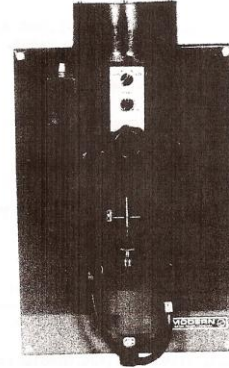


## Series W-450 & W460 Automatic Gas Control Valve

- Automatic pacing with cylinder, wall or cabinet mounted systems
- Self-contained, Flow proportioning control
- Capacities up to 500 PPD of chlorine
- Easy installation



W-450 automatic gas control valve offers substantial economies in automatic pacing of the chlorine gas feed rate. It is designed to automate a vacuum operated gas feed system. Designed for applications up to 500PPD of chlorine or 475 PPD of sulfur dioxide. The valve will feed these gases in direct proportion to flow.

Here are paced systems that can be economically justified for even the smallest water or wastewater applications. Not only do you save precious floor space, but you also realize savings in initial equipment costs. The chemical resistant wall mounted design incorporates all the control electronics necessary for automatic flow proportioning, eliminating the need for a separate and expensive controller.

The benefits do not stop there. In Modern's chlorinator system, the controller (vacuum regulator) and injector are molded of heavy duty, chlorine resistant materials in order to reduce the number of parts, simplify maintenance and extended the units service life.

Modern has designed the pacing valve so it can be operated by a wide variety of primary elements: open channel, propeller, and other types of flow meters.

Automatic flow proportioning takes the guesswork out of regulating the gas feed rate every time the flow changes. The W-450 automatically regulates chlorine feed into a flow stream in direct proportion to the quantity of flow steam in direct proportion to the quantity of fluid being purified. The control signals originate from a primary flow element or meter at some point in the stream. Signals (4-20 mA DC) from these instruments are used to drive a servomotor that is connected to the stem of the pacing valve.

The valve stem is automatically positioned so that it allows the proper amount of chlorine to enter an injector.

A dosage control knob is provided to increase or decrease the gas feed rate. Once set the dosage will hold at a fixed value with a variation in flow from minimum to maximum. The dosage control knob also permits an increase up to twice the design dosage at half the maximum flow.

An auto/manual switch and manual rate adjustment knob is provided to manually operate the valve in the event of a power failure, loss of input signal or manual override.

The automatic valve is installed between the controller and injector. A signal (4-20 mA DC) from a flow transmitter is sent to the valve where it is compared to its present position and automatically opens or closes until a balanced electrical signal occurs. The result is a linear gas feed rate adjustment. The automatic valve will respond to any appropriate input signal to provide versatile, automatic control.

The injector provides a vacuum source that draws chlorine from the controller. After leaving the controller, the chlorine flows into a chamber on the inlet side of the automatic valve and then through the orifice opening. From there it enters the injector where it is mixed with water and discharges into the flow stream.

Optional direct residual or compound loop control as model W-460.