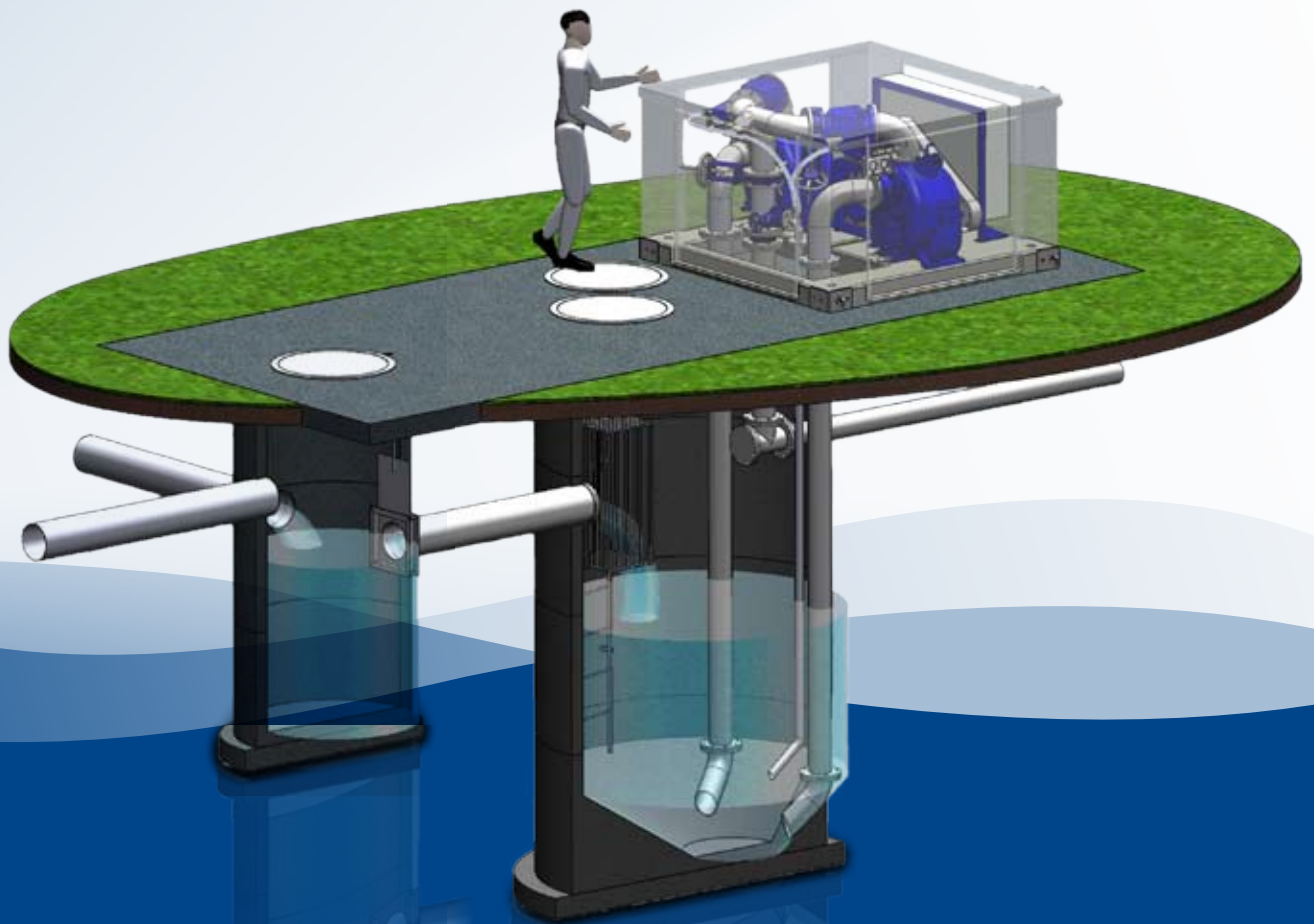


Hydro+

Pumps & Mixers

Above-ground pumping stations



**PRACTICAL, ECONOMICAL
AND DURABLE**

www.hydro-plus.be

Hydro+

Pumps & Mixers

Above-ground pumping stations

Gorman-Rupp is the world's leading manufacturer of self-priming centrifugal pumps and the main producer of packaged above-ground pumping stations. With installations that have been in place for over 30 years in the United States, these stations are a key solution for industrial and municipal applications. Not only are they quick and easy to install with minimal environmental impact, the pumps require minimal and simple maintenance, which means that these above-ground enclosures offer a whole range of advantages over submersible or dry-dock pump stations.

