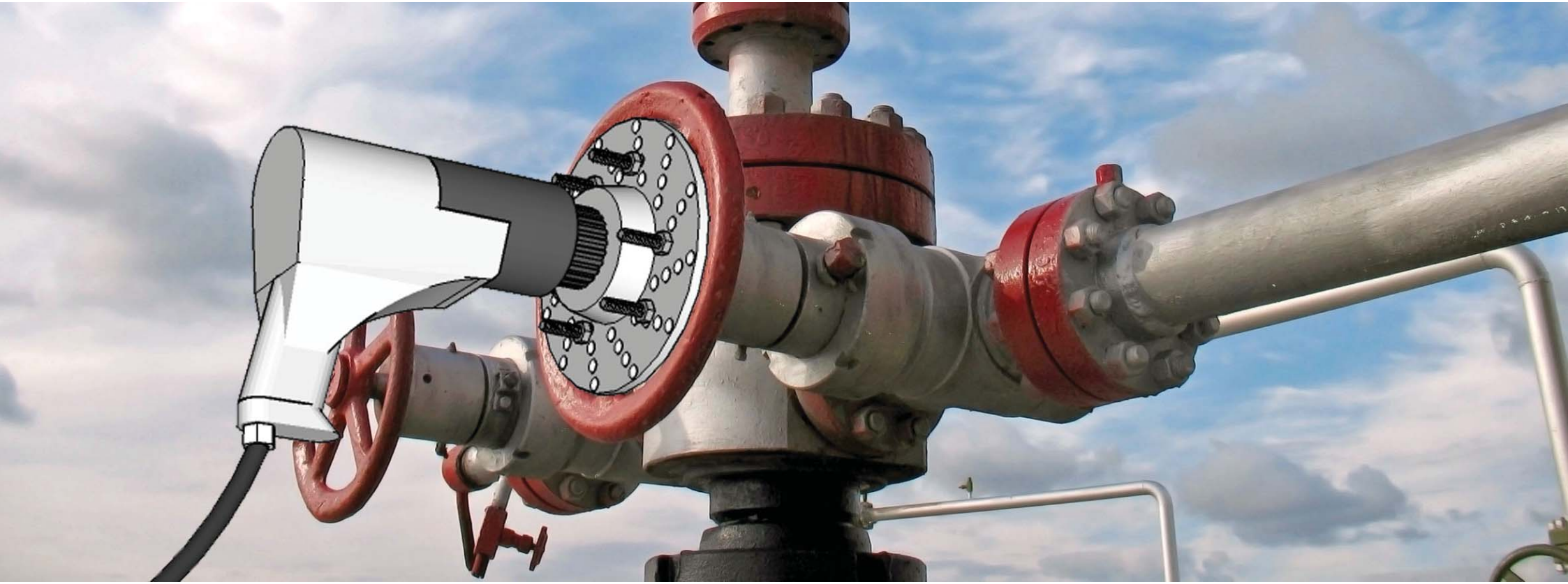
Valve Assist

Portable Valve Actuator



Operating valves, effortlessly.....

TOTAL LOCKOUT

Valve actuation problems?

New from Total Lockout is ‘Valve Assist’, a mobile, portable valve actuator which quickly and easily operates large valves which might otherwise be difficult to operate.

In many industrial environments where large valves are used, problems arise either due to their infrequency of use such that the valve seizes on its seat, or the valves are so large that they can take a long time to operate.

Seized Valves

Valves which are infrequently used can become stiff to operate either due to corrosion of the valve stem or the valve wedge has become seized due to build up of residue.

Large Valves

Valve wheel keys are sometimes used to add torque leverage to the wheel, but if the valve has several hundred revolutions to operate, this can become a time consuming process.

