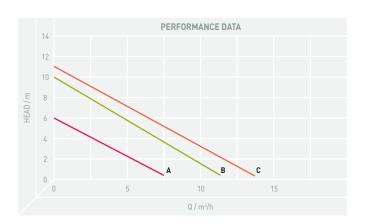
- REMOVAL OF DOMESTIC WASTEWATER WITHOUT SOLIDS I.E. KITCHEN, UTILITY ROOMS AND BASEMENTS
- FOR INSTALLATION WITHIN **BUILDING AND BELOW GROUND SPACES**

#### **FEATURES**

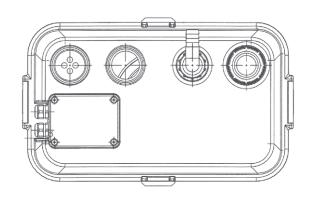
- PLUG AND PLAY INSTALLATION
- POLYPROPYLENE CONTAINER WITH 10L USABLE VOLUME
- INTERNAL INTEGRAL LEVEL CONTROL
- AUDIBLE ALARM IN CASE OF CRITICAL HIGH WATER LEVEL
- FREE CONTACT FOR AN EXTERNAL ALARM OF WASHING MACHINE STOP BUTTON

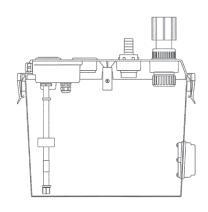
- PUMP IS FIXED TO THE CONTAINER LID FOR EASE OF MAINTENANCE
- NO CABLE GLAND ON THE CONTAINER
- SEPARATE CONNECTION FOR WASHING MACHINE
- FITTED WITH ONE SHOWER INLET (ONLY 80mm OFF THE FLOOR)
- OPERATING TEMPERATURE 40°C (SHORT PERIOD: UP TO 90°C)
- PRESSURE OUTLET 11/4" WITH INTEGRATED CHECK VALVE
- VENTILATION BY INTEGRATED ACTIVE CARBON FILTER
- 1.5 METER POWER CABLE
- SOLIDS HANDLING 10mm





TYPE	CURVE	FREE PASSAGE mm	WEIGHT kg	CODE	PRICE £	DELIVERY STATUS
T-T UTILITY BOX 1	<b>/</b> A	10	15	PZN/UTILITYB0X-1	460	-
T-T UTILITY BOX 2	<b>/</b> B	10	16	PZN/UTILITYB0X-2	530	-
T-T UTILITY BOX 3	<b>/</b> C	10	17	PZN/UTILITYB0X-3	550	-























### **BLUE BOX**

The Blue Box is a Polyethylene Lifting Station, ideal for lifting household waste water, where gravity drainage is not possible. There are four sizes available, the smallest being the Blue Box 90 litre (for 1 pump) and the larger version being the Blue Box 400 litre (for 2 pumps). These units are designed to be used with vortex or grinder pumps.

There are two installation options available for the Blue Box: fixed installation and an Auto-coupling option using the DAC system.

The pump range to be used with the Blue Box are the following, please see our pump literature or website for these particular ranges for further information:

- DG Blue Pro 50, DG Blue Pro 75, DG Blue Pro 100, DG Blue Pro 150, DG Blue Pro 200
- \*GR Blue Pro 100, \*GR Blue Pro 150, \*GR Blue Pro 200

#### **APPLICATIONS**

- DOMESTIC & INDUSTRIAL APPLICATIONS FOR THE REMOVAL OF SEWAGE AND DRAINAGE WATER
- CELLARS & BASEMENTS
- EXTENSIONS & **CONSERVATORIES**
- \*COMPATIBLE WITH THE DAC SYSTEM OPTION

#### **FEATURES**

- POLYETHYLENE CONSTRUCTION
- SUITABLE FOR VORTEX AND GRINDER PUMPS 230V / 400V
- PEDESTRIAN COVER
- DAC SYSTEMS ALLOW EASY REMOVAL OF PUMPS FOR SERVICE AND MAINTENANCE



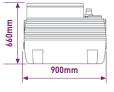


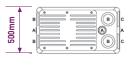




#### **BLUE BOX** 250 litre

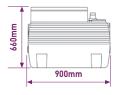
A: Ø 2" B: Ø 110mm C: Ø 125mm

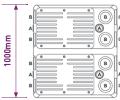




#### **BLUE BOX** 400 litre

A: Ø 2" B: Ø 110mm C: Ø 125mm





	PUMP TYPE	V / PHASES	kW	Α	RPM	OUTPUT	DELIVERY	SUI	TABLE FO	R BLUE	вох
						"/mm	STATUS	90L	150L	250L	400L
	DG BLUE 40/2/G40V A1BM/50	230V / 1Ph	0.3	2.3	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm	•	*			
	DG BLUE 50/2/G40V A1BM/50	230V / 1Ph	0.37	2.8	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm	•	*	*		
	DG BLUE 75/2/G40V A1BM/50	230V / 1Ph	0.55	4.1	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm	•	*	*		
	DG BLUE 100/2/G40V A1BM/50	230V / 1Ph	0.74	5.6	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm	•	*	*	*	*
~	DG BLUE PRO 50/2/G40V A1BM/50	230V / 1Ph	0.37	2.8	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm	•		*		
VORTEX IMPELLER	DG BLUE PRO 75/2/G40V A1BM/50	230V / 1Ph	0.55	4.1	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm			*		
Ā	DG BLUE PRO 100/2/G40V A1BM/50	230V / 1Ph	0.74	5.6	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm	•		*	*	*
	DG BLUE PRO 150/2/G40V A1CM/50	230V / 1Ph	1.1	7.5	2900	2" / 50mm	•			*	*
ORT	DG BLUE PRO 200/2/G40V A1CM/50	230V / 1Ph	1.5	10.0	2900	2" / 50mm	•			*	*
>	DG BLUE PRO 50/2/G40V A1BT/50	400V / 3Ph	0.37	1.15	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm			*		
	DG BLUE PRO 75/2/G40V A1BT/50	400V / 3Ph	0.55	1.6	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm			*		
	DG BLUE PRO 100/2/G40V A1CT/50	400V / 3Ph	0.74	2.15	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm			*	*	*
	DG BLUE PRO 150/2/G40V A1BT/50	400V / 3Ph	1.1	3.2	2900	2" / 50mm				*	*
	DG BLUE PRO 200/2/G40V A1CT/50	400V / 3Ph	1.5	4.3	2900	2" / 50mm				*	*
	GR BLUE PRO 100/2/G40H A1CM/50	230V / 1Ph	0.74	5.5	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm		*	*	*	*
	GR BLUE PRO 150/2/G40H A1CM/50	230V / 1Ph	1.1	7.5	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm				*	*
DER	GR BLUE PRO 200/2/G40H A1CM/50	230V / 1Ph	1.5	10.0	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm	•			*	*
GRINDER	GR BLUE PRO 100/2/G40H A1CT/50	400V / 3Ph	0.74	2.7	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm	•	*	*	*	*
0	GR BLUE PRO 150/2/G40H A1CT/50	400V / 3Ph	1.1	3.2	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm				*	*
	GR BLUE PRO 200/2/G40H A1CT/50	400V / 3Ph	1.5	4.3	2900	1 <sup>1</sup> / <sub>2</sub> " / 40mm	•			*	*





















### **LOOPAK**

Loopak is a macerator pump designed to automatically grind and discharge: sewage, toilet paper, greasy water, acid and water (up to 100°C), originating from either a bathroom or a kitchen. There are three models of the Loopak:

#### THE DOMESTIC

Fitted with a 600 watt motor, suitable for all domestic applications.

#### THE PROFESSIONAL

Equipped with a 1000 watt motor and is designed for the more demanding applications found in offices, hotels, restaurants, pubs and clubs

#### THE PROFESSIONAL PLUS

Fitted with a 600W motor and equipped with a heavy duty cutting system and designed for the most demanding conditions.

