

Rate Control

1. Gain

- A factor used to modify the rate adjustment based on the volume of product being applied. A higher volume of product requires a lower gain to reduce the rate of adjustment. The adjustment is exponential – a small change in the gain can produce a very large effect.

2. Integral

- Use accumulated rate error to move to target rate quicker.

3. Max Power

- Maximum power delivered to the motor or valve.

4. Min Power

- The minimum power delivered to the motor or valve.

Adjustment Process:

1. Initial Setup:

- Begin by setting the minimum power required to move the motor or valve. Set the maximum power to 100, reducing it as needed to improve control stability.

2. Gain Adjustment:

- Next, adjust the gain very slowly until the system overshoots the target. Then reduce the gain to stabilize flow control.