defying gravity

By Scott Thelen

Lifting equipment complements wastewater and storm water pumping systems

Davit cranes are a reliable way to raise and lower pumps in the absence of a boom truck capable of reaching remote sites.

In developed countries throughout the world, water is moving from one destination to the next with the help of gravity. As wastewater or storm water, it flows continuously until it reaches a point in the system where gravity is defeated. At each of these points, the water needs to be lifted and the process started all over again.

There are hundreds of thousands of wastewater and storm water pump stations throughout North America, and millions throughout the world. This massive and complex network of pump stations involves pumps that need to be maintained but that are too heavy to lift manually.

Many of these pump stations involve a dedicated site that may or may not be accessible by a boom truck or other mobile lifting mechanism. A viable method is required not only to lift those pumps out, but also to put them back in the wet wells, dry pits or underground structures in which they are housed.

A MUCH-NEEDED LIFT

Whenever Romtec Utilities designs a new structure, a decision must be made about how the pumps will be serviced. Not every utility company or municipality owns a boom truck capable of reaching remote sites. More often than not, the most economical and realistic way to raise and lower these pumps for maintenance is with a davit crane.

An important consideration when working with public agencies or utilities that own and manage wastewater and storm water systems is the need for standardization. When owning and operating a public infrastructure with potentially thousands of pump stations, it is more efficient to have a common design and maintenance standard that can be replicated time and again.

Engineers, public agencies and private companies all over the country—and to some degree the world—must design, supply and construct wastewater and storm water pumping stations of all sizes. For the majority of systems Romtec designs, Thern's reliable lifting solution enable the development of effective lifting strategies that can be standardized for repeated use throughout an entire system.

An understanding of the industry combined with testing and standardization of its own products allows companies to provide the detailed design data needed to recommend lifting products that can be used in various applications.

Another aspect of choosing a lifting solution is whether it will be done manually or with some form of power assist. A variety of hand winches and power winches areavailable to handle a range of capacities.

"Thern cranes are an excellent way to ensure that our designs enable operators to lift pumps out without having to block traffic or remove fences," said Mark Sheldon, vice president of marketing, sales and engineering for Romtec Utilities. WWD

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