#### **APPLICATIONS**

#### **LOOPAK DOMESTIC**

- HOUSE & HOME

#### **LOOPAK PROFESSIONAL**

- HOTELS
- SHOPS
- RESTAURANTS
- PUBS
- OFFICES

#### **LOOPAK PROFESSIONAL PLUS**

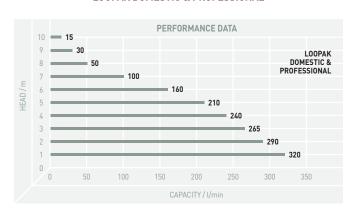
- HOUSE & HOME

#### **FEATURES**

- MACERATOR PUMP
- EXTREMELY VERSATILE
- CAN BE FITTED TO ANY EUROPEAN STANDARD W.C. BOWL WITH HORIZONTAL DISCHARGE
- UTILISES SMALL 32mm OR 40mm DISCHARGE PIPE
- VERY EASY MAINTENANCE; NO MESS
- MOTOR UNIT CAN BE SERVICED OR REPLACED WITHOUT DISTURBING TOILET AND WASTE CONNECTIONS



#### **LOOPAK DOMESTIC & PROFESSIONAL**

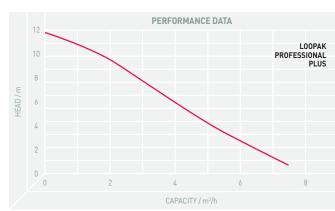


PUMP TYPE	WEIGHT kg	CODE	PRICE £	DELIVERY STATUS
LOOPAK DOMESTIC	11	LP/V-S008	540	-
LOOPAK PROFESSIONAL	12	LP/V-S007	750	-
LOOPAK PROFESSIONAL PLUS	11	LP/V-009	890	-















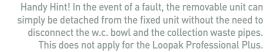
















# **Heavy Duty Chopper Pumps**

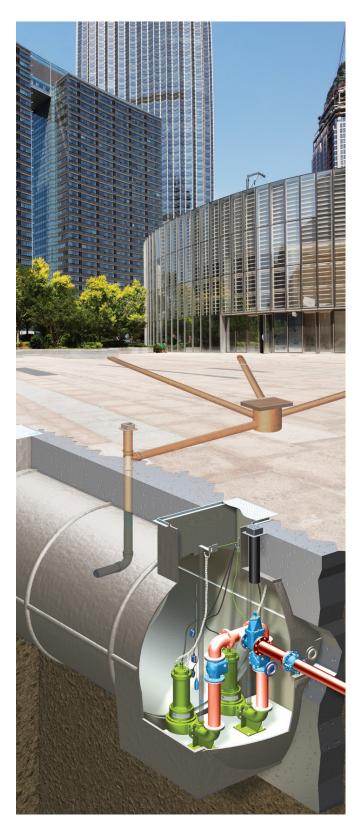
## For the Toughest of Applications

- Heavy duty chopper pumps with the ability to handle HIGHER SOLIDS CONCENTRATES than standard pumps
- Open multi-channel impeller, ideal for MINIMAL CLOGGING OF WASTE WATER containing large solid particles





# PACKAGE PUMPING STATIONS





01

03

0

ns

U7





The Trojan range of compact pumping stations provide a complete unit supplied with vortex pumps, valves and control panel, which is easily installed and maintained.

#### **APPLICATIONS**

- FOR USE IN WASTE WATER OR SEWAGE APPLICATIONS WHERE **REMOVAL IS NOT POSSIBLE** UNDER GRAVITY, SUCH AS SINGLE DWELLING AND HOUSING DEVELOPMENT



#### **FEATURES**

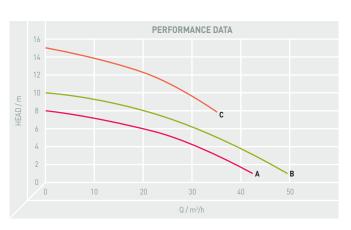
- POLYETHYLENE CHAMBER
- 55L OR 150L CAPACITY
- COMPLETE UNIT FITTED WITH HIGH EFFICIENCY SINGLE / DUAL VORTEX PUMPS
- 1.1kW, 1.5kW OR 3.0kW OPTIONS
- MECHANICAL SEAL WITHIN OIL BATH
- 50mm SOLIDS HANDLING
- DN80 OR DN100 OUTLET
- DN50 OR DN100 INLET (55 VS)
- DN100 OR DN150 INLET (150 VS)
- PNEUMATIC LEVEL CONTROL WITH LCD DISPLAY, FAULT AND ALARM OPTIONS AVAILABLE

#### **VORTEX SINGLE**





#### **VORTEX DUAL**



PUMP TYPE	CURVE	MAX FLOW m³/h	MAX HEAD m	RPM	VOLUME L	WEIGHT kg	DELIVERY STATUS
TROJAN 55 VS 1.1 230V	<b>/</b> A	41	8.1	1400	55	43	•
TROJAN 55 VS 1.1 400V	<b>/</b> A	41	8.1	1400	55	43	•
TROJAN 55 VS 1.5 400V	<b>/</b> B	49	9.9	1400	55	45	•
TROJAN 55 VS 3.0 400V	<b>/</b> C	35	15	2800	55	63	•
TROJAN 150 VD 1.1 230V	<b>/</b> A	41	8.1	1400	150	90	•
TROJAN 150 VD 1.1 400V	<b>/</b> A	41	8.1	1400	150	90	•
TROJAN 150 VD 1.5 400V	<b>/</b> B	49	9.9	1400	150	93	•
TROJAN 150 VD 3.0 400V	<b>/</b> C	35	35	2800	150	130	•
MANUAL HAND PUMP	N/A	0.65L PER ACTION	15	N/A	N/A	16	•















The Trojan range of compact pumping stations provide a complete unit supplied with grinder pumps, valves and control panel, which is easily installed and maintained.

#### **APPLICATIONS**

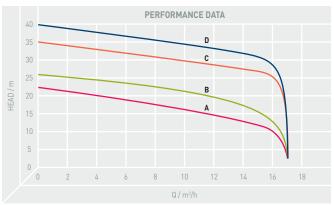
- FOR USE IN WASTE WATER OR SEWAGE APPLICATIONS WHERE REMOVAL IS NOT POSSIBLE UNDER GRAVITY, SUCH AS SINGLE DWELLING AND HOUSING DEVELOPMENT



#### **FEATURES**

- POLYETHYLENE CHAMBER
- 55L OR 150L CAPACITY
- COMPLETE UNIT FITTED WITH SINGLE / DUAL GRINDER PUMPS
- 1.7kW OR 3.2kW OPTIONS
- DN80 OR DN100 INLET
- SINGLE DN32 OUTLET.
  DUAL DN50 OUTLET
  CONNECTION ON Y-PIPE
- PNEUMATIC LEVEL CONTROL WITH LCD DISPLAY, FAULT AND ALARM OPTIONS AVAILABLE





#### **GRINDER SINGLE**

PUMP TYPE	CURVE	MAX FLOW m³/h	MAX HEAD m	RPM	VOLUME L	WEIGHT kg	DELIVERY STATUS
TROJAN 55 GS 1.7/1 230V	<b>/</b> A	17	22	2800	55	63	•
TROJAN 55 GS 1.7/1 400V	<b>/</b> A	17	22	2800	55	63	•
TROJAN 55 GS 1.7/2 400V	<b>/</b> B	17	25	2800	55	63	•
TROJAN 55 GS 3.2/3 400V	<b>/</b> C	17	35	2800	55	68	•
TROJAN 55 GS 3.2/4 400V	<b>/</b> D	17	39	2800	55	68	•
TROJAN 150 GD 1.7/1 400V	<b>/</b> A	17	22	2800	150	130	•
TROJAN 150 GD 1.7/2 400V	<b>/</b> B	17	25	2800	150	130	•
TROJAN 150 GD 3.2/3 400V	<b>/</b> C	17	35	2800	150	140	•
TROJAN 150 GD 3.2/4 400V	<b>/</b> D	17	39	2800	150	140	•
MANUAL HAND PUMP	N/A	0.65L PER ACTION	15	N/A	N/A	16	•



















The Trojan range of compact pumping stations provide a complete unit supplied with vortex pumps, valves and control panel, which is easily installed and maintained.

#### **APPLICATIONS**

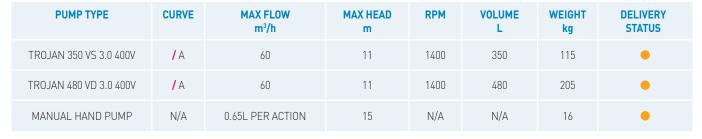
- FOR USE IN WASTE WATER OR SEWAGE APPLICATIONS WHERE REMOVAL IS NOT POSSIBLE UNDER GRAVITY, SUCH AS SINGLE DWELLING AND HOUSING DEVELOPMENT



#### **FEATURES**

- POLYETHYLENE CHAMBER
- 350L OR 480L CAPACITY
- COMPLETE UNIT FITTED WITH HIGH EFFICIENCY SINGLE / DUAL VORTEX PUMPS
- 3.0kW
- MECHANICAL SEAL WITHIN OIL BATH
- 150mm INLET
- DN100 OUTLET
- 80mm SOLIDS HANDLING
- PNEUMATIC LEVEL CONTROL WITH LCD DISPLAY, FAULT AND ALARM OPTIONS AVAILABLE

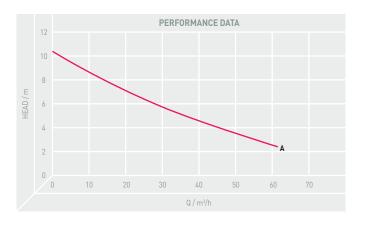
#### **VORTEX LARGE SINGLE**



# **NEW**PRODUCT



#### **VORTEX LARGE DUAL**



















The Trojan range of compact pumping stations provide a complete unit supplied with channel pumps, valves and control panel, which is easily installed and maintained.

