

# Cone Valves & Hydraulic Power Units Provide: **PUMP PROTECTION AT WASTEWATER TREATMENT PLANT**

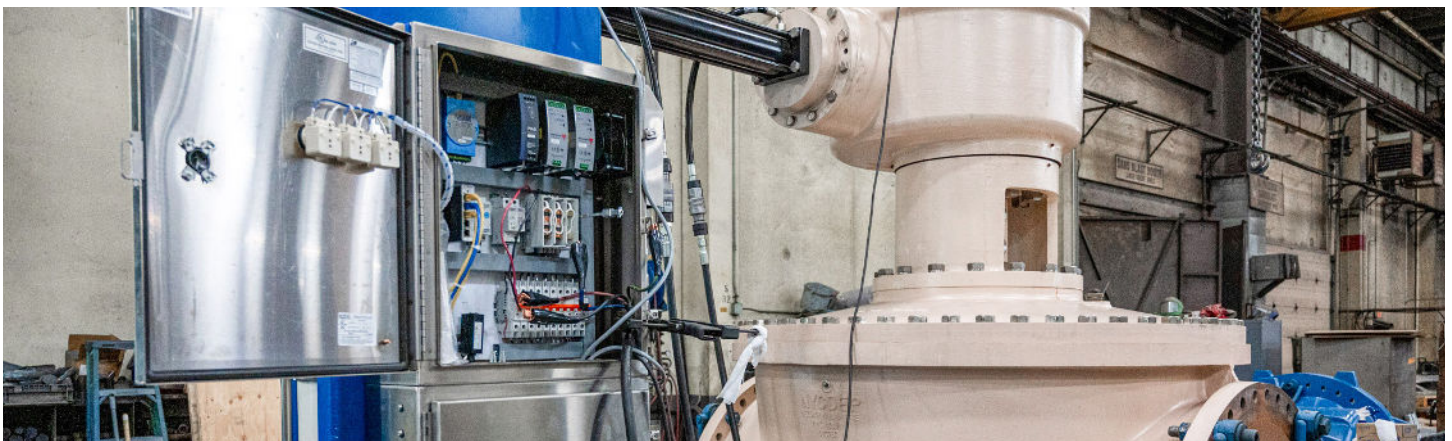
With the increased attention to energy efficiency, New York's Coney Island Wastewater Resource Recovery Facility launched a \$110 million upgrade project to enhance energy efficiency and facility reliability. DeZURIK played a crucial role in this project by providing six 42" Willamette Cone Valves (VMCs) to lower the energy needs of the new sewage pump system. Additionally, DeZURIK Hydraulic Power Units (HPUs) were configured to ensure emergency closure in the event of a power failure.

## Energy-Efficient and Reliable Valve Solutions

The Willamette Cone Valves were selected due to their energy-efficient operations, robust design, and reliable performance. These attributes make them an ideal choice for the pump control needs of the facility.



The 42" Willamette Metal-Seated Cone Valve (VMC) is tested prior to shipment.



The DeZURIK Hydraulic Power Unit (HPU) provides emergency valve actuation in the event of power failure.

## Robust and Reliable Valves for Long Service Life

- **Metal-to-Metal Seats:** The VMCs feature wide, welded Monel metal seats and large double bearings, providing an incredibly long service life. The lift-turn-reseat action of the actuator ensures minimal wear during operation.
- **Time-Tested Performance:** In numerous other installations, Willamette Cone Valves have operated virtually maintenance-free for up to 60 years, showcasing their robust design and protecting infrastructure investments.
- **Low Head Loss:** At full open, the VMC's 100% full port design results in virtually zero head loss (similar to an equal length of pipe), reducing the energy needed for pumping and saving significant operational costs over the valve's lifespan.



DeZURIK HPU's add necessary resilience and control to water treatment facilities.



42" Willamette Metal-Seated Cone Valve (VMC) from DeZURIK loaded and ready to make the long journey from Minnesota to New York.

## Advanced Hydraulic Power Units for Enhanced Control

DeZURIK HPUs were selected for valve control due to their reliability across various industries. These units ensure the valves move to a specified position during power failures, protecting the pumps from back-spin.

## Features of DeZURIK Hydraulic Power Units

- **Power Failure Protection:** HPUs store hydraulic power in their accumulators, allowing the valves to move to a closed position during power outages, safeguarding the pump system.
- **Versatility:** DeZURIK HPUs control various valve types, including VMCs, knife gate valves, slide gate valves, and metal seated gate valves, offering standardized maintenance, training, and ease of use. A total of 23 HPUs were provided to control these valves.
- **Space Efficiency:** Custom-engineered HPUs fit into existing spaces, with each of the 23 units in this project occupying a 2-foot by 2-foot footprint.

## Commitment to Energy Efficiency and Resilience

The comprehensive approach taken by the DeZURIK team highlights innovation and commitment to enhancing the resilience and efficiency of the Coney Island Wastewater Treatment Plant. The selection of Willamette Cone Valves for their durability and cost-effectiveness, coupled with versatile DeZURIK Hydraulic Power Units, demonstrates a forward-thinking strategy for infrastructure design. These solutions prioritize longevity, efficiency, and adaptability, ensuring the facility remains a reliable public utility for the community it serves.



The DeZURIK HPUs were custom engineered to have a specified footprint.

## SALES AND SERVICE

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