

APPLICATION SOLUTION: Automatic Valve Turners



Image credit: Dave Lindblom

Product Family: Power Transmission
Product Used: H220 Caliper Disc Brake
Product Type: Standard

Application Requirements
Torque: 5,141 to 15,574 N-m
(depending on disc diameter)
Pressure: 1500 PSI max.

Application Description:

Brakes used to stabilize and hold automated valve turners.

Challenge:

The water utilities division of an international firm that manufactures truck and trailer mounted valve operators for use in maintenance of public water systems was asked to provide a higher-powered, yet easy-to-use valve exerciser. Maintenance workers were manually cycling the valves with large breaker bars to flush hydrants and water distribution systems causing repeated physical injury. The client needed a safe way to automate the process and reduce worker injury.

Tolomatic Solution:

Four Tolomatic H220 hydraulic caliper disc brakes were selected to be engaged when the mounted valve operator unit was moved into place to actuate the valve. The brakes would only be disengaged when the system was positioned over the remote located valve to maintain worker safety. The four H220 brakes provided the redundancy and safety required when power was applied to the valve exerciser.

Customer Benefit:

- Safe operation in challenging outdoor environments
- Streamlined training and certification of operators
- Ergonomic advantages of automating the process eliminated operator injury