#### **APPLICATIONS**

- FOR USE IN WASTE WATER OR SEWAGE APPLICATIONS WHERE REMOVAL IS NOT POSSIBLE UNDER GRAVITY, SUCH AS SINGLE DWELLING AND HOUSING DEVELOPMENT

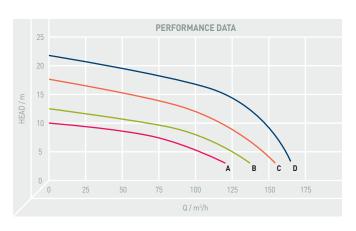
#### **FEATURES**

- POLYETHYLENE CHAMBER
- 480L OR 1000L CAPACITY
- COMPLETE UNIT FITTED WITH SINGLE / DUAL CHANNEL PUMPS
- 3.0kW, 4.0kW, 5.5kW OR 7.5kW OPTIONS
- UP TO 100mm MAX SOLIDS HANDLING
- DN150 INLET
- DN100 OUTLET
- PNEUMATIC LEVEL CONTROL WITH LCD DISPLAY, FAULT AND ALARM OPTIONS AVAILABLE

# **NEW**PRODUCT



#### **CHANNEL LARGE DUAL**





#### **CHANNEL LARGE SINGLE**

PUMP TYPE	CURVE	MAX FLOW m³/h	MAX HEAD m	RPM	VOLUME L	WEIGHT kg	DELIVERY STATUS
TROJAN 480 CS 3.0 400V	<b>/</b> A	120	10	1400	480	210	•
TROJAN 480 CS 4.0 400V	<b>/</b> B	140	13	1400	480	220	•
TROJAN 480 CS 5.5 400V	<b>/</b> C	160	18	1400	480	225	•
TROJAN 480 CS 7.5 400V	<b>/</b> D	165	22	1400	480	240	•
TROJAN 1000 CD 3.0 400V	<b>/</b> A	120	10	1400	1000	370	•
TROJAN 1000 CD 4.0 400V	<b>/</b> B	1407	13	1400	1000	385	•
TROJAN 1000 CD 5.5 400V	/ C	160	18	1400	1000	400	•
TROJAN 1000 CD 7.5 400V	<b>/</b> D	165	22	1400	1000	425	•
MANUAL HAND PUMP	N/A	0.65L PER ACTION	15	N/A	N/A	16	•















## INDUSTRIAL BLUE BOX 500S



The Blue Box 500S lifting station has been designed for the larger application within basements and where a below ground pumping system cannot be used.

Blue Box 500S utilises the Uniqa range of high efficiency motor (IE3) sewage and drainage pumps mouted horizontally inline with two 500 litre polythene chambers incorporating inlet and maintenance parts (additional chambers can be added).

#### **APPLICATIONS**

- INDUSTRIAL APPLICATIONS FOR THE REMOVAL OF SEWAGE AND DRAINAGE WATER

#### **FEATURES**

- 4kW 18.5kW
- 45 METER HEAD
- 43 L/S
- 65mm 80mm SOLID HANDLING
- UNIQA HIGH EFFICIENCY SUBMERSIBLE PUMPS INSTALLED EXTERNALLY
- FULL FREE PASSAGE FOR **VORTEX IMPELLER MODELS**
- SEAL INSURES FREE-LEAKING OF THE BOX
- ANTI-FLOATING FIXATION





PUMP TYPE	CURVE	OUTPUT mm	kW	DELIVERY STATUS
BLUEBOX E 500S M/ZUG V 065 A	<b>/</b> A	65	4 – 9	•
BLUEBOX E 500S D/ZUG V 065 A	<b>/</b> A	65	4 – 9	•
BLUEBOX E 500S T/ZUG V 065 A	<b>/</b> A	65	4 – 9	•
BLUEBOX E 500S T/ZUG V 080 A	<b>/</b> B	80	4 – 11	•
BLUEBOX E 500S T/ZUG V 080 B	<b>/</b> C	80	7.5 – 18.5	•



Same day dispatch

Lead times may apply





# High Performance, Low Energy Submersible Sewage Pumps







The **Pluto Pumping Station** is the most effective means for collecting and removing excess water collected from cavity drainage systems.

The fully automatic unit is designed and built for reliability and long life and employs a high performance pump range that can be selected to meet your specific application.

#### **OPTIONS**

- SINGLE MAINS POWERED PUMP WITH BATTERY BACK UP, 2ND PUMP 12V DC POWERED. COMPLETE WITH CONTROL FACILITY IN PANEL FOR BATTERY BACK-UP OPERATION AND CHARGING SYSTEM
- DUAL MAINS POWERED PUMPS FOR DUTY STANDBY ARRANGEMENT, WITH DUAL PUMP CONTROL PANEL (230V)
- SEWAGE PUMPS CAN BE PROVIDED FOR SMALL APPLICATIONS

#### STANDARD FEATURES

- SINGLE AUTOMATIC SUBMERSIBLE PUMP (230V) WITH INTERNAL PIPEWORK, QUICK RELEASE COUPLING, NON-RETURN VALVE, HIGH LEVEL FLOAT SWITCH
- MAINS / BATTERY POWERED HIGH LEVEL ALARM UNIT FEATURING LIGHT AND AUDIBLE ALARM WITH MUTE BUTTON
- STRONG POLYETHYLENE CHAMBER WITH 160 LITRE OPERATING STORAGE
- 32 / 63mm MDPE DISCHARGE CONNECTION
- STRONG ACCESS COVER PRODUCED IN GALVANISED MILD STEEL. (DIFFERENT ACCESS COVERS AVAILABLE ON REQUEST)
- 2 LOWER LEVEL 110mm INLETS TO ACCOMMODATE STANDARD DRAINAGE CONNECTIONS

#### **TECHNICAL DETAILS**

LIQUID CAPACITY: 160 LITRES

CHAMBER MATERIAL: MDPE

INLETS: 2 NO 110mm

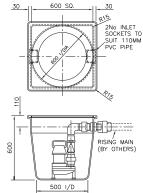
DISCHARGE: 40mm OR 63mm HDPE DEPENDING ON PUMP SELECTION

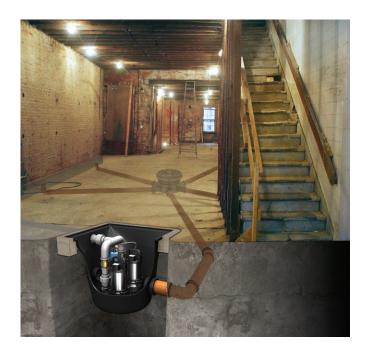
#### **AFTER SALES SUPPORT**

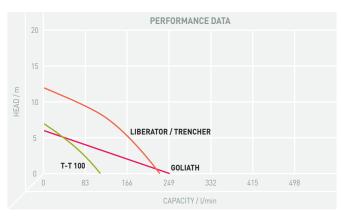
- FULL AFTER SALES SUPPORT AVAILABLE FOR REGULAR MAINTENANCE AND EMERGENCIES



PLUTO (ILLUSTRATES DUAL OPTION)







Please contact us for further advice in selecting the most appropriate pumping solution for your application, or complete the questionnaire on page 350.









03

09







The Planet® Range of Package Pumping Stations, designed and manufactured by T-T and approved by the BBA, provide an efficient and economical way of installing a sewage / drainage pumping station.

#### **FEATURES**

- PUMP CHAMBERS ARE WELL **ENGINEERED AND** MANUFACTURED. AND HAVE PASSED RIGOROUS AND DETAILED TESTING, SITE INSPECTIONS AND FACTORY PRODUCTION CONTROL ASSESSMENT BY THE BRITISH **BOARD OF AGRÉMENT TO** ACHIEVE CERTIFICATION **APPROVAL**
- EACH PUMP CHAMBER IS MADE OF STRONG, MEDIUM-DENSITY POLYETHYLENE
- SMOOTH INTERNAL WALLS AID THE HYGIENIC DISPOSAL OF EFFLUENTS, TO AVOID SMELLS AND SEPTICITY
- PACKAGES COME COMPLETE WITH PIPEWORK PRE-ASSEMBLED IN THE CHAMBER, READY FOR INSTALLATION INTO THE GROUND. AFTER WHICH THE PUMPS AND CONTROL **EQUIPMENT ARE ADDED**
- ALL PACKAGE PUMPING STATIONS ARE SUPPLIED WITH CONTROLS FOR FULLY AUTOMATIC OPERATION, AND A HIGH-LEVEL ALARM INDICATOR
- UNITS CAN BE ADAPTED TO SUIT INDIVIDUAL **REQUIREMENTS AT** MANUFACTURING STAGE
- PACKAGES ARE AVAILABLE ON SHORT LEAD-TIMES TO FIT IN WITH TIGHT CONSTRUCTION **SCHEDULES**
- A COMPREHENSIVE INSTRUCTION MANUAL IS PROVIDED

A wide range of submersible pumps can be used for the Package Pumping Stations; we are able to select these from T-T's complete range, in order to match your requirements.

Please see page 349 for selection questionnaire, which allows us to make the best selection for you.

#### **IMPORTANT**

The information given in this publication is for your initial guidance. For each scheme, general arrangement drawings are issued on receipt of order.