The European market

On the strength of its 20 years of experience in the field of pumping solutions for purification and transfer of solids-laden liquids, the Belgian company Hydro+ has perfected and adapted its above-ground pumping sta-

tions in line with European standards in collaboration with Gorman-Rupp and with the assistance of local partners.

Demonstrations and tests

Packaged enclosure models are on permanent display at the company's facilities in Namur, Belgium. The fully assembled enclosures can also be tested at the facilities before delivery. What's more, thanks to the long-standing collaboration between the two companies, Hydro+ benefits from the valuable and outstanding support of its American partner, as the equipment can be delivered directly from Gorman-Rupp in Ohio, USA.

Effective after-sales service

In order to guarantee its clients a high-quality after sales service, Hydro+ keeps all the components which make up the pumping stations in stock. This means that spare parts are available quickly and simply.



Gorman-Rupp : Internationally renowned

Gorman-Rupp pumps are exported to over 100 countries around the world. The company ensures its presence in Europe and its proximity to local distributors with a manufacturing plant in Ireland and a warehouse in The Netherlands.

Ultra modern facilities

Manufacturing quality products requires facilities that use cutting-edge technology. Gorman-Rupp possesses high-performance, ultra-modern installations. They are constantly upgraded and optimised, calling on the latest technologies to guarantee the manufacture of pumps that are among the most reliable in the industry.

Every pump made is thoroughly tested. Gorman-Rupp certifies the quality and performance of its pumps using test equipment that complies with the latest standards.

Lastly, theoretical training courses are regularly organised and held on site with numerous demonstration workshops in order to explain all aspects of how the self-priming technology works.



Fully automated Machine Centres produce the cast components quickly to an extremely high standard of quality.



These rough castings are stored and ready for machining and assembly into finished products.



Thanks to the high-speed assembly lines designed for handling large volumes, manufacturing lead times are very short.

ABOVE-GROUND PUMPING STATIONS

The Gorman-Rupp self-priming centrifugal pumps for solids-laden liquids are situated directly on ground level and are designed to reprime automatically at heads of up to 7.60 metres between the suction inlet and the level of liquid in the sump.

Specially designed enclosures that are perfectly adapted to this technology house all the necessary electromechanical equipment. They can contain one or more groups of self-priming motor-driven pumps. If an enclosure houses just a single group, it also provides space to store a spare rotating assembly to ensure that repairs can be carried out quickly. Each pump has its own suction line, whereas the discharge lines link up to a common collector which is directly connected to the underground discharge main. A large opening is provided in the concrete base of the enclosure to allow the piping to pass through. The electrical box, which is also situated inside the enclosure and is invisible from outside, is sheltered from bad weather and vandalism.

The interior layout of the enclosures is designed to facilitate all work carried out by service staff. In the case of major work, the enclosures can be disassembled in situ.