Health & Safety Issues

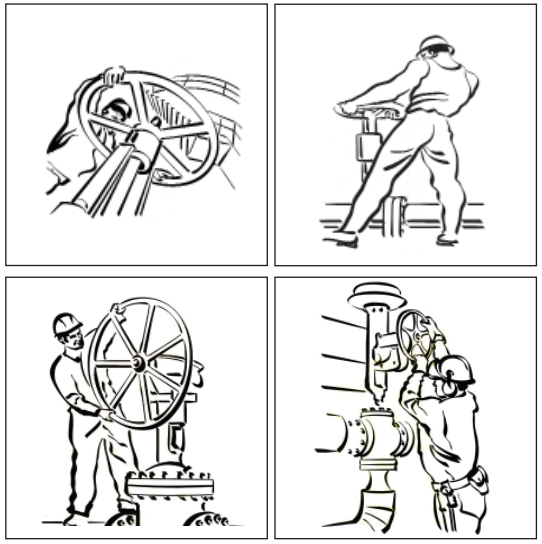
These aspects of valve operation present health and safety hazards to the operators.

Overreaching and forced rotation can result in strain injuries to the operators which can lead to lost productivity and personal injury insurance claims.

Significant safety advantages.

Air Assist reduces the risk of injury when operating valves.

Over reaching, high wheel rotation revolutions all present the risk of strain injuries which can have a significant impact on productivity and insurance costs.



“Valve Assist can significantly reduce the risk of strain injury when operating valves”

Valve actuation solutions

The solution is a hand-held pneumatically or electrically driven actuation tool which can be quickly fitted, either permanently or temporarily to a valve hand-wheel.

Once in place, the power tool is connected to a nearby power source or portable generator or compressor. Pulling the trigger on the actuator gun starts the actuator rotating the valve wheel.

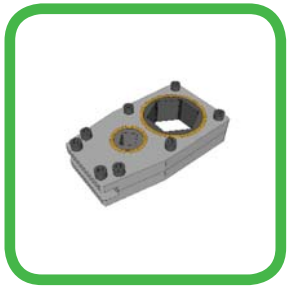
Valve Assist solves the following valve operation issues.

- Stiff to operate.
- Seized or jammed valves.
- Long operation duration.
- High number of revolutions.
- Manual handling injury risk.
- Repetitive strain injury risk.

A single 'Valve Assist' power tool can be used for many valves on any one site.








System comprises

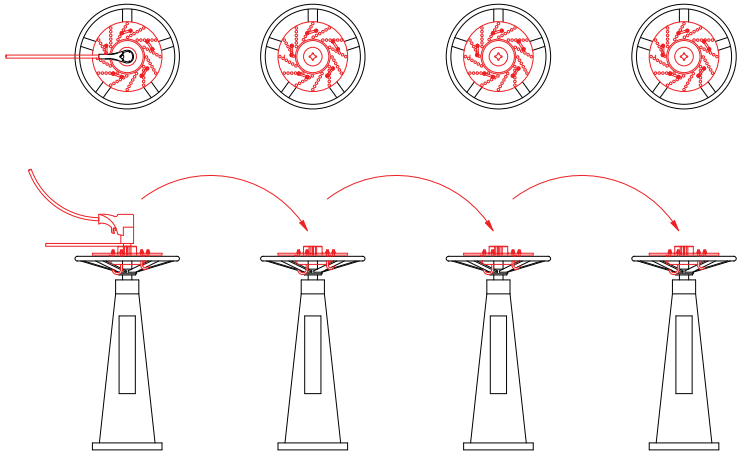
- Pneumatic & Electric Torque Multiplier
- Offset Gearbox
- Reaction device
- Portable or fixed air or electricity supply.
- Air Filter Regulator Lubro

Features

- Smooth, quiet, non-impacting action with reversible motor.
- Two speed models available.
- One-man operation.