For your further assistance, more comprehensive details are available, and we will be pleased to provide additional information and advice.

Our aim is to provide you with a completely satisfactory solution for your pumping needs.

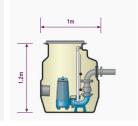


#### MERCURY® SINGLE / DUAL\* PUMP

The Mercury® is ideal for small flows from a single dwelling and where excavation depth is limited.

#### **COMPATIBLE PUMPS**

- CUTTER 80mm
- GRINDER 50mm
- VORTEX 50mm / 80mm
- \*Dual pumps only available with 50mm Vortex / Grinder.

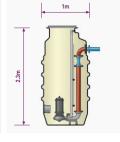


#### VENUS® SINGLE / DUAL\* PUMP

The Venus® chamber is the most popular size for use in a single dwelling, toilet block, or small office serving up to 10 people.

#### COMPATIBLE PUMPS

- CUTTER 80mm
- GRINDER 50mm
- VORTEX 50mm / 80mm
- \*Dual pumps only available with 50mm Vortex / Grinder.

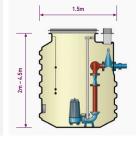


#### SATURN® DUAL PUMP

The Saturn® chamber for two pumps, is suitable for small housing and industrial / commercial developments, restaurants, small hotels / nursing homes, caravan sites.

#### **COMPATIBLE PUMPS**

- CUTTER 80mm / 100mm
- **GRINDER 50mm**
- VORTEX 50mm / 80mm / 100mm
- CHANNEL 80mm / 100mm

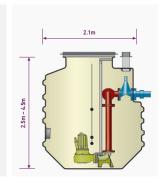


#### JUPITER® DUAL PUMP

The two-pump Jupiter® pump station is the selection for larger developments, hotels, hospitals, sewage works. The basic unit is capable of special build modification to provide capacities up to 15,000 litres, and can be incorporated into schemes where, for example Sewers for Adoption specification is required.

#### **COMPATIBLE PUMPS**

- CUTTER 80mm / 100mm
- GRINDER 50mm
- VORTEX 50mm / 80mm / 100mm
- CHANNEL 80mm / 100mm / 150mm













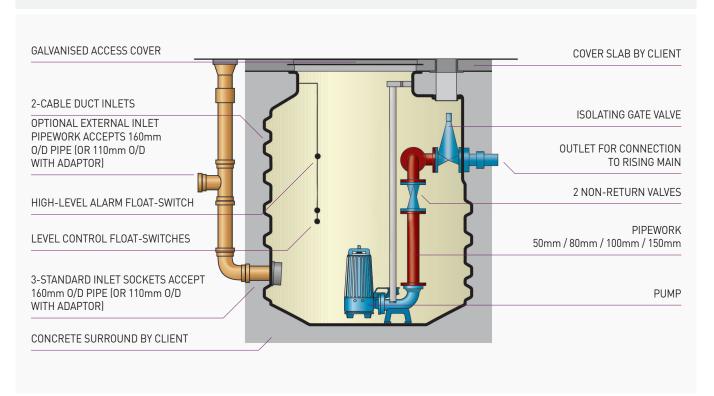


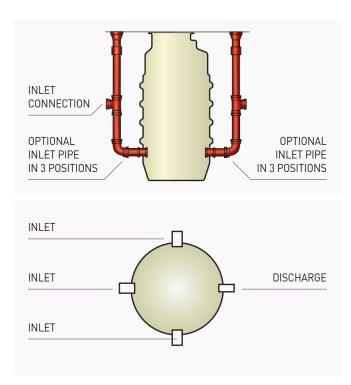






#### TYPICAL DUAL PUMP PACKAGE PUMPING STATION





#### THE PLANET® RANGE OF PUMPING STATIONS

IMPORTANT FOUR EASY STAGES TO A T-T PUMPS PACKAGE PUMPING STATION

1 SELECT - ORDER

2 EXCAVATE

3 INSTALL STATION AND CONNECT SERVICES

4 COMMISSION AND SET INTO OPERATION





The XL & XXL Planet® Range of Package Pumping Stations, designed and manufactured by T-T, provide an efficient and economical way of installing a sewage / drainage pumping station.

#### **FEATURES**

- DESIGNED AND MANUFACTURED IN THE UK
- PUMP STATIONS ARE WELL **ENGINEERED AND** MANUFACTURED, AND HAVE PASSED RIGOROUS AND DETAILED TESTING, SITE INSPECTIONS AND FACTORY PRODUCTION CONTROL **ASSESSMENT**
- EACH PUMP CHAMBER IS MADE OF STRONG GRP
- SMOOTH INTERNAL WALLS AID THE HYGIENIC DISPOSAL OF EFFLUENTS, TO AVOID SMELLS AND SEPTICITY
- PACKAGES COME COMPLETE WITH PIPEWORK PRE-ASSEMBLED IN THE CHAMBER, READY FOR INSTALLATION INTO THE GROUND, AFTER WHICH THE PUMPS AND CONTROL **EQUIPMENT ARE ADDED**
- ALL PACKAGE PUMPING STATIONS ARE SUPPLIED WITH CONTROLS FOR FULLY AUTOMATIC OPERATION, AND A HIGH-LEVEL ALARM INDICATOR AS STANDARD
- UNITS CAN BE ADAPTED TO SUIT INDIVIDUAL **REQUIREMENTS AT** MANUFACTURING STAGE
- PACKAGES ARE AVAILABLE ON SHORT LEAD-TIMES TO FIT IN WITH TIGHT CONSTRUCTION SCHEDULES
- A COMPREHENSIVE INSTRUCTION MANUAL IS PROVIDED

#### **APPLICATIONS**

- DOMESTIC
- COMMERCIAL
- INDUSTRIAL

A wide range of submersible pumps can be used for the Package Pumping Stations; we are able to select these from T-T's complete range, in order to match your requirements.

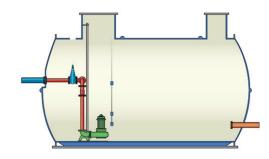
Please see page 349 for selection questionnaire, which allows us to make the best selection for you.

#### **IMPORTANT**

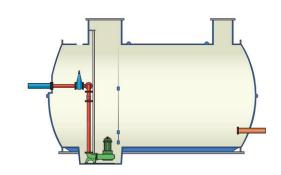
The information given in this section is for your initial guidance. For each scheme, general arrangement drawings are issued on receipt of order.

For your further assistance, more comprehensive details are available, and we will be pleased to provide additional information and advice.

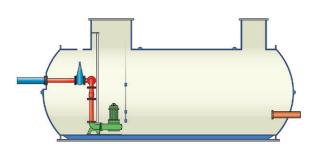
Our aim is to provide you with a completely satisfactory solution for your pumping needs.



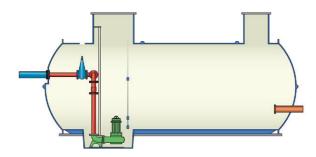
**XL SHALLOW SUMP** 



**XL WITH PUMP SUMP** 



XXL SHALLOW SUMP



XXL WITH PUMP SUMP

Please note that the drawings are not to scale.



















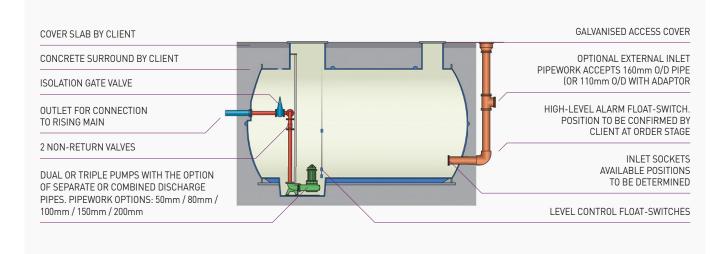


MODEL REF	CHAMBER SIZE LITRES	INTERNAL DIAMETER mm	INTERNAL LENGTH mm	EXTERNAL DIAMETER mm	EXTERNAL LENGTH mm	SHALLOW SUMP HEIGHT mm	WITH PUMP SUMP HEIGHT mm
XL	10000	2200	3100	2400	3300	2600	2900
XL	12500	2200	3750	2400	3950	2600	2900
XL	15000	2200	4420	2400	4620	2600	2900
XL	17500	2200	5070	2400	5270	2600	2900
XL	20000	2200	5730	2400	5930	2600	2900
XL	22500	2200	6390	2400	6590	2600	2900
XL	25000	2200	7050	2400	7250	2600	2900
XL	27500	2200	7710	2400	7910	2600	2900
XL	30000	2200	8370	2400	8570	2600	2900
XL	35000	2200	9680	2400	9880	2600	2900
XL	40000	2200	1100	2400	11200	2600	2900
XXL	25000	3200	3760	3450	4010	3600	3900
XXL	30000	3200	4390	3450	4640	3600	3900
XXL	32500	3200	4700	3450	4950	3600	3900
XXL	35000	3200	5010	3450	5280	3600	3900
XXL	37500	3200	5320	3450	5570	3600	3900
XXL	40000	3200	5830	3450	5880	3600	3900
XXL	42500	3200	5940	3450	6190	3600	3900
XXL	45000	3200	6250	3450	6500	3600	3900
XXL	47500	3200	6560	3450	6810	3600	3900
XXL	50000	3200	6870	3450	7120	3600	3900
XXL	55000	3200	7500	3450	7750	3600	3900
XXL	60000	3200	8120	3450	8370	3600	3900
XXL	65000	3200	8740	3450	8990	3600	3900
XXL	70000	3200	9370	3450	9620	3600	3900
XXL	75000	3200	9990	3450	10240	3600	3900
XXL	80000	3200	10610	3450	10880	3600	3900
XXL	85000	3200	11230	3450	11480	3600	3900
XXL	90000	3200	11650	3450	12100	3600	3900





#### TYPICAL DUAL PUMP PACKAGE PUMPING STATION



Full range of valves available, please speak to our Sales Team for further information.

