

Case study

Micro-C_v Control Valve Product Line Line No Other

Cost Savings

60-80%

Per Valve Average⁽¹⁾

Turndown

500:1

Less Downtime

Eliminate costly outages by on-line adjustments for improved accuracy

⁽¹⁾ Savings and reduction vary by application.

THE CHALLENGE

Low-Flow, or Micro C_v, valve applications present unique challenges. **A very minor change in process conditions can necessitate trim changes, or even valve replacement.** At the same time, exact conditions are not always known, or are buffered to provide a "safety margin" during valve selection. The result is often **oversized valves that don't control as accurately as desired.** What if the process will be cavitating?

THE SOLUTION

The **Masoneilan™ 28000 Series Varipak** control valve line provides unique capabilities in the low-flow product range. With a scope unmatched by any other micro-C_v control valve, the Varipak provides a perfect solution to an imperfect application segment.

Adjustable C_v

No other low-flow control valve offers the capability of **adjustable C_v**. The simple C_v adjustment allows for a +/- 40% variation in C_v while maintaining exceptional rangeability and accuracy. **C_v adjustment is as simple as moving an adjustment knob along the slotted lever assembly.** In most cases, C_v adjustment does not require any recalibration, making it possible to quickly change C_v setting with minimal disruption to the process. Adjustment is within the actuator with no valve disassembly required, preventing exposure to the controlled fluid and HSE issues that result.

Zero Emissions

In applications requiring both a low-flow valve and zero emissions, the Varipak can be provided with a **Bellows Seal construction.** Available for pressure classes up to CL600 (PN100), the bellows construction is suitable for up to 800 psi (55 bar) pressure. Perfect for flammable, explosive or toxic fluids.

Simple Flexibility

Although the Varipak offers a wide cope of options, the design maintains commonality and simplicity throughout. The trim design shares parts across 10 different nominal sizes to offer **74 C_v ratings** from just 8 plugs and 5 seat rings. The actuator is field reversible by just changing pin positions, with only two spring ranges covering the full product range. A standard integrally mounted positioner eliminates most linkage components **contributing to reliability and simplifying maintenance.**

Improved Accuracy for Process Efficiency

Shutting down a process to change trim, or the entire valve is time consuming and expensive. Varipak's unique adjustable C_v and range of options help compensate for imprecise application data and resulting oversizing, **improving control accuracy and process reliability.**



Masoneilan
28000 Series Varipak

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