



# Tech notes

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Product Information & Updates • Installation & Technical Tips



Pre-engineered Package Lift Stations for Wastewater and Stormwater

## THIS EDITION OF TECH NOTES

looks at the advantages a pre-engineered lift station brings to contractors, project engineers, owners and operators. Romtec Utilities is the only company that supplies a complete pre-cast concrete system that is pre-engineered and designed from a systems standpoint. All of the components – from wet well to valve vault to the control system, which includes level control probes, pump disconnect panel and control panel – work together in an integrated system for efficiency of installation and operation, reliability, operator safety and ease of maintenance.

## Advantages of pre-engineering

Wastewater and stormwater lift stations are typically created one at a time, requiring lengthy design work and arduous on-site construction. The site build is often plagued by compatibility issues between components supplied by different vendors, as well as on-site contractor changes.

The traditional, one-off approach can also

cause problems in a network of lift stations, since quite often there is little continuity in the way the individual controllers are operated.

The Pre-engineered Package Submersible Lift Station supplied by Romtec Utilities puts together everything that's good about lift stations and delivers a complete system onsite in one shipment. The patented systems approach means that station owners get the same best-in-class components, the same integrated system and the same easy installation every single time.

### The package

Even the best design by the most skilled engineer

doesn't always translate into efficiently operating lift stations. Once the drawing leaves the engineer's hands, a host of variables come into play.

Components are commonly sourced from different vendors, leading to compatibility issues. Do the pipes in the wet well match up with the pipes in the valve vault? Do the valve vault pipes fit the equipment? Does the controller work efficiently with the liquid level sensing system?



Romtec Utilities' Pre-Engineered Package Lift Stations include self-cleaning, pre-cast concrete wet wells in 6- and 8-foot diameters. The base, barrels and top slab are pre-aligned for ease of installation.



The lift station is a fully integrated system featuring best-in-class components.

# ROMTEC UTILITIES

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Romtec Utilities is a dedicated integrator of submersible pumps and lift station equipment manufactured by ITT Flygt.



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### Pre-engineered Package Lift Stations for Wastewater and Stormwater



The pre-cast concrete valve vault arrives at the job site ready for installation.

pre-cored and sealed.

Incorporating suggestions from operators has also created a number of innovations found in the Romtec Utilities lift station. Hatches are designed with a safety grate for operator safety; the hatches also will

withstand the weight of the pumps, so they can be hosed off before being loaded into a truck for maintenance checks.

Special cable trays make it possible for operators to unplug the pump without having to go into the wiring, eliminating the need for operators to hold limited electrical licenses.

Romtec offers Flygt's C/N Series Pumps, as well as Flygt's Mix/Flush Valve, Flygt pump removal system and heavy-duty

access covers, self-cleaning wet well basins with integrated pump discharge connections, and MultiTrode liquid level monitoring and control systems. Ultra-reliable electrical generators from Cummins/Onan are sized to individual lift station requirements and fully integrated with the Romtec Utilities control system.

Engineering designs are interpreted differently by different contractors. Do the pumps have the exact area they need for an optimum hydraulic environment? Are the discharge elbows placed properly? Is the hatch in the right place, and is it the right size?

The guesswork disappears with a pre-engineered package lift station. When a Romtec Utilities system ships, the only things a contractor needs to provide is site preparation and excavation, and the labor to install the lift station.

#### The design

Engineers at Romtec Utilities took a multi-pronged approach to designing the Pre-engineered Package Submersible Lift Station. First, they gathered the best lift-station designs the

engineering community had to offer. They then incorporated into those designs practical suggestions by the ones who know lift stations best — the operators. Finally, they topped off the lift station by using components manufactured by the best companies in the business, including ITT Flygt and Cummins/Onan.

Pre-cast wet wells, in 6'- and 8'-foot diameters to 30 feet in depth, are from proprietary Romtec Utilities tooling. Romtec Utilities' unique base slab and top slab ship ready for crane off-loading. All discharge elbows, and hatches are pre-installed and ready for all soil and any installation. All inflow and outflow penetrations are



A Kor-N-Seal flexible seal is fitted into each wet well penetration to accept the influent and discharge pipes.

### FOR MORE INFORMATION:

The complete pre-engineered package submersible lift stations available from Romtec Utilities feature components from the industry's leading manufacturers, including ITT Flygt and MultiTrode, Inc. Integrated systems include 6' and 8' diameter pre-cast concrete wet wells to 25' deep, with Flygt duplex or triplex submersible pumps, UL listed pump controls, pre-assembled valve vaults and Cummins/Onan standby generators. For more information, call Romtec Utilities at 541-496-3541 or visit our website at

[www.romtecutilities.com](http://www.romtecutilities.com)