P**333** 

## **DEVELOPERS CHOICE**

The choice of utilising Adoptable or Non Adoptable Pumping Stations is very often a case of economies and whether the necessary space is available for an Adoptable Pumping Station.

#### NON ADOPTABLE PUMPING STATION



The non-adoptable pumping station can be utilised in:

- SINGLE DWELLINGS
- BUSINESS PREMISES / OFFICES
- COMMERCIAL PROPERTY
- INDUSTRIAL
- HOTELS
- NURSING HOMES
- CARAVAN PARKS

#### **Pros and Cons**

- A non-adoptable pumping station is far more economical to install as it does not require the need to meet the demands of the Water Companies' specifications
- The pumping station will be equally as reliable and efficient as the equivalent adoptable pumping station
- Quick and easy to install
- Less space required
- Overall costs less
- Property owners will be responsible for running and maintenance costs

#### ADOPTABLE PUMPING STATION



The adoptable pumping station can be utilised in:

- MULTIPLE HOUSING DEVELOPMENTS
- COMMERCIAL

# Sewers for Adoption

#### **Pros and Cons**

- Adoptable stations will have to comply with the current requirements of Sewers for Adoption and amendments by the local Water Company
- Lead time and adoption is longer
- Running and operating costs are the responsibility of Water Companies after adoption

01

04

07

TI

Please contact us for further advice in selecting the most appropriate pumping solution for your application, or complete the questionnaire on page 350.



# ADOPTABLE PUMPING STATIONS



Please contact us for further advice in selecting the most appropriate pumping solution for your application, or complete the questionnaire on page 350.

01

03

0E

06

07

09

## ADOPTABLE PUMPING STATIONS

#### STAGES FROM CONCEPT TO ADOPTION

#### WHAT IS SEWERS FOR ADOPTION?

The basis of Sewers for Adoption is to ensure that the developer builds to a required standard and quality. To achieve 'Adoption' of a pumping station the specification, build and installation of the system would have to be compliant with Local Water Company specifications. Details of these specifications are found in the 'Sewers for Adoption' guidelines, published by WRc Plc, which is the standard set for the design and construction of sewers within the UK.

#### **CONCEPT TO PROJECT**

We like to be involved at the early stage to advise on the most effective way to position and construct the pumping station and what is the most economical solution. Each client will receive a single specialist to liaise with on a day-to-day basis and who will manage your project.

#### TENDER / QUOTATION / ORDER

A competitively priced service is offered that will meet with your criteria, with no additional hidden costs and on receipt of official instruction to proceed you will receive an agreed programme of works.

#### **DESIGN**

In-house design facilities are used, incorporating the latest technology, to create full design and manufacturing drawings, these will be specific to your project. Having this feature in-house allows us greater flexibility to respond to design up-dates and amendments. During the design process, we will if required, communicate with the Water Company and the developers' design team to ensure that all aspects of the pumping station are comprehensively covered.

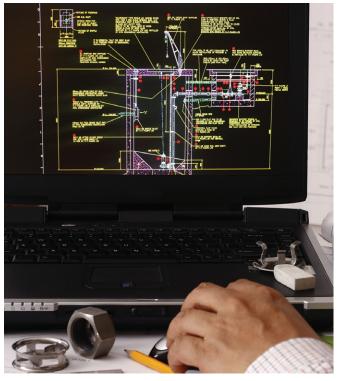
#### **EQUIPMENT MANUFACTURE**

Once design approval has been obtained, the final manufacturing and ancillary equipment – a bespoke arrangement to your site's specific requirements. Lead times are kept to a minimum and due to the in-house manufacture of most equipment and our large

stage will commence for the pumps, control system, pipe work, valves stock-holding there is no need for external resources.

### **Sewers for Adoption**







#### **INSTALLATION**

All installation work is carried out by our own highly trained and skilled installation teams who have the necessary combined electrical / mechanical skills to install pumping stations. A full installation report is left with the developers' site representative detailing any items which need attention related to the civil work or the M&E installation prior to commissioning.

#### **COMMISSIONING**

Our commissioning engineers will undertake a full check of the installation, ensuring that the installation is safe and meets all of the required standards. A full installation report will be given and a certificate of electrical completion is also issued once all equipment has been commissioned.

#### MAINTENANCE PERIOD

The mechanical and electrical equipment provided in our pumping systems are offered with a 12 month warranty as standard against any defective parts/faults, unfortunately this does not include for blockages, misuse or vandalism. Extended warranties can be offered on request.

In addition our Service Department will follow up our commissioning visit with an offer of a maintenance contract whereby you will be able to have peace of mind that your installation will be regularly inspected and maintained thus reducing the risk of un-necessary expensive breakdowns. Service visits can be tailored to meet your needs and can be adjusted as necessary.

#### **ADOPTION**

We are familiar with the requirements of all Utility Companies which enables us to provided the correct equipment to meet the needs of your particular scheme.

T-T will control the Adoption process from concept through to Adoption on your behalf to ensure a smooth handover to the Utility Company incorporating all documentation from a design package to operating and maintenance manuals. Pre-handover inspections are a standard feature of our service liaising with the Adoptions Engineers to ensure a smooth, uninterrupted handover.

#### SEWERS FOR ADOPTION

For housing developments, it's both practical and cost-effective to construct a wastewater and sewage pumping station that can be 'adopted' by the local water company – eliminating the developers' responsibility for future maintenance and running costs.

Having worked with all Water Companies over the years T-T are fully aware of their requirements, expectations and current legislation. This enables us to ensure that your project runs smoothly and that the station is Adopted within the fastest most cost-effective time frame.









01

US

04

06

07

09



### ADOPTABLE PUMPING STATIONS

An Adoptable pumping station is required for inflows from domestic dwellings where the local Water Company will adopt the pumping station on satisfactory completion to Sewers for Adoption (SFA7) specification and contributing standards.

Adoptable pumping stations are categorised into four types which is determined by inflow:

#### Note

SFA7 is applicable at the time of printing and may update, also each water company has its own requirements that are in addition to SFA7 specification. Please consult with T-T Pumping Stations to ensure that the requirements are met for your pumping station.

ТҮРЕ	PEAK FLOW UP TO	MAX DWELLING	MINIMUM DISTANCE FROM DWELLING m	PUMP kW
TYPE 1	≤ •25LT/SEC	5	5	N/A
TYPE 2	≥ •25 TO 1 LT/SEC	20	10	N/A
TYPE 3	≥ 1 LT/SEC	20+	15	≤ 30kW
TYPE 4		≥ 30kW		

#### WHAT OUR CUSTOMERS SAY ABOUT US:

"They are my supplier of choice and I will be using them on another new site. We have no health and safety issues with them and the site team followed all our procedures and needed no extra supervision.

T-T stuck to their tender price and subsequent adoption of all stations has gone without incident."

#### **David Wilson Homes**

"T-T Controls / T-T Pumps have been supplying Pumps & Controls systems to London Underground & Transport for London for a minimum of 10 years and as a very satisfied ex-employee of those companies I can say T-T has been and still are a very professional organisation and a pleasure to do business with.

There is a 'will do' attitude that comes from the very top and works its way down."

#### **GGL Consultancy**

"As part of our drainage design we required an S104 FW pumping station. We contacted T-T Pumps who were more than helpful from the start. I mainly dealt with Nick Morgan, Tommy Heath and Paul Rachel. Nick particularly was a great asset to the whole process and his skills and advice were extremely valued.

I would highly recommend T-T Pumps for future projects given the level of service received during our time working together."

#### BWB Consulting Ltd.

# Sewers for Adoption







## LARGER SCHEMES

#### LARGER & BESPOKE SCHEMES

The diversity of our product range coupled with our knowledge and experience allows us to supply larger and bespoke pumping stations designed and engineered to your exact specifications. Whatever your requirement T-T have the knowledge and experience to support you.

#### **CASE STUDIES**

A number of pumping stations have been supplied and installed for enabling works at Victoria Underground Station. The sewage scheme consisted of 2 stations both with DGN pumps, controlled by bespoke control panels specifically designed for non-critical sites.