"Valve Assist improves onsite productivity by reducing valve operation times"

Valve Assist Application Examples



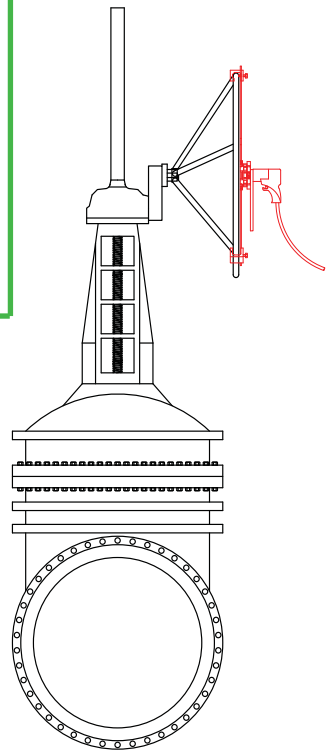
Pedestal Valves

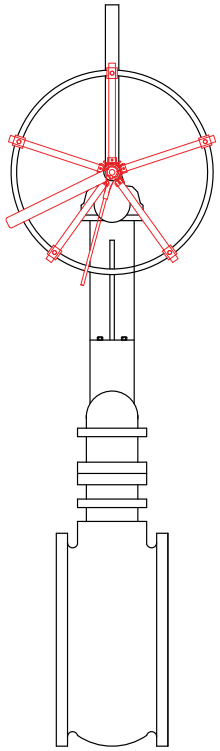
Pedestal valves illustrate the flexibility of Valve Assist. If you have several valves which can all benefit from power actuation, a single actuator power tool can be used. The mounting kit and reaction device can either be left permanently in place, or transferred to each valve.

Gear Operated Valves

The addition of a manual gearbox to a large valve can reduce the input toque required to operate the valve however the gearing reduction has a knock-on effect of increasing the number of hand-wheel revolutions.

The Valve Assist portable actuator can speed up the operation of this type of valve.

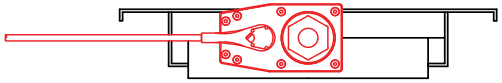


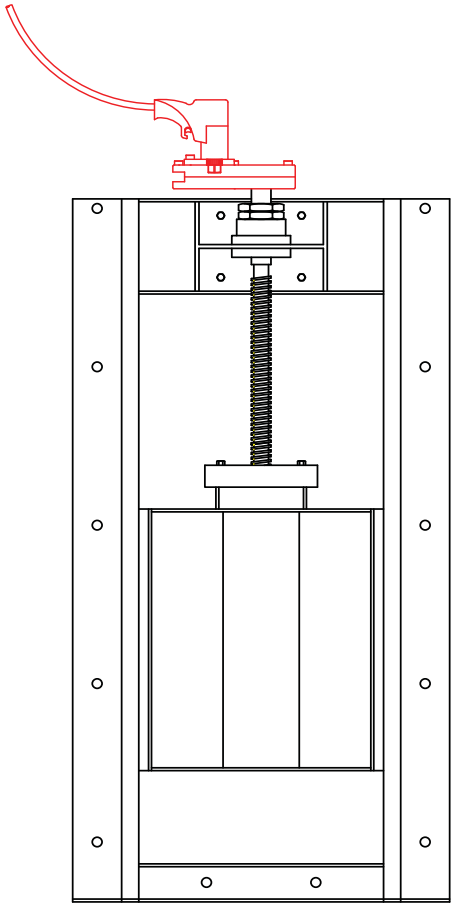


Penstock Valves

Penstock valves are often used in water treatment works or other water ways to control the flow of water. A typical penstock could have many hundreds of wheel revolutions to operate from open to closed.

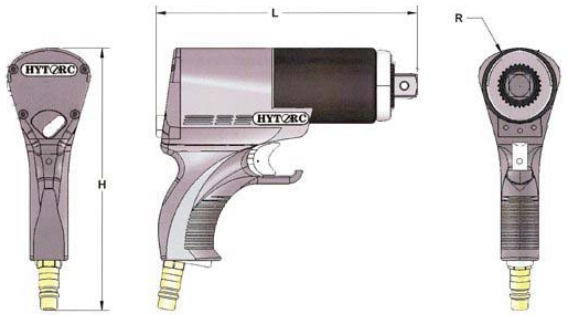
This illustration shows Valve Assist being used with an offset gearbox which facilitates the rising stem to move unrestricted as the valve opens and closes.





