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# SANIPUMP<sup>®</sup> GR Sanifos 1000

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Operating / installation manual

To be used in conjunction with Sanifos 1000 GR Twin

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# Glossary

#### **ND (Nominal Diameter)**

Parameter used to characterise parts that are suitable for each other, for example: pipes, connections, sleeves.

## Wastewater

Water changed by the use that was made of it (for example: domestic wastewater).

#### Noise level

Expected sound emissions, expressed in sound pressure level LpA in dB(A).

## Separator

Equipment which prevents, by gravity, the penetration of harmful substances into the discharge system by separating them from wastewater, for example: grease trap.

#### Wastewater pumping station

Installation for the automatic pumping of wastewater and blackwater above the back-flow level.

#### **Inlet piping**

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Pipe through which wastewater from sanitary fixtures is routed to the pumping station. Discharge piping

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Piping for raising wastewater above the back-flow level and routing it to the sewer.

The clearance is the space that needs to be provided for interventions.

# 1. SAFETY

## WARNING

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This device must only be serviced, installed and maintained by qualified professionals who have read these instructions in full.

## **ELECTRICAL CONNECTIONS:**

The electrical installation must be done by a qualified electrician. The device's power supply must be connected to ground (class I) and protected by a high sensitivity differential circuit breaker (30 mA). Devices without plugs must be connected to a main switch on the power supply which disconnects all poles (contact separation distance of at least 3 mm). The connection must be used exclusively to provide the power to the product.

If the power cord is damaged, to prevent possible danger, it must be replaced by the manufacturer, customer service team or a similarly qualified individual. ۲

## **DANGER**

It is not permitted to handle the SANIPUMP<sup>®</sup> pumping sta-tion when it is switched on to prevent personal injury and damage to property.

The SANIPUMP<sup>®</sup> macerator is fitted with blades. Even when it is switched off, it must be handled with caution.

The SANIPUMP<sup>®</sup> macerator has to be installed in a closed tank or a closed sump to prevent danger associated with blades.

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# **1.1 Identification of warning signs**

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This term defines a high risk of danger, which can lead to death or serious injury, if not avoided.

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# Warning

This term defines a hazard which could cause a risk to the machine and its operation, if it is not taken into account



∧ WARNING

## Dangerous area

This symbol, in combination with a keyword, character-ises hazards that could lead to death or injury.



## Dangerous voltage

This symbol, in combination with a keyword, characterises dangers associated with the voltage and provides information on voltage protection.

## **ATTENTION Property damage**



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This symbol, in combination with the keyword ATTENTION, characterises dangers to the machine and its proper operation.

# **1.2 General points**

This operating and installation manual contains important instructions to follow for the fitting, operation and maintenance of the SANIPUMP<sup>®</sup> pumping station. Following these instructions is essential for safe operation and prevents injury and property damage.

Please follow the safety instructions in every section.

Before fitting and commissioning the pumping station, qualified staff/the operator concerned must read and understand all these instructions.

# 1.3 Intended use

•The pump should only be used when in good working condition, and by an individual who has read this manual in its entirity

- The pumping station must only pump the fluids described in this documentation
- The pumping station must never operate without pumped fluid

- Never exceed the usage limits defined in the documentation.
- The safe use of the pumping station can only be ensured when its use is compliant (as described in this manual).

# **1.4 Qualification and training of staff**

Commissioning and maintenance of this device must be performed by a qualified professional. For further information or clarification, please contact SFA Australia.

# **1.5 Safety instructions for maintenance, inspection and installation**

• Any alteration or modification of the pumping station will render the warranty void.

• Use only genuine parts.

The use of other parts may void the manufacturer's liability for any resulting damage.

• The operator must ensure that all maintenance, inspection and installation work is carried out by qualified, authorised staff having previously studied this operating and installation manual. Before working on the pumping station, switch it off and disconnect the power supply.

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• You must follow the procedure for switching off the pumping station described in this operating manual.

• The pumping station that discharges fluids harmful to health must be cleaned before restarting, observe the operating instructions.(paragraph 4, page 24).

• Keep unauthorised people away from the pumping station and any associated control devices

• Never exceed the usage limits defined in the documentation.

• Follow all the safety precautions and instructions in this operating and installation manual.

This operating manual must always be available on the site so it can be accessed by qualified staff and the operator.

These operating instructions must be retained by the operator.

# **1.6 Risks and consequences of non-compliance with the operating manual**

Failure to comply with this operating and installation manual will result in the loss of warranty rights and rights to damages.

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# 2. TRANSPORT / TEMPORARY STORAGE / RETURNS / DISPOSAL

#### 2.1 Receiving inspection

- When receiving goods, check the condition of the pumping station delivered.
- In case of damage, note the exact damage and immediately notify the retailer in writing.

#### 2.2 Transport

#### **DANGER**

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#### Pumping station falling over. Risk of injury if the pumping station falls !

