

De-Watering Valve Drive System Replacement

FOR IMMEDIATE RELEASE

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Systems Capabilities

Include:

- AC & DC Adjustable Speed Drive Systems
- Navy & Marine Control Systems
- Crane Drive Systems
- Motion Control Systems
- PLC and PC-based Control, Operator Interface & HMI / SCADA Packages
- Power Distribution Panels and Portable Carts
- Instrumentation Panels

Service Capabilities

Include:

- Certified AC & DC Drive Start-Ups
- Drive Preventative Maintenance Programs
- Control System Troubleshooting and Repair
- PLC, HMI, and VFD Programming Services
- Training Seminars
- 24-Hour Service & Repair



Original DC Drive System



New AC Gearmotor System

Background:

Drydocks #1 and #2 share a pumping system for de-watering. The particular drydock to be de-watered is selected by opening and closing the appropriate valves between the pump and the water in each drydock. The original system was powered from a single rheostat-controlled DC motor, nameplated 1899, which was geared to a common drive shaft for each valve. A manually engaged clutch was used to deliver power to the appropriate valve to be opened.

Project Scope:

Jo-Kell Inc. was contracted to perform the project management, engineering, drawings, documentation, assembly, testing, demolition, installation, and commissioning to replace the original system. The new system consists of an AC gearmotor for each valve, couplings, a gearmotor baseplate, motor control panel, and an operator station.

Comments:

The new system allows the operator to open and close the valves via an operator station vice manually engaging clutches. The motor control panel incorporates a motor torque sensing device, allowing the operator to monitor running and seating torque of the motor, and to provide automatic shutdown of the motor if the torque level set point is exceeded. The torque meter is incorporated in the operator station. The project was completed on schedule and budget.

Jo-Kell Engineered Solutions Group

Jo-Kell has over 10 years experience in Systems and Services. We take pride in supplying reliable, high quality products, systems and services to all of our customers.

Credentials and Approvals

UL508 A Listed Facility - Industrial, Crane, Marine
Certified Crane Integrator for ABB & Cutler-Hammer Drives
Panels built to NEC Requirements, NFPA-79, IEEE, USCG and ABS Standards