Valve Assist Hardware

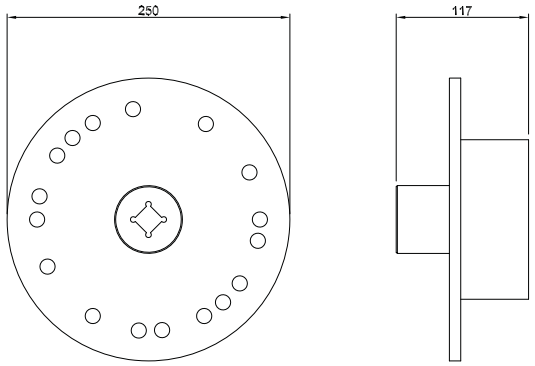
Pneumatic Power Tool



J-Gun .25 Specification	
Torque Range	81 - 373Nm
Drive	3/4”
Height (H)	22.05cm
Length (L)	21.67cm
Radius (R)	3.18cm
Weight (excl. reaction device)	3.26kg
Speeds	Single <175rpm

Flash Gun Specification	
Torque Range	500Nm
Drive	1/2”
Height (H)	19.5cm
Length (L)	29.0cm
Radius (R)	3.6cm
Weight (excl. reaction device)	4.0kg
Speeds	Single 8.1 rpm
Voltage	110v / 220v

Valve Wheel Drive Plate



The valve wheel drive plate offer temporary or semi-permanent adaptation for the power tool.

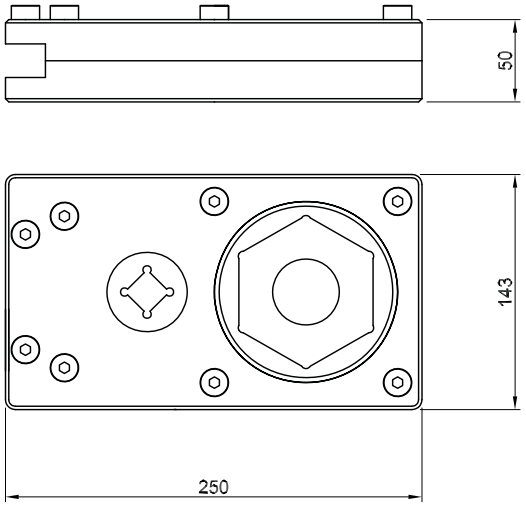
The drive plate uses threaded ‘U’ bolts to fix to the hand wheel spokes. If the valve requires regulator operation, the drive plate can be left in place.

Alternatively, the drive plate can be removed for use on another valve after each operation.

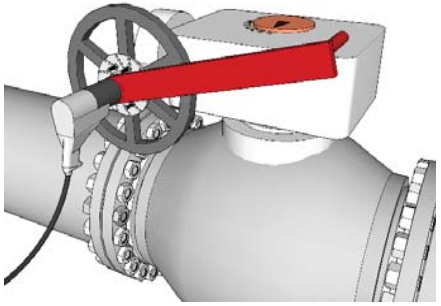
Filter, regulator and lubrication unit all pneumatic torque guns.

FRL Unit can be upgraded with the Silencer Unit to reduce operational noise

Offset Gearbox



Offset Gearbox can be used for rising stem valves. The power input drive shaft is offset from the valve drive stem to allow it to rise and fall as the power tool drives the valve. As with the valve wheel drive plate, the offset gearbox can be attached to the valve either semi-permanently or temporarily, depending upon the frequency of operation.



Reaction Device (highlighted in red)

The reaction device is the most important component in the Valve Assist assembly. Unlike other valve actuator tools on the market, Valve Assist includes a reaction device to protect the operator from ‘kick-backs’. This is when the actuator hits a tight spot causing the power tool to jarr in the opposite direction to rotation. The design of the reaction device will vary from one valve to another.

Lockout Tagout

Products & expertise for a complete safe isolation procedure using lockout tagout equipment.

Valve Assist

Portable valve actuators to take the hard work out of manual valve operation.

Worldwide Headquarters:

Total Lockout (Safety) Ltd
Braintree
Essex
CM77 8XW
United Kingdom

Tel: +44 (0)1376 325506
E-mail: sales@totallockout.com
Web: www.portablevalveactuator.com