- Transport the pumping station in a vertical position.
- Never hang up the pumping station by the electric cable.
- Use a suitable means of transport.
- The pumping station has been inspected to make sure there is no damage due to transport.
- Choose a suitable means of transport according to the weight table.

## Weight

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	Weight
SANIPUMP <sup>®</sup> with 10 meters of cable	13 kg

## 2.3 Disposal

At the end of its life, this product must be returned to a dedicated collection, it cannot be treated as household waste.

Ask your local council about where to take the old appliance so that it can be recycled or destroyed.

# 3. DESCRIPTION

## 3.1 General description and method of operation

SANIPUMP<sup>®</sup> is a waste water pumping station specially developed for private and commercial use. It is not intended for pumping rainwater. It can be installed in an outdoor sump (pumping grey water and black water).

## **DANGER**

The SANIPUMP<sup>®</sup> macerator has to be installed in a closed tank or a closed sump to prevent danger associated with blades.

Its operating principle is as follows: when the level of effluents contained in the sump where the SANIPUMP<sup>®</sup> is installed is sufficient, the "ON" float switch starts up the pumping station.

The effluent is automatically pumped to drain into the sewer pipe.

Waste water is discharged :

- through DN 40 PVC Pressure pipe for SANIPUMP® bladed macerator

#### 3.2 Scope of supply

Submersible SANIPUMP<sup>®</sup> pump with mounting base and pump power supply cable H05VV-F-3G type 1.5 mm<sup>2</sup>, with a length of 10 metres.

#### 3.3 Rating plate

- 1 Name of the pumping station
- 2 Power consumption of motors
- 3 Power supply voltage
- 4 Frequency
- 5 Protection index
- 6 Production date
- 7 ID number

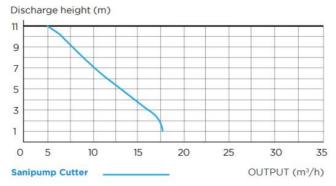


#### 3.4 Technical specifications SANIPUMP®

Pump specifications	SANIPUMP <sup>®</sup> macerator	
Flow rate (H = 1 m)	10.5 m³/h	
Max Height (Q = 0)	14 m	
ON/OFF level	Defined by IL	
Maximum immersion height	5 m	
Activation system	Float	
Thermal overload protection	Yes	
Power	Single phase	
	220-240 V / 50-60 Hz	
Motor consumption	1 x 1,500 W	
Maximum current consumption	6 A	

#### SANIPUMP® pump curve

#### FLOW RATE PERFORMANCE CHART







#### Noise level

The noise level depends on the fitting conditions and operating point. This sound pressure level Lp is less than 70 dB (A).

#### 3.5 Pumped fluids

WARNING

Pumping unauthorised fluids.

Dangerous for people and the environment!

→ Only discharge authorised pumped fluids into the public sewerage network.

#### Authorised pumped fluids:

The following liquids are allowed in discharge system:

• Water contaminated by domestic use, human excrement, toilet roll.

#### **Unauthorised pumped fluids:**

The following liquids and substances are not to be handled by the pump: solid materials, fibres, tar, sand, cement, ash, coarse paper, hand towels, wipes, cardboard, rubble, rubbish, slaughterhouse waste, oils, hydrocarbons, greases, etc.
Wastewater containing harmful substances (for example, untreated greasy waste from restaurants). Pumping these liquids and substances requires the fitting of a compliant grease trap.

• Rain water.

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#### 3.6 Installation of the SANIPUMP pumping station®

• The characteristics shown on the rating plate have been compared with those on the order and installation (supply voltage, frequency).

- The SANIPUMP<sup>®</sup> pumping station cannot be immersed in water more than 5 m deep.
- The installation must be protected against frost if installed in a frost-prone area

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#### **3.7 Electrical connection**

## DANGER

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Electrical connection work performed by an unqualified individual. Risk of death by electric shock!

- → The electrical connection must be carried out by a qualified and licensed electrician.
- → The electrical installation must meet the current standards in the country.

#### ATTENTION



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Wrong supply voltage. Damage to the pumping station!

The supply voltage must not differ by more than 6% of the rated voltage specified on the rating plate.

Only carry out the electrical connections after the final connections have been completed. The device must be connected to an earthed junction box. The power supply circuit must be protected by a 30 mA differential circuit breaker rated at 16 A.

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The connection must be used exclusively to provide the power to the product. If the power cord is damaged, to prevent possible danger, it must be replaced by the manufacturer, customer service team or a similarly gualified individual.

# 4. ACTIVATION

#### 4.1 Prerequisites for commissioning

Before commissioning the pumping station, make sure that the electrical connection of the pumping station has been carried out correctly.

- The safety instructions have been followed.
- The operating characteristics have been checked.
- The regulations in force at the place of installation are complied with.
- The operating instructions for the submersible pump are complied with.

