

A METHOD TO EVALUATE A PERFORMANCE OF A CONTROL VALVE AND A SYSTEM THEREOF

5 ABSTRACT

The present invention relates to a method for providing a system for establishing a control valve performance in a process operation, said system including establishing an expected flow rate for a control valve by measuring a differential pressure between an upstream and downstream position of a control valve of interest and using the formula

10 $Q = C_v \times \phi(x) \times \sqrt{\frac{\Delta P}{G}}$, measuring an actual flow rate across the control valve,

comparing the actual flow rate with the expected flow rate to determine the difference in value between the actual and expected flow rate, determining if the difference is within an acceptable range of values from the expected flow rate and establishing the performance of the control valve.

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The invention also relates to a system for establishing a control valve performance, said method including a flow meter to measure an actual flow rate across a control valve, a database having at least an expected flow rate for a control valve, and a comparator to compare the actual and expected flow rate to establish the performance of the control

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FIGURE 2