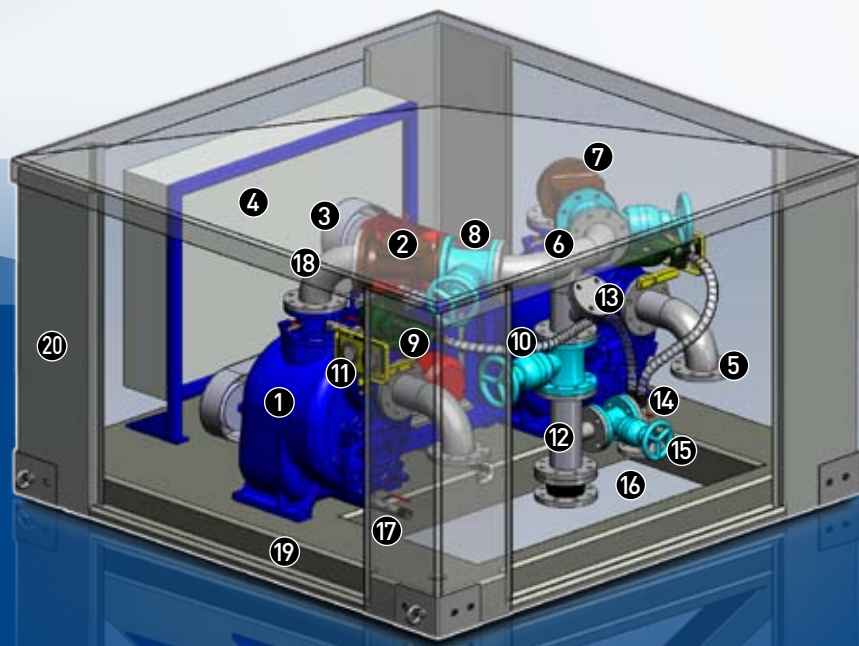
This technology is a particularly interesting alternative to that of submersible pumps or pumps situated in dry pit.

The above-ground pumping stations from Hydro+ are supplied fully equipped.

They include:

- Fibreglass or concrete enclosure with several appearance options, allowing it to blend perfectly with the surrounding environment
- Gorman-Rupp self-priming motor-driven pump group(s) (unit capacity can reach 750 m³/h)
- Custom-built electrical box (in accordance with applicable standards) and level control
- Piping connections including all accessories (valves, gates, pressure gauges, etc.)

*Connect the piping, hook up the power supply...
and your station is ready to go!*



Hydro+
Pumps & Mixers

1. Self-priming pump
2. High-performance electric motor
3. Belt drive transmission
4. Electrical box
5. Suction line
6. Discharge line
7. Check valve
8. Shut-off valve
9. Air release valve
10. Flexible hose for the air release valve
11. Pressure gauges (suction and discharge)
12. Discharge line
13. Tap for flushing the discharge line
14. Drainage piping
15. By-pass valve
16. Compensator
17. Drainage gate for pumps
18. Heating with thermostat
19. Reinforced concrete base
20. Enclosure



SELF-PRIMING PUMP MODELS FOR SOLIDS-LADEN LIQUIDS

Super T® Series

Versions: 2, 3, 4, 6, 8 et 10"
Max. capacity: 750 m³/h
Max. pressure: 3.5 bars
Max. solids: 76 mm
Guaranteed reprimability
up to 7.60 m



Ultra V® Series

Versions : 3, 4 et 6"
Max. capacity: 430 m³/h
Max. pressure: Ultra V: 5 bars
UltraMate: 10 bars
Max. solids: 76 mm
Guaranteed reprimability
up to 7.60 m

Enclosures that blend in

The fully waterproof and air-tight enclosures are made of fibreglass or concrete, depending on the customer's wishes, and all have reinforced concrete bases onto which the motor-driven pump groups and electrical box are mounted.



Fibreglass enclosures

Polyester structure reinforced with fibreglass and closed-cell foam sheets

2 models available:

- 120 x 200 (L 200 cm x W 120 cm x H 140 cm)
- 200 x 200 (L 200 cm x W 200 cm x H 140 cm)

All four sides of the enclosures have large doors which allow access to all parts of the enclosures.

The fibreglass enclosures can be painted in any colour from the RAL colour spectrum. They can also be fitted with brick facings in a choice of colours to meet town-planning requirements. What's more, the enclosures can be fitted with acoustically attenuated panels.

Concrete enclosures

Reinforced concrete structure

2 models available:

- 250 x 325 (L 325 cm x W 250 cm x H 225 cm)
- 350 x 325 (L 350 cm x W 325 cm x H 250 cm)

The concrete enclosures have just one double door which is large enough to allow access for personnel and equipment. Choose between a flat or pitched roof covered with slate or tiles, and select from a number of facings for the walls (bricks, local quarry stone, natural stone, etc.).