#### **4.2 Application limit**

• Observe the operating specifications in the

- documentation.
- Do not run the pump with the isolation valve closed.

• Dry running, without pumped fluid, must be avoided unless for testing purposes. When in use, observe the following parameters and values:

Parameter	Value
Max. authorised temperature of the fluid	40°C up to 70°C
	for 5 minutes max.
	Max. ambient temperature. 50°C
Operating mode	S3 30%

#### 4.3 Starting and stopping

The automatic control starts and stops the pump when a defined level is reached.

#### **4.4 Starting frequency**

To prevent engine overheating and excessive stress on the engine, seals and bearings, limit the number of starts to 10 per hour.

#### 4.5 Operations required for commissioning

Check the various points on the check-list (described in paragraph 3.6).

- Check the sump for cleanliness (no debris and foreign matter).
- Check that the discharge diameter is appropriate for the installation.
- Check that the power supply circuit is earthed and protected by a 30 mA differential circuit breaker.
- Check that the power cable is not cut or damaged.
- Check that the connection is only used to supply the pump.
- Carry out a functional test (switching on/off).
- Check the freedom of movement of the floats.
- Check the correct functioning of the non-return valve.
- Check that the gravity flow of wastewater into the sump is correct.
- Check the correct functioning and ease of operation of the shut-off valves.
- Check the flow at the discharge outlet.
- If the sump is sealed, ventilation must be installed so that it is always at atmospheric pressure. Air must flow in both directions.

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#### 4.6 Decommissioning

- **1.** Close the valves on the supply pipes.
- **2.** Drain the tank.
- **3.** Close the discharge valve.

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- 4. Switch off the electrical power supply and record the installation.

#### **DANGER**

- The power supply is not cut. Risk of electric shock !
- → Unplug the plug or disconnect the electrical conductors and take the steps required to avoid inadvertent operation.
- **5.** Inspect the hydraulic parts and shredding blades. Clean them if necessary.

#### No WARNING

- Pumped fluids harmful to health. Dangerous for people and the environment!
- → The pumping station used to discharge fluids harmful to health must be decontaminated.
- If necessary, wear a mask and protective clothing.

# 5. MAINTENANCE

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### **WARNING**

- Work carried out on the pumping station by unqualified staff. Risk of injury!
- → Repairs and maintenance must be performed by specially trained staff
- → Observe the safety and basic instructions.

## MARNING

- Pumped fluids harmful to health. Dangerous for people and the environment!
- → Pumping stations used to discharge fluids that may be harmful to health must be decontaminated.

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If necessary, wear a mask and protective clothing.

#### **WARNING**

Work on the pumping station without adequate preparation. Risk of injury!

- → Properly stop the pumping station and secure it against inadvertent operation.
- → Close the inlet and discharge valves.
- → Drain the sump in which the pumping station is installed.
- → Allow the pumping station to cool to room temperature.

The pumping station must be maintained in such a way as to ensure proper discharge of wastewater and to detect and eliminate malfunctions at an early stage. The proper functioning of the pumping

station must be checked by the user once a month by observing at least two operating cycles. The interior of the sump should be checked from time to time and deposits should be disposed of as necessary.

Maintenance of the pumping station must be carried out by qualified personnel. The following intervals should not be exceeded:

- 6 months for pumping stations for commercial use.
- 1 year for pumping stations for domesticated



#### NOTE:

Setting up a maintenance plan avoids costly repairs, minimizes maintenance work and achieves correct and reliable operation.

# 6. INSPECTION AND MAINTENANCE CHECKLIST

#### Inspection and maintenance:

- Turn off the power supply.
- Close the supply and discharge shut-off valves.
- Drain the sump.

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- Unscrew the connection connecting the drain to the bottom of the pump.
- Remove the pumping station from the tank.
- Check the general condition of the pump, electrical cables, floats (switching on, tripping) and the shredding blade. (Contact SFA Technical Service if a replacement element is faulty).
- Clean the pump and float switches.
- Replace the pump and reconnect the discharge pipe to the pump base.
- Switch back on and open the shut-off valves.
- Perform several operating tests (switching on/off).

#### List of possible incidents with causes and remedies

Abnormalities observed	Possible causes	ACTION TO BE TAKEN
Does not start up	The pump is not connected to a power supply	Switch on the pump
	Float blocked in low position	Unblock the float
	Float out of service	Consult SFA after-sales service
	Motor out of service	Consult SFA after-sales service
Does not turn - buzzing	Defective capacitor	Consult SFA after-sales service
	Blocked hydraulics	Clean the hydraulics
Turns but does not discharge	Closed discharge valve	Check that the valve is open
	Non-return valve defective	Consult SFA after-sales service
	Hydraulic problem	Consult SFA after-sales service

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# **SERVICE NOTES & CONTACT DETAILS**

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