

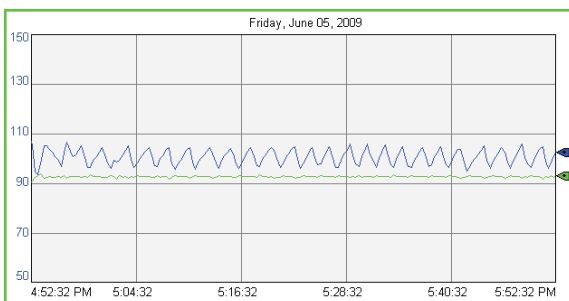
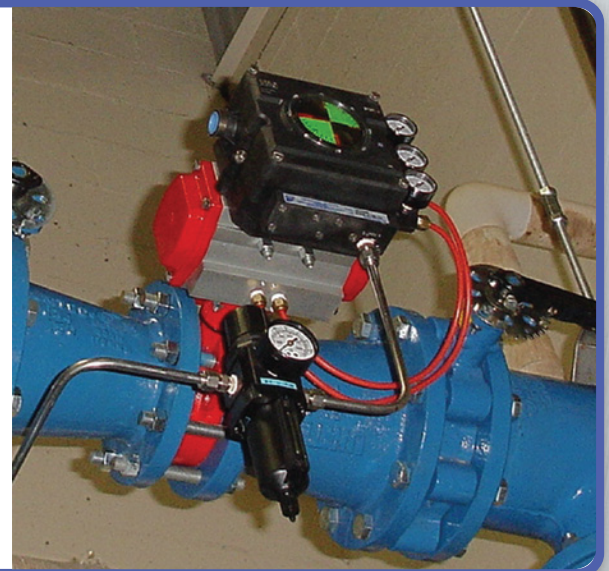


# CAM Demand Expander™



When conducting an energy audit, we recommend that customers always look at the big picture. Mechanical Systems interact with each other; whereby a savings in one area may create a cost in another. Most analysts will consider potential improvements in both the supply side and demand side of an industrial air system. Do not forget the last piece of the puzzle, which is the distribution network and capacitance of the system. Target efficiencies will never be met if the system, valves, dryers and distribution network are not properly sized. Engineers at CAM Technologies can customize a solution to meet your air system demands.

The CAM Demand Expander™ is a low-loss, high-accuracy pressure control valve station that provides stable plant pressure (typically +/- 0.5 psi or better) while isolating the plant from the trim compressor supply. Combined with event storage the CAM Demand Expander™ allows the plant to receive a consistent compressed air utility regardless of the conditions of the supply. Compressors can also be taken out of service and various optimized combinations of compressors can be used without the plant ever noticing a change. The end result is a lower monthly utility bill and improved operational productivity. The CAM Demand Expander™ can be controlled locally or managed directly from the CAMLink™ compressed air system automation control. CAMLink™ Air System Controllers can be used to combine compressor controls with the CAM Demand Expander™ to coordinate setpoints for optimum operation of the entire compressed air system.



As the original developers of the Demand Expander, CAM Engineers understand the importance of air system efficiency. The CAM Demand Expander™ maximizes air compressor and system efficiency by separating the supply side trim compressors from the demand side (users) and base compressors. It is designed to provide for the expansion of compressed air from storage to the system with a minimum loss of energy; results are a consistently lower plant air pressure. As pressure is lowered in the piping system, all unregulated flows and leaks are reduced. The pressure dew point is also lowered as a result of expansion. The CAM Demand Expander™ is designed for minimal initial to pilot pressure vs regulators that typically require 10x as much Delta pressure. It is a precise control device that has a control and response sensitivity within tenths of a psig. Using a CAM Demand Expander™ allows storage to be maintained in the upstream supply system for handling variations in demand, rather than utilizing online compressor power.