

Vortab Flow Conditioners Enhance Pump Efficiency and Life

Eliminating Flow Disturbances Due To Crowded Equipment Conditions

San Marcos, CA — The efficiency and service life of pumps can be greatly extended by following the manufacturer's installation recommendation for pipe straight run entering the pump. When cramped pump houses or restricted pipe runs make this impractical and costly, Vortab flow conditioners from The Vortab Company overcome this challenge by delivering a uniform, swirl-free flow profile to the pump inlet in as little as six pipe diameters.



Upstream flow disturbers, such as elbows, expanders or reducers, and valves, often produce non-uniform, non-repeatable and swirling fluid flow entering the pump that can lead to pump cavitation and other issues causing premature wear. The result is extra maintenance, expensive repairs and/or premature replacement, which can take equipment offline. Vortab products provide effective process conditioning to protect pumps.

The Vortab Company's product line of process flow conditioners, with their exclusive flow profile and anti-swirl tab design, correct flow disturbances to mimic adequate pipe straight run and produce a highly repeatable, symmetrical flow profile. Vortab flow conditioners are proven to be the industry's lowest pressure drop flow conditioning technology, which reduces energy costs and minimizes process design considerations. Their use also eliminates the extra pipe cost and technician labor for additional lengths of pipe straight run and/or moving equipment around to accommodate new pumps.

Swirl reduction and velocity profile correction occur naturally in long lengths of straight pipe due to diffusion, friction and turbulent mixing. The Vortab flow conditioner's anti-swirl and inclined vortex generating profile correction tabs, projecting from the inside pipe surface, generate vortices that accelerate these natural pipe effects to create a uniform, non-swirling, symmetrical flow profile in a much shorter section of pipe.

The simple, flexible designs of the Vortab Elbow (Model VEL) and the Vortab Insertion Sleeve (Model VIS) configurations provide a cost effective, easy to install solution that supports proper pump installation.

They can be made from carbon steel, 316L stainless steel or Hastelloy C-276 and in almost any pipe size. A variety of process connections are also available--ANSI flanges, male NPT threads, butt welded preps or retaining wafers.

The Vortab Company is a manufacturer and global supplier of flow conditioners and flow straighteners committed to meeting the needs of its customers through innovative solutions to the most challenging requirements for flow disturbance isolation to optimize flow meter accuracy and repeatability in gases or liquids.

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