We were pleased to supply and commission four pumping stations at a new 167,667m<sup>2</sup> Marks and Spencer distribution centre. The pumping stations were installed to deal with waste and rainwater at the offices and incorporated GR Blue Pro, MAN, and DGO Pumps, alongside various valves and ancillary equipment, all controlled using a number of dual control panels housed in GRP kiosks.

As part of the M1 motorway widening scheme, T-T were selected to supply, install and commission two drainage pumping stations. The first of the two stations was fitted with  $4 \times 18.5 \text{kW}$  pumps and the second fitted with  $4 \times 11 \text{kW}$  pumps, each station is controlled with a multi-sectional floor standing motor control centre.

T-T was selected to supply the pumping system for a Grand Designs project at an old lifeboat station in Tenby. However, this project was no normal feat, as careful consideration had to be given towards the location of the system, extreme weather conditions and access for maintenance.

Suspended under the property, T-T supplied two submersible sewage pumps within a stainless steel tank, a bespoke control panel and a small chemical dosing unit – to inject chemicals into the tank to prevent odours, septicity and to break up congealed fat build up. Please see page 276 for selection questionnaire, which allows us to make the best selection for you.

For more information or advice about pumping systems please speak to our experienced team on **01630 647200**.











05

06

07

Uč



### READY SUMP®

#### SEWAGE, DRAINAGE AND EFFLUENT PUMPING STATION PRECAST SUMP

A unique design that incorporates the key features required for sewage, drainage and effluent stations and that meets the adoptable standards demanded by the water companies. These engineered sumps are produced to high standards with a quality controlled process using precision tools. They have been specifically designed and built with efficiency and cost saving in mind.

As a standard product the Ready Sump® is a stock item and available for delivery to your site on short lead times to suit your requirements. Sealed concrete rings, traditional non sealed concrete rings, access covers and inlet chambers are available options.

#### **FEATURES**

- SMOOTH AND CLEAN DESIGN
- RAPID, ECONOMIC AND SAFE INSTALLATION
- REDUCES HEALTH AND SAFETY RISKS ON SITE
- SUITABLE FOR ADOPTABLE AND PRIVATE PUMPING STATION
- SUPERIOR HYDRAULIC PERFORMANCE
- REDUCES CONSTRUCTION TIME AND COSTS
- READILY AVAILABLE



"In terms of the 'Ready Sump' we found it very easy to install and when used in conjunction with pre-cast chambers this provides all the benefits you would expect from off-site fabrication, e.g. better quality, quicker installation and safer installation practices due to less trades being involved. In summary, we will consider using this system on our next development."

Beech Developments Ltd.























## READY SUMP®

# **NEW**

#### SEWAGE, DRAINAGE AND EFFLUENT PUMPING STATION PRECAST SUMP

#### PRIVATE PUMPING STATION

When there is no requirement for the pumping station to be adopted by the local water company the Ready Sump® still provides an economic basis for your pumping station. The pumping station has the virtues of good hydraulic design and associated performances.

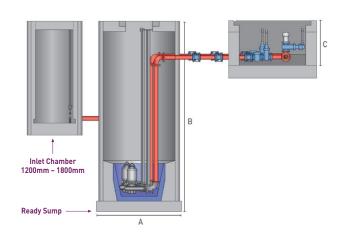
#### ADOPTABLE PUMPING STATION

The demands of the latest Sewers For Adoption Guide (SFA) requires sump chambers to incorporate a number of key features including benching inclines and postioning of the submersible pumps, all this of which the Ready Sump® accommodates. With the engineered design and smooth finish the Ready Sump® provides the efficient and clean centre of the pumping station.

#### **READY VALVE CHAMBER®**

The Ready Valve Chamber® is essential when constructing a pumping station to the requirment of the SFA guide. Incorporating all the features of a valve chamber and has the flexibility to accommodate various rising main outlets to meet site specifics for right or left hand and straight on connection.

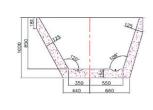
A logical choice, the Ready Valve Chamber® with its factory produced accuracy, clean lines and compliance is an economical solution that is readily available. It is provided as a flat pack for easy assembly within an hour, with no special tooling required.

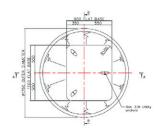


A - DIAMETER OF RING	B – DEPTH OF RING AVAILABLE	C - DEPTH OF VALVE CHAMBER
1800mm	500mm	1200mm
2100mm	750mm	1300mm
2400mm	1000mm	1400mm
2700mm		1500mm
3000mm		1600mm
3660mm		1700mm
4000mm		1800mm

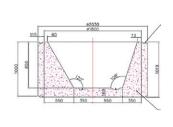
# Sewers for Adoption

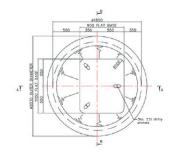
#### **READY SUMP® DIMENSIONS**



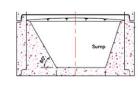


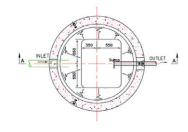
#### TRADITIONAL NON SEALED CONCRETE RING READY SUMP®





#### SEALED CONCRETE RING READY SUMP®





01

02

06

07





The RainCycle® has been specifically designed to utilise rainwater which would normally go to waste, with three different systems available - Garden, Domestic or Commercial.

#### **HOW A TYPICAL RAINCYCLE SYSTEM OPERATES**

Rain water is captured from the roof and diverted into the RainCycle system, which then flows into the Volume Filter; as water flows through the inlet the level builds up and is equally distributed across the cascade.

The largest dirt particles flow over the primary filter cascading directly to the storm water drain or soak-away.

The pre-filtered water then flows over the secondary filter sieve (mesh size 0.65mm) and into the RainCycle chamber, via a calmed inlet which prevents disturbance of the settled sedimentation layer at the base of the chamber, ready for use.

#### **APPLICATIONS**

- FLUSHING
- LAUNDRY FACILITIES
- GARDEN WATER / IRRIGATION

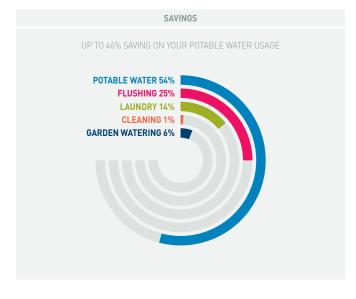
#### **FEATURES**

- CHAMBER SIZES FROM 1350 LITRES - 13,000 LITRES WITH THE OPTION OF BESPOKE CHAMBERS UP TO 90 000 LITRES
- PUMP CHAMBERS ARE WELL MANUFACTURED AND ENGINEERED AND HAVE PASSED RIGOROUS TESTS
- OUR STANDARD PUMP CHAMBER IS MADE OF STRONG, MEDIUM DENSITY POLYETHYLENE, WITH THE BESPOKE CHAMBERS BEING MADE FROM GRP
- UNITS CAN BE ADAPTED TO SUIT INDIVIDUAL **REQUIREMENTS AT** MANUFACTURING STAGE
- AVAILABLE ON SHORT LEAD-TIMES
- CONTROL PANELS ARE INCLUDED AS STANDARD
- A COMPREHENSIVE INSTALLATION MANUAL IS INCLUDED AS STANDARD
- SYSTEMS INCORPORATING A BACK-UP FROM THE MAINS WATER SUPPLY REQUIRE A TYPE AA OR AB BACKFLOW PREVENTION DEVICE, IF USING A DIRECT SYSTEM WE OFFER A MAINS WATER TOP-UP BOX WHICH IS COMPLETE WITH BUILT IN AA AIR GAP



















P342





#### **GARDEN**



The RainCycle® Garden rain harvesting system is designed for recycled water use in the garden or small holding. Collected, filtered rainwater stored in an underground storage tank that does not obscure the landscape and where the temperature is stable.

#### **FEATURES**

- 1350L CHAMBER IS FITTED WITH AN INTERNAL FILTER WHICH HAS A CAPACITY FOR UP TO 200m<sup>2</sup> AREA
- LARGER CHAMBERS HAVE AN EXTERNAL FILTER WHICH HAS CAPACITY FOR UP TO 450m<sup>2</sup> AREA
- ALL TANKS ARE INSTALLED WITH A CALMED INLET WHICH PREVENTS DISTURBANCE OF ANY SETTLED SEDIMENT AT THE BASE OF THE TANK
- GARDEN CHAMBERS ARE INSTALLED WITH AN OVERFLOW FITTED WITH A RODENT BARRIER

- AN AUTOMATIC CONTROL PANEL OPERATES THE PUMPS, COMPLETE WITH LOW LEVEL PROTECTION TO STOP THE PUMP AND INDICATE LOW WATER LEVEL
- PRESSURE SWITCH TO OPERATE THE PUMP WHEN THE TAP IS OPENED
- FEEDS GARDEN TAPS DIRECTLY FOR OUTDOOR (NON-POTABLE) WATER USE

The RC500 multistage submersible pump is ideal for the transfer and pressurisation of clean water. The pump has a stainless steel construction and impeller with Noryl diffuser.