Other pump and enclosure models can be adapted to your requirements.
Don't hesitate to contact us for more detailed information.



ADVANTAGES OF ABOVE-GROUND PUMPING STATIONS

*Connect the piping, hook up the power supply...
and your station is ready to go!*

Save on civil engineering

- The pumps are installed at ground level
- The sump is significantly smaller while still providing the same useful flow volume
- There's no need for a separate valve chamber

Save on operating costs

- Swift and secure maintenance and emergency repairs due to easy access to all equipment
- Automatic flushing of the pump tanks thanks to the capability of pumping down to a very low level (a few centimetres from the bottom of the sump)
- Good energy efficiency thanks to the use of high-performance electric motors
- Protection of the electric motor, which is kept dry and sheltered (no risk of water ingress or motor burn-out)
- Very long pump service life compared to submersible pumps
- For unit capacities of up to 300 m³/h operations in the enclosures can be controlled by a single person without handling equipment
- Standardisation:
 - With just a few pump models you are able to cover a wide range of performance levels
 - The belt drive with variable speed means that impellers of the same model are always identical
- The pressure gauges located at the suction and discharge lines of the pumps allow preventive monitoring and diagnostics

Save on on-site work

The enclosures are tested at our facility and delivered fully assembled. All you need to do is to connect the pipes and hook up the power supply. So you'll be up and running in no time!

When renovating an existing pumping station, on-site implementation is simplified by installing an above ground pumping station in place of submersible or dry dock pumps.

Easy operation

As well as being able to work in complete safety when performing maintenance or urgent repairs, operating staff are not confronted with confined spaces and can work in the dry in a clean, sheltered environment.

High-pressure pumps

The pumps of the Ultra V Series can be equipped with an additional stage (UltraMate Series) which enables you to attain pressures of up to 10 bars when transferring solids-laden liquids.

CHARACTERISTICS OF GORMAN-RUPP SELF-PRIMING PUMPS

Complete rotating assembly

Gorman-Rupp pumps are equipped with an easily removable rotating assembly. It can be replaced without having to disconnect the piping or pump volute, resulting in considerably less downtime. Pusher bolts are provided to assist with removal. The rotating assemblies of the Ultra V and UltraMate models are interchangeable.

Solids-handling impeller

The two-vane, semi-open, heavy-duty balanced impeller made from ductile cast iron has been designed to last. Pump out vanes on the back shroud reduce foreign material build-up and pressure between the impeller and the mechanical seal, thereby increasing the life of the mechanical seal.

Patented mechanical seal

The Gorman-Rupp self-aligning, oil-lubricated, double-floating mechanical seal is specifically developed for abrasive and/or solids-handling service. The faces made of silicon carbide or tungsten titanium carbide and the extra large seal oil chamber provide superior dry-run capability. This patented cartridge design allows for accurate and easy installation.

Anti-rotation ribbing

The pumps are equipped with anti-rotation ribbing within the sealplate, which reduces internal wear and maximises the life of the mechanical seal and the sealplate.

Patented bearing protection

A patented atmospheric barrier created between two lip seals provides maximum bearing protection. This unique design also facilitates external monitoring.

Removable back cover plate

A large back cover plate allows for easy access to the pump interior. Pusher bolt capability is provided to assist with removal. The back cover plates are interchangeable between the Ultra V and UltraMate units.

Replaceable front wearplate

A replaceable wearplate attached to the cover plate has a self-cleaning design to ensure debris is cleared away and does not collect on the impeller vanes. This innovative design reduces the overall lifecycle costs by minimising blockage.

Patented shimless cover plate adjustment

The patented shimless cover plate adjustment system allows for accurate maintenance of the clearance between the impeller and wearplate, without realigning belts or couplings. Once adjustments have been made the collar locks into place, maintaining the clearance setting even if the cover plate is removed. This design feature guarantees hydraulic efficiency and doubles the service life of the impeller and wearplate.

Suction check valve

The externally removable suction check valve eliminates the need to disconnect any piping for inspection or replacement. The check valve has a blowout centre that limits excessive volute pressure, protecting the pump.



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Pumps & Mixers

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