



Figure 1 - BP Whiting Clean Energy Facility Whiting, Indiana

The Project

Turning valves and valve handwheels is an important job for professionals charged with maintaining pipeline infrastructure. An organization can have hundreds or even thousands of valves that must be controlled, or in some industries “exercised”, the process of running a valve through its full cycle to prevent sticking, freezing or tuberculation. The Whiting Clean Energy Combined Cycle Cogeneration Facility in Whiting, Indiana (figure 1) sought to prevent employee injuries by acquiring Wachs handheld RS-2 pneumatic valve operators (figure 2) for this task.

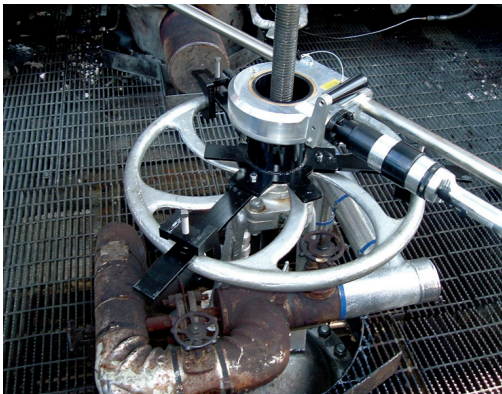


Figure 2 - Wachs RS-2 Rising Stem Pneumatic Valve Turner



Figure 3 - Wachs P-2 Electric with Handwheel Adaptor

The Challenge

Large manually operated valves may require hundreds or even thousands of revolutions to fully cycle. Conversely, some valves require few revolutions but high torque to operate. This can lead to fatigue from severe repetitive motion or arm and back injuries attempting to turn difficult or stuck valves. Often two, three or more employees are used on tough valves to reduce this risk, a highly inefficient use of skilled manpower. And in an emergency the critical time saved using a handheld power valve operator can be the difference between avoiding or incurring a significant or serious incident.

The Solution

E.H. Wachs handheld powered valve operators are built for quick operation and exercising of rising stem valves and non rising stem valves (figure 3). Available in pneumatic, hydraulic and electric drive models they're cost effective, powerful and highly portable for quick, efficient operation of most valves, handwheel valves and post indicator valves (PIV). VITALS equipped machines with software control of torque are ideal for municipalities and water system operators (figure 4) implementing a valve exercising program. This is critical in water systems where untouched valves tend to become stuck, requiring costly replacement.



Figure 4 - RS-2 Hydraulic Exercising Water Treatment Valve

The Technology

Offering up to 800 ft/lbs (1085 Nm) of torque, the RS-2 and P-2 can operate valves from 6" to 60" (152mm - 1524mm). VITALS software equipped models with adjustable torque control limits are ideal for water utility professionals and are so easy to operate even an inexperienced user can exercise valves like a pro (figure 5). Wachs Valve Operators feature:

- ▶ Portable, Lightweight Design
- ▶ Easy Setup and Fingertip Control
- ▶ High Speed and High Torque Models
- ▶ VITALS Torque Control / Data Collection Models

Whiting Clean Energy did a good turn for their employees by acquiring Wachs RS-2 Pneumatics, and deservedly was recognized with a Best Practices Award by Combined Cycle Journal.

Call today to learn more about E.H. Wachs RS-2 and P-2 Valve Operators and all our Superior Equipment. Complete Support.



Figure 5 - Models Available for most Valve Applications

Executive Summary

Attempting to manually turn large industrial valves and valve handwheels can be injurious to your health. Arm, back and repetitive stress injuries have been associated with performing this demanding but important task. Left untouched industrial valves, particularly water valves, have a tendency to stick or freeze, meaning they may not work at a critical juncture. It's why facility professionals charged with maintaining pipeline infrastructure will "exercise" valves, periodically cycling them through their full travel range to prevent deterioration.



Handheld Power Valve Operators

E.H. Wachs RS-2 and P-2 handheld valve operators are ideal for this task. Lightweight and powerful, they're available with electric, pneumatic or hydraulic drive to tackle even the toughest valves. As part of a comprehensive valve exercising maintenance plan, models are available with VITALS data collection software and torque limiting controls.

One good turn deserves another. Equip your facility with Wachs RS-2 or P-2 handheld valve operators to reduce the risk of arm, back or repetitive stress injuries incurred turning valves and watch your labor savings grow. Lightweight, easy to set up and use even for a beginner, our handhelds quickly operate and exercise manual valves and handwheel valves. Contact your E.H. Wachs representative today for details on how to get the wheels turning.

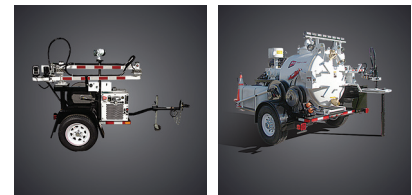
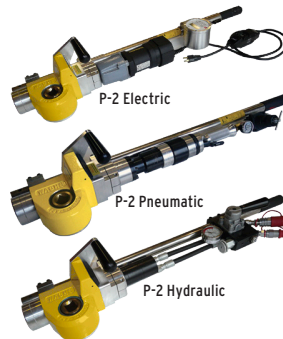
Valve Maintenance Products

E.H. Wachs offers a complete line of products designed to turn and exercise valves of all types. Products include the RS-2 and P-2 handhelds plus larger truck and trailer mounted solutions that include our extended range ERV-750 and heavy duty TM-7. They're part of a complete valve maintenance system for water utility professionals that includes vacuum excavating equipment plus controllers and software for data collection and field asset management.

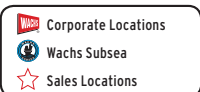
Wachs products are renowned for their engineering excellence, precision manufacturing and rugged reliability. They're sold and serviced worldwide through our international dealer network and Wachs Sales and Service Centers located in Illinois, Texas, Canada, the UK, Singapore, Germany and the UAE.

E.H. Wachs[®] Industrial Division

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- ▶ Portable Weld Prep Machine Tools, Sales and Rentals
- ▶ Split Frames, Guillotine[®] Pipe Saws, Trav-L-Cutter[®]
- ▶ End Prep Machines, Flange Facers, Valve Operators
- ▶ Onsite Technicians, Factory Training, Engineered Products



From Top:
 Yuma field tablet, running infraMap with VITALS
 ERV-750 on Compact LX-VMT • New MUNCIPALE Valve
 Maintenance Trailer with ERV Torque Multiplier



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