External Ion Gauge Vacuum Control System

The external ion gauge vacuum control system uses a special configuration of the Alicat single valve pressure controller. Alicat’s **External Ion Gauge Vacuum Controller** was designed specifically for the vacuum coating industry.

This innovation circumvents the low end range of our pressure sensors and allows for control of extreme vacuum conditions in the coating chamber.

The controller provides lightning fast control based on data provided by an ion gauge vacuum sensor with a linear 0-10 volt output of pressure. The controller translates the signal and precisely controls extreme vacuum pressures within the process chamber.

In this application, the 0-10V signal correlates to 0-0.5 Torr. The controller utilizes the pressure signal from the ion gauge to precisely control extreme vacuum conditions in the coating chamber.

The mass flow meter upstream of the pressure controller is unaffected by the vacuum conditions and measures precise mass flow, volumetric flow and the totalized mass of gas into the chamber.

Set-points can be delivered to the controller locally with an analog signal or via the RS-232 serial connection. Please contact a sales engineer to discuss your external ion gauge system application.