

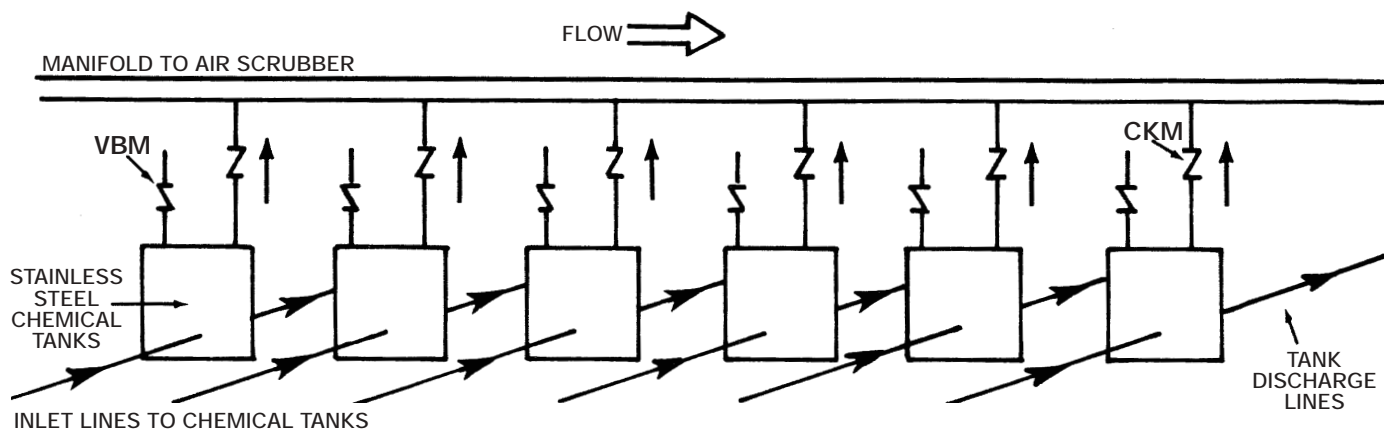
MARKET Pharmaceutical Manufacturing

PRODUCT(S) Vacuum Breaker Series VBM and Check Valve Series CKM

REQUIREMENT To provide vacuum relief and pressure venting during transfer operations.

PROCESS FLUID(S) Organics, Water, Caustics, Acids and Vapors

INLET PRESSURE/TEMPERATURE Vacuum to Slight Positive Pressures / Ambient Temp. of 72°F



A leading pharmaceutical manufacturer required a bubble-tight, closed-loop, venting system for their stainless steel chemical transfer tanks. They desired a method of relieving vacuum and positive pressure during chemical transfer which would also meet the strict guidelines of the EPA Clean Air Act.

A manifold was designed to accept the vapor and gas discharge created during the tank(s) fill cycle(s) and deliver them to an air scrubber for processing. Plast-O-Matic Series CKM Check Valve, with its normally-closed, bubble-tight design was specified

to allow the vapor/gas to discharge and to prevent cross contamination of the chemical tanks via the manifold.

(1) The Plast-O-Matic Series VBM Vacuum Breaker provided the engineers with a normally-closed, bubble-tight method of relieving vacuum during the tank discharge cycle. Series VBM will begin to relieve vacuum at as little as 2" Hg. Series VBM also remains bubble-tight, preventing fugitive emissions from escaping to the atmosphere at all other times.

NOTE: Bulletins are intended only to show possible applications of Plast-O-Matic products and are not design recommendations for a system or its safety. See statement of limitations in front of manual.