Quiet submerged pump, max head 35m, max flow 3.6m³/h (other pumps available on request).

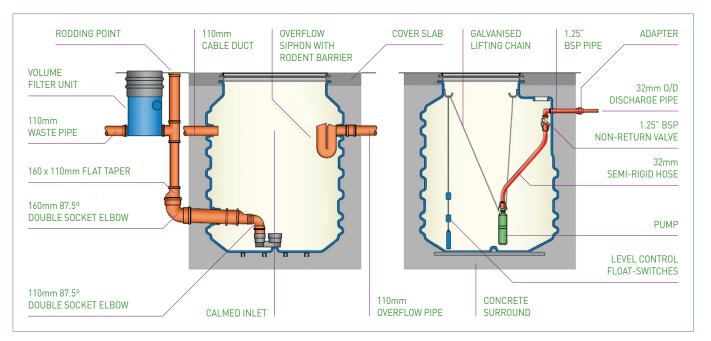




RC500

#### BEAT THE HOSEPIPE BAN!

Since there is no mains water connection, this sytem can continue to be used without contravening any hose pipe restrictions in force in your area.



For more information or chamber selection please speak to our experienced Sales Team.

01

02

04

07

0.0





#### **DOMESTIC**



The RainCycle® Domestic rain harvesting system is a below ground installation for the collection, filtration and storage of rainwater for use in the home and garden. The domestic system provides additional filtration on the pump intake as well as a skimmer siphon on larger systems to remove floating materials, which helps to prevent discolouration of the stored rainwater.

#### **FEATURES**

- 1350L CHAMBER IS FITTED WITH AN INTERNAL FILTER WHICH HAS A CAPACITY FOR UP TO 200m<sup>2</sup> AREA AND IS INSTALLED WITH AN OVERFLOW COMPLETE WITH RODENT BARRIER
- LARGER CHAMBERS HAVE AN EXTERNAL FILTER WHICH HAS CAPACITY FOR UP TO 450m<sup>2</sup> AREA AND ARE FITTED WITH A MODIFIED SKIMMER SIPHON
- ALL TANKS ARE INSTALLED WITH A CALMED INLET WHICH PREVENTS DISTURBANCE OF ANY SETTLED SEDIMENT AT THE BASE OF THE TANK

- PUMP FITTED WITH FLOATING INTAKE FILTER WHICH SITS JUST BELOW THE SURFACE WATER LEVEL TO TAKE THE BEST QUALITY WATER WITHIN THE SYSTEM
- SUITABLE FOR DIRECT OR INDIRECT PRESSURISED SYSTEMS
- FEEDS TOILETS, URINALS, LAUNDRY, CLEANING AND OUTDOOR GARDEN TAPS FOR ALL (NON POTABLE WATER USE)
- AN AUTOMATIC CONTROL PANEL OPERATES THE SYSTEM COMPLETE WITH LOW LEVEL PROTECTION TO STOP THE PUMP. AN AUTOMATIC WATER TOP UP IS FEATURED ON A DIRECT PRESSURISED SYSTEM
- PRESSURE SWITCH TO OPERATE THE PUMP WHEN THE TAP IS OPENED

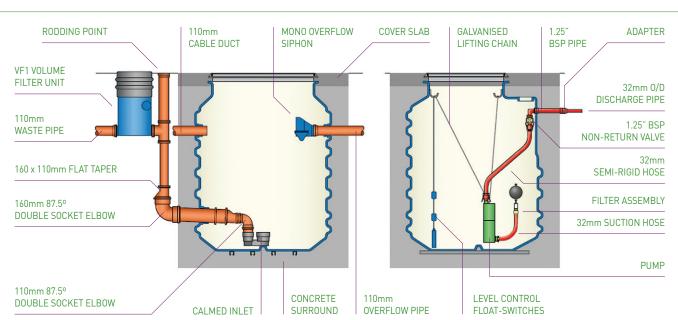
The RC900 multistage submersible pump is ideal for the transfer and pressurisation of clean water. Suitable for domestic and industrial use. The pump has a Stainless Steel construction and impeller with Noryl diffuser.

Quiet submerged pump, max head 60m, max flow 6.3m³/h (other pumps available on request).





RC900



U7









RainCycle® Commercial rain harvesting system offers ground installation for the collection, filtration and storage of rainwater for use within commercial and larger developments. The Commercial system can provide storage for up to 90,000 litres within a single chamber and are designed specifically for each scheme to meet requirements.

Please contact our sales team for further information and advice.

The RainCycle has economic benefits for larger schemes where pooled water resources can reduce water costs.

#### **APPLICATIONS**

- COMMUNITY HOUSING
- MULTIPLE DWELLINGS
- FLAT / OFFICES / WORKSHOPS
- INDUSTRIAL PROCESSES
- COMMUNITY CENTRES
- SUPERMARKETS
- SCHOOLS
- HOSPITALS



#### Maintenance

The system needs minimal maintenance, but we would suggest that your RainCycle is inspected by our Service Engineers at least once per year to ensure that all filters are clean and clear, and sediment levels are acceptable to ensure optimum performance.

A Service Agreement Scheme is available, contact us for further information.

#### Commissioning

Once the electricity supply and liquid connections are made the RainCycle system is ready to be commissioned. Our engineers can undertake a full check of the installation, ensuring that it is safe and to specification. Checks are carried out to verify the RainCycle system's operational sequence and its overall function.

A full installation and commissioning report is provided to the site representatives.

#### Health and Safety

T-T attaches the highest priority to Health and Safety issues.

All Service Engineers work in teams of two and are fully qualified for:

- Confined Space Working
- First Aid
- 17th Edition of IEE Wiring Regulations

Where multiple dwellings are drawing off one RainCycle we would recommend that a metering system is introduced.

#### Sizing of the RainCycle

The amount of water available for use is dependent on the rain water collection area, which will normally be from the roof, and local rain fall, which varies from area to area. Usage of water needs to be considered; for normal domestic use, we take that a nominal amount of total water used can be rainwater and will depend on the usage data you provide in the following questionnaire.

Normally this will vary for commercial property and where residents may want to use more water for the garden.

To help us to make the best selection for your application, please complete the following questionnaire, which can be easily posted or faxed. Alternatively please go to our website www.ttpumps.com and complete online.

#### Considerations for selecting a RainCycle

The RainCycle can be happily introduced into most schemes as part of a new build or as a retrofit, but care should be taken to understand the limitations and maintenance requirements.

- a) Small schemes will have an extended payback period
- b) Recovered rainwater is not suitable for human consumption
- c) All taps and pipework used to convey rainwater must be clearly labelled
- d) Systems incorporating a back-up from the mains water supply require a type AA or AB backflow prevention device
  - A type AA air gap conforming to EN 13076:2003 to prevent pollution by backflow of potable water - unrestricted air gap
  - A type AB air gap conforming to EN 13077:2008 to prevent pollution by backflow of potable water - air gap with non-circular overflow
- e) Gutters used for collecting the rain water should be checked and cleaned regularly. Avoid areas where large amounts of bird or animal droppings are likely
- f) The RainCycle system should be checked by the user periodically to ensure that the system is clean and that it operates correctly
- g) Every 12 months the RainCycle system should be inspected and serviced by a competent engineer. T-T offer a reassuring and economical Service Agreement Scheme
- h) Care should be taken when selecting roofs for rainwater collection. Only use roofs that are in a good state of repair and away from areas of heavy leaf deposits. Avoid using roofs covered in asbestos, old steel corrugation that is rusty and roofs with mastic covering or repairs, as the quality of water collected will be impaired



# BABY PUREFLOW (6)

Baby Pureflow (6) is a wastewater treatment unit for households up to 6 persons and up to 4 bedrooms. The treatment unit has been built to work in harsh climates and is tested and certified according to BS EN 12566-3 standard.

BPF (6) has been independently tested to be the most reliable wastewater treatment unit. It is easy to maintain and service need is minimal. The biological treatment unit of BPF (6) is based on trickling filter technology which tolerates load variations and low flow periods very well. Flow peaks or electricity breaks do not cause overflow risk.

The underground installation saves physical space need in your garden. The biological treatment unit can be enhanced with a chemical treatment unit to flock phosphorus.

#### **BPF(6) STANDARD DELIVERY CONTENT**

- ELECTRIC CONTROL PANEL
- BABY PUREFLOW CHAMBER & FITTINGS
- AERATION PUMP & FITTINGS

#### **OPTIONAL EXTRAS**

- GROUND ANCHORING KITS
- ADDITIONAL CHEMICAL DOSING SYSTEM
- FINAL EFFLUENT PUMP STATION



#### PROCESS PERFORMANCE

- BOD7 = 18.8 MG/L
- SS = 28.9 MG/L
- PTOT = 1.08 MG/L
- NTOT = 24.1 MG/L

PUMP TYPE	EQUIVALENT POPULATION	HEIGHT OF UNIT mm	WIDTH mm	EMPTY WEIGHT kg	BOD7	PRICE £	DELIVERY STATUS
BABY PUREFLOW	6	2500	1583	250	18.8	P.O.A.	•















# **PUREFLOW**

The Pureflow effluent treatment plants are a range of units that cater for populations from 5 up to 250 people, producing an effluent to comply with discharge consent limits of BOD's, SS and nitrified effluents. The Pureflow units are robustly constructed, easy to install have good availability with short lead times.

