

Industry: Fresh food packaging

Application: Vacuum

**The Challenge**

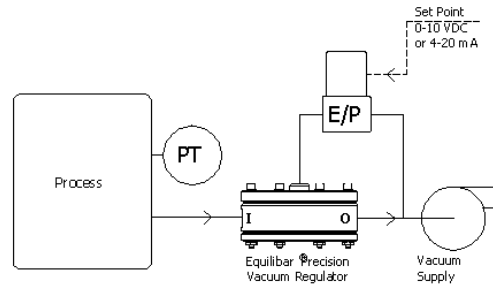
Many fresh meats and vegetables are packaged today using Modified Atmosphere Packaging (MAP) where air is rapidly removed and an inert gas is substituted.

To do this economically, the gas exchange processes must occur extremely quickly, challenging the performance of traditional gas handling components and systems. By providing stable vacuum pressures under rapidly varying flow rates, the Equilibar regulator dramatically reduces the atmospheric variability from package to package, thereby improving the quality of the product and the productivity of the process.

**Easy integration into process control systems**



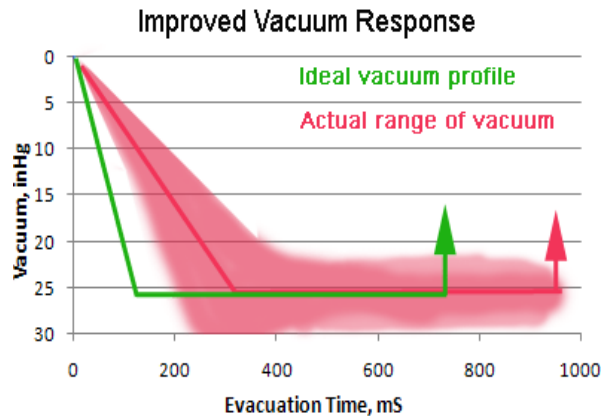
EVR-20 2 1/2" vacuum regulator shown



Typical flow schematic for an automated vacuum process.

**Improved Cycle Times**

The Customer has a proprietary sequence for evacuating and flushing their food packages. In summary, their process requires achieving a vacuum of 26 inHg inside the package before the flushing sequence can take place. However, it is important that the vacuum be consistent from package to package and not deviate above 26 inHg to avoid other process problems. The red area in the chart shows the actual range of variability due to inconsistent vacuum application. The injection of inert gases must be delayed to compensate for the uncertain application of vacuum. Not only does this slow down the process, it also imparts variability into the overall gas composition in the product.



**The Results**

The customer reports improved cycle time in the packaging process, consistent gas fills and fewer “puffy” packages.

Please feel free to contact us for more information or to describe your question and application challenges. Equilibar is available by email at [info@equilibar.com](mailto:info@equilibar.com), web form on [www.equilibar.com](http://www.equilibar.com) or phone at (828)650-6590 (9:00 AM - 5:30) PM Eastern Time.