

LORENTZ Leachate and Remediation Pumping Solutions

A new approach to solving your landfill pumping challenges



LORENTZ offers you an electrically powered down well progressive cavity pump as a better solution to solve your leachate pumping challenges.

Our high efficiency, intelligent pump systems bring a new but proven approach to the market. Our pumps remove many of the service challenges of both air pumps and non specialized electric submersibles and so reduce your operating costs.

The high efficiency system gives you power choices, allowing you to run from grid or solar power so opening up locations that were previously not economical.

Presented by:



Manufacturer of Environmental and Industrial Solutions

EPG Companies Inc.
19900 County Rd. 81
Maple Grove MN 55311
1-800-443-7426
www.epgco.com

Sold by:

Significantly reduced operating costs

Progressive Cavity Pumps (helical rotor pumps) are well known for their reliability and effectiveness. The LORENTZ leachate pump design brings this technology for use in landfill and remediation applications.

The LORENTZ system has been developed based on over 25 years experience of pumping challenges in the harshest conditions around the world.

With the LORENTZ solution there are no above ground moving parts, no wearing items to replace, no scheduled service intervals, no pulling your pumps for cleaning, no wearing parts or seals to replace and no air injection creating calcification in pipework.

Progressive cavity submersible pumps with DC brushless motors just keep on working without maintenance.

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The pump controller constantly records operational data and provides access to rich information for the operator.

The flow can be infinitely controlled, interval and time of day timers can be set and other sensor data can be used to ensure the pump system can manage compliance levels and feed treatment plants effectively.

The controller can also be connected to our pumpMANAGER managed service. This is a simple, cloud delivered, pay monthly service that takes away the complexity of remote monitoring and management. One low fee means that you can see exactly what the system is doing, make changes to settings and receive alerts irrespective of location.

Simple to configure, information rich interface, monitoring built in and remote management enabled.

Power choices

The LORENTZ system uses a unique DC brushless and sensorless motor named ECDRIVE.

ECDRIVE is very efficient which gives you the option to run your pump on solar power. This means that without any power infrastructure, running of power lines or negotiation of easements you can pump leachate or contaminated water in any location.

The system can run on solar power with battery backup. With ECDRIVE's higher efficiency, you can run longer with fewer solar panels and batteries.

The system can also run on grid power where high efficiency means lower power consumption, lower utility bills and cool running for a long life.

High efficiency systems means you have choices of grid, solar power with battery backup, and always low running costs.

A complete solution

LORENTZ designs our products to be a complete solution, this means that you have all of the hardware and software you need to control, monitor and manage your pumping operations.

The controller has eight sensor inputs that allow analogue and digital sensors to be connected. This combination of sensors with the powerful inbuilt software applications allows for full pump control and based on flow, pressure, fluid levels or daily pumping amounts.

PS2 is a complete solution "out of the box" without the need for building additional switching cabinets or PLC units.

All of the hardware and software required to successfully deliver your project.



PS2-600 HR-07 Leach Solar Submersible Pump System for 4" and Larger Wells

System Overview

Head	max. 50 m
Flow rate	max. 1.4 m ³ /h

Technical Data

Controller PS2-600

- Controlling and monitoring
- Control inputs for dry running protection, remote control etc.
- Protected against reverse polarity, overload and overtemperature
- Integrated MPPT (Maximum Power Point Tracking)
- Battery operation: Integrated low voltage disconnect

Power	max. 0.70 kW
Input voltage	max. 150 V
Optimum Vmp**	> 68 V
Motor current	max. 13 A
Efficiency	max. 98 %
Ambient temp.	-40...50 °C
Enclosure class	IP68

Motor ECDRIVE 600-HR

- Maintenance-free brushless DC motor
- Water filled
- Premium materials, stainless steel: AISI 304/316
- No electronics in the motor

Rated power	0.7 kW
Efficiency	max. 92 %
Motor speed	900...3,300 rpm
Insulation class	F
Enclosure class	IP68
Submersion	max. 150 m

Pump End PE HR-07 Leach***

- Non-return valve
- Premium materials, stainless steel: AISI 304/316
- Optional: dry running protection
- Helical rotor pump
- Sacrificial anode included

Pump Unit PU600 HR-07 Leach (Motor, Pump End)

Borehole diameter	min. 4.0 in
Liquid temperature	max. 60 °C



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