



Tech notes



Pre-engineered Package Lift Stations
for Wastewater and Stormwater

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Product Information & Updates • Installation & Technical Tips

T HIS EDITION OF **TECH NOTES** introduces Romtec Utilities' new 8-foot wet well lift station system. The prefabricated, precast wet well can be shipped nationally, and is designed for wastewater or stormwater. The larger diameter wet well provides the volume needed even in areas where site constraints make deep digging impractical. The 8-foot system also offers triplex pumping capability, with Flygt pumps up to 35hp. Visitors to WEFTEC 2005 can examine a full-size model of a 6-foot pre-cast wet well base equipped with Flygt submersible pumps at the Romtec Utilities booth, #8944. This year's WEFTEC event is set for Oct. 29-Nov. 2 at the Washington Convention Center in Washington, D.C. For more information, visit www.weftec.com.

Wet wells: bigger and better

Romtec Utilities has expanded the wastewater and stormwater capacity of its complete pre-engineered package submersible lift station. The new 8-foot wet well system gives engineers and designers the same advantages as the 6-foot system, while providing the capability to handle larger volumes of wastewater or stormwater, and the ability to handle a triplex pump configuration.

The details

As with the 6-foot system, the wet well base is a single piece of concrete cast with a self-cleaning, non-porous fiberglass basin. The pump discharge elbows are precisely positioned to fit the pumps, and their anchor bolts are actually pre-cast into the concrete base.

The 8-foot lift station is engineered for a duplex or triplex pumping configuration, depending on the needs of the lift station. In duplex configuration, the lift station will accommodate ITT Flygt 3301 105hp pumps; in triplex, three ITT Flygt 3171 35hp pumps



Romtec Utilities workers prepare to stack the pre-cast top slab before painting alignment marks on the barrel sections.

can be installed.

The 8-foot base has an outside diameter of 9

feet, 4 inches, and weighs about 32,500 pounds. The wet well is engineered to

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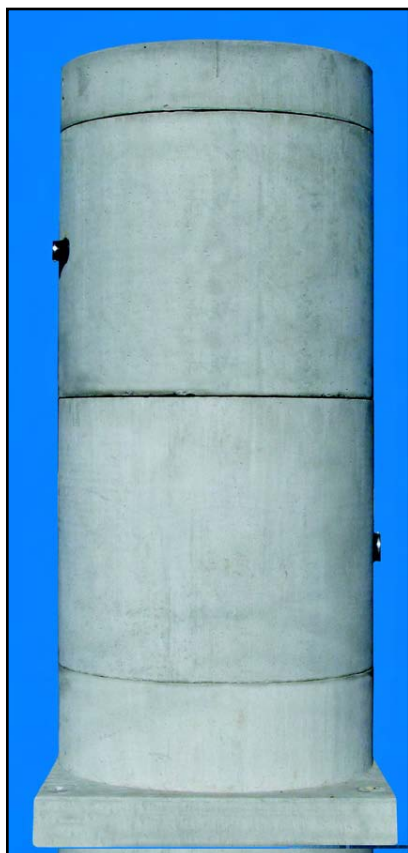
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Pre-engineered Package Lift Stations for Wastewater and Stormwater



Romtec Utilities adds an 8-foot-diameter wet well model to its pre-engineered lift station line-up.

resist buoyancy and meets all uplift requirements nationwide with a 1.5 safety factor.

The prefabricated, “ready to go” 8-foot wet well base and barrel sections are nationally shippable; all parts of the complete lift station ship to the job site in one delivery.

The advantages

The new size of the wet well offers significant advantages. When shallow

digging is mandatory due to site constraints, the larger wet well can handle a larger volume. When it’s not convenient – or possible – to go deep, system designers can still get the capacity they need by going wide.

The other significant advantage to the larger wet well is the ability to add a third pump. The 8-foot inside diameter of the precast concrete base provides room for three ITT Flygt 35hp pumps.

The larger capacity of the well itself maximizes the effectiveness of the pumping system

by providing a large enough holding vessel to manage the flow coming in with efficient pump starts. By offering an 8-foot system that accommodates a triplex pumping configuration, Romtec Utilities gives designers and engineers the ability to meet widely ranged flows, as well as the security of built-in redundancy.

For example, a typical triplex system would have a small jockey pump and two larger

duty pumps. The lift station’s control system can determine which pump turns on, according to the volume of the flow. The smaller pump would handle a smaller volume; once that volume reaches a pre-set rate, the controller would shut down the jockey pump and turn on one of the bigger pumps. The eight-foot system is particularly useful in stormwater applications. A triplex pumping system can efficiently handle the widely varying flows typical in stormwater situations, while meeting the demanding pumping requirements of large storms and other significant

weather events.

A full-size pre-cast wet well base equipped with Flygt submersible pumps will be on display at WEFTEC 2005, in the Romtec Utilities booth, #8944. This year’s WEFTEC event is set for Oct. 29-Nov. 2 at the Washington Convention Center in Washington, D.C. We hope to see you there.



Alignment marks are painted on the barrel sections for easy installation of the wet well’s barrel sections. The new 8-foot wet well is nationally shippable, and comes to the job site ready to be installed by crane.

FOR MORE INFORMATION:

The complete pre-engineered package submersible lift stations available from Romtec Utilities ship to the job site in one delivery and can be installed in one or two days. Integrated systems include 6’ and 8’ diameter pre-cast concrete wet wells to 30’ deep, with Flygt submersible pumps in duplex or triplex configurations, UL listed pump controls, pre-assembled valve vaults and Cummins standby generators. For more information, call Romtec Utilities at 541-496-3541 or visit our website at www.romtecutilities.com.