

DEZURIK HYDRAULIC POWER UNITS SYSTEM SOLUTIONS



Unique Pump Protection Application Requirements

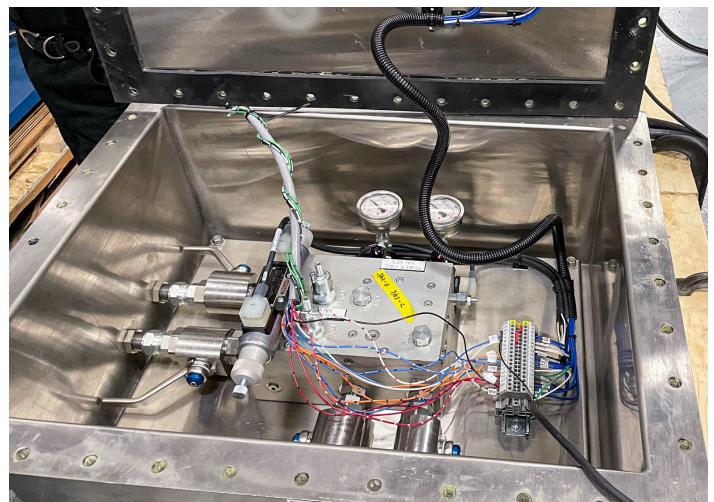
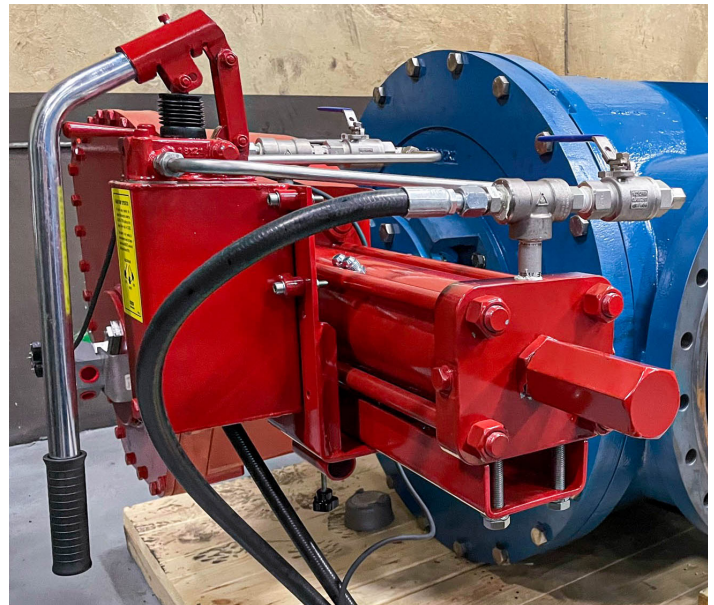
A wastewater treatment plant contacted DeZURIK about a unique pump protection application. This application required eight 30" Eccentric Plug Valves with hydraulic actuators to cycle between 5 and 10 seconds. Two Hydraulic Power Units (HPUs) were needed to operate four valves each. The HPUs were in a ground-level operations building and the valves were located many floors below grade. An individual, local control panel for each valve needed to be located near the valve installation. Both the valve and local control panels had to be capable of possible submergence. In the case of a power loss, an emergency fail position and manual override were required. In addition, the HPU control panel needed to communicate with the plant's Distributed Control System (DCS).

DeZURIK's Single Source Capabilities

DeZURIK was selected as the single-source supplier for the valve package and the hydraulic power source because of its capabilities in designing and building systems solutions, combined with the complexity and unique installation requirements of this application.

The DeZURIK team designed and manufactured the two HPUs to meet the extensive requirements for this project. The hydraulic actuators were sized to exceed the service conditions. Position indication and manual hydraulic override were supplied as part of the actuation package on the valve. Special attention was required due to the submergence specification.

Design and sizing of the HPU was extensive. As usual, system pressure, flow requirements and pump sizing were all part of the initial design. Then came the design of the emergency fail position capability, accumulator tanks and integration into the HPU system package. Completing the system design was the control system for the HPU and individual local control panels. Extensive consideration and engineering were essential to meet the submergence requirement of the individual local control panels as well as the HPU requirement to communicate with the DCS.

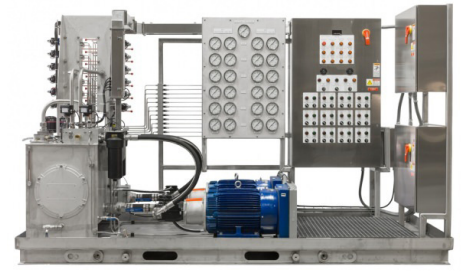


DeZURIK's Experience as a System Solution Supplier

DeZURIK has designed and produced numerous HPUs supplied to many industries including mining, power, water and wastewater treatment. DeZURIK can provide customized units to meet specific needs. DeZURIK also manufactures portable HPUs with stainless reservoirs powered by gas or diesel. These versatile units pack a lot of power in a small rugged package with variable pressure and flow adjustments. In addition to supplying hydraulic actuated valves, DeZURIK can also supply HPUs as part of a complete system solution.



Portable HPU



Customized Hydraulic Power Unit

SALES AND SERVICE

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