#### **APPLICATIONS**

- HOUSING
- RESTAURANTS & HOTELS
- CARAVAN PARKS

#### **FEATURES**

- ODOUR FREE
- EASY INSTALLATION
- LOW MAINTENANCE
- ENVIRONMENTALLY ACCEPTABLE



**JUNIOR PUREFLOW** 



**SENIOR PUREFLOW** 

PUMP TYPE	EQUIVALENT POPULATION head	AVERAGE FLOW 200 I/h/d m³/d	APPLIED LOAD BOD5 60 g/h/d kg/d	UNIT WEIGHT (EMPTY) kg tonnes	UNIT WEIGHT (FULL) kg tonnes	INLET/OUTLET PIPE DIAMETER mm	PRICE £	DELIVERY STATUS
JUNIOR PUREFLOW	7 – 28	1.4 – 5.6	0.42 – 1.68	0.25 – 0.80	3.02 – 12.80	100	P.O.A.	•

PUMP TYPE	EQUIVALENT POPULATION head	AVERAGE FLOW 200 l/h/d m³/d	APPLIED LOAD BOD5 60 g/h/d kg/d	UNIT WEIGHT (EMPTY) kg tonnes	UNIT WEIGHT (FULL) kg tonnes	INLET/OUTLET PIPE DIAMETER mm	PRICE £	DELIVERY STATUS
SENIOR PUREFLOW	40 – 250	8 – 50	2.40 – 15	0.94 - 4.09	16.07 – 98.57	150	P.O.A.	•













## SUPPORTING SERVICES

#### **HEALTH AND SAFETY**

T-T has an exemplary reputation for its health and safety standards, covering employees, clients and general public. We attach the highest priority to health and safety and prior to any work commencing on site T-T's method statement and risk assessments will be submitted.

Our engineers are also fully qualified for:

- IEE Wiring regulations
- First Aid
- Construction Skills Certification Scheme
- Confined Space Working



Site specific RAMS are produced for each installation taking into account site conditions and hazards together with our method of installation and commissioning.

#### QUALITY

Quality procedures are vital in every project and our total company activities come within the scope of ISO 9001:2008 Quality Management System approval.

#### **SURVEYS & INSPECTION**

T-T can undertake surveys for selection of pumping equipment and inspections of pumping schemes for insurance assessment, pre-adoption and general feasibility studies. The pumping scheme will be fully inspected mechanically, electrically and for operational capability with a full report of our engineers' findings and recommendations.

#### **REFURBISHMENTS**

Modernising stations improves both efficiency and reliability. Refurbishments of older pumping stations are available from a pump upgrade to full refurbishment with minimum disruption.

#### AFTER-SALES SERVICE

Once your equipment is delivered, you can have complete confidence in T-T to provide comprehensive after-sales back-up, offering full service and maintenance agreements on request.







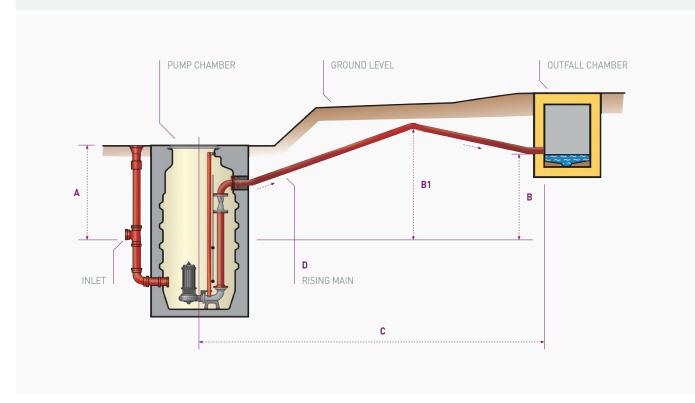






# PUMPING STATION SELECTION QUESTIONNAIRE

#### TYPICAL DUAL PUMP PACKAGE PUMPING STATION



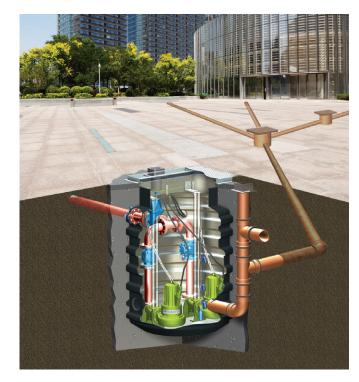
#### **PUMPING STATIONS**

Good pumping system selection is critical to ensure that our customers enjoy optimum life and performance from their pumping station.

The selection process for a pumping system is complex and our trained engineers, with the aid of the latest computer systems are able to look at the best options for your specific application.

Some several hundred calculations are made for each selection to ensure that the pumping system selected has the optimum efficiency, reliability and compliances.

The following questionnaire will help us make the best selection.



02

03

05

06

07

30



# SITE DATA QUESTIONNAIRE

Site data questionnaire (for use with adoptable and non-adoptable systems). To enable us to select the correct equipment for your scheme, please complete this short questionnaire, and send it to us. We will send our quotation by return.

SCH	SCHEME NAME						
SCHEME ADDRESS							
<b>A*</b>	Depth from ground level to inlet invert	mm					
В*	Difference in level between inlet level and discharge into outfall chamber	mm					
B1*	Highest point of rising main (if higher than discharge of rising main)	mm					
C*	Total pipework run from pump chamber to outfall chamber	m					
D	Rising main internal diameter (we can advise if required)	mm					
D1	Rising main material						
E*	Fluid to be pumped						
	SEWAGE / DRAINAGE / STORM WATER						
OTH	IER (PLEASE SPECIFY):						
INF	LOW VOLUME Vs SURFACE AREA TO BE COLLECTED	m²					
F	Pumping capacity required	l/s					
or;	Max number of occupants						
or;	Number / type of property						
G*	Electrical power supply available (400V 3Ph required if adoptable station)						
	230V / 400V 3Ph						
Н	Kiosk for control panel required ('yes' if adoptable station)						
	YES / NO						
	If 'yes', will the electricity meters be housed in kiosk? ('Yes' if adoptable station)						
	YES / NO						
1	Fluid storage period required	hrs					
REC	QUIRED CHAMBER VOLUME (IF KNOWN)	ltrs					

	YOUR SITE DATA
J	Access covers loading ('vehicle not highway' if adoptable station)
PEI	DESTRIAN / VEHICLE NOT HIGHWAY / ROAD GOING HIGHWAY RATED
К	Telemetry monitoring ('yes' if adoptable station)
YES	/ NO / IF 'YES', LANDLINE / MOBILE PHONE TECHNOLOGY
L*	Will the pumping station be adopted?
YES	/N0
М	If 'yes', who is the adopting authority?
N	Service contract required?
YES	/N0
Oth	ner information

YOUR CONTA	ACT DETAILS
COMPANY NAME	
NAME	
JOB TITLE	
ADDRESS	
	POSTCODE
TELEPHONE	
FAX	
E-MAIL	

01

04

05

06

07

08

U7



# RAINCYCLE QUESTIONNAIRE

PLEASE ENSURE THE UP-STREAM AND DOWN-STREAM INVERT LEVELS ARE DESIGNED TO FACILITATE THE BACK DROP THROUGH THE FILTER INLET AND BYPASS.

<b>6</b>	GARDEN	
	DOMESTIC	
	COMMERCIAL	

YOUR SITE DATA
SITE / SCHEME NAME
SCHEME LOCATION POSTCODE
WATER AVAILABLE
ROOF TYPES
PITCHED ROOF / TILE / SLATE/CONCRETE / FLAT ROOF
GRAVEL COVER / CULTIVATED OR GRASS / OTHER (PLEASE SPECIFY)
ROOF AREA m²
TYPE OF SYSTEM REQUIRED
DIRECT SYSTEM (FIG 1)
INDIRECT SYSTEM (FIG 2)

WATER DEMAND						
NUMBER OF PEOPLE	AREA	m²				
<b>A</b> TOILETS	<b>F</b> GARDEN WATERING	m²				
<b>B</b> URINALS	<b>G</b> SPORTS GROUND	m²				
<b>C</b> LAUNDRY	<b>H</b> OTHER	m²				
<b>D</b> CLEANING						
<b>E</b> OTHER						
HIGHEST POINT THAT WATER IS TO BE PUMPED						
DISTANCE FROM RAINCYCLE TO DISCHARGE POINT						
WHAT IS THE REQUIRED SYSTEM PRESSURE	?	m²				

YOUR CONTA	ACT DETAILS
COMPANY NAME	
NAME	
JOB TITLE	
ADDRESS	
	POSTCODE
TELEPHONE	
FAX	
E-MAIL	

01

02

0/

07

08

UY



n3

nΩ