

Tank Purging

Description of Application

Many liquids in the Chemical and Food & Beverage industry must be protected from contact with air. The oxygen in air can cause oxidation, resulting in unacceptable consequences ranging from discoloration or spoilage to catastrophic explosion. A blanket of an inert gas introduced through purging of the tank or vessel, protects the liquid from contact with air.

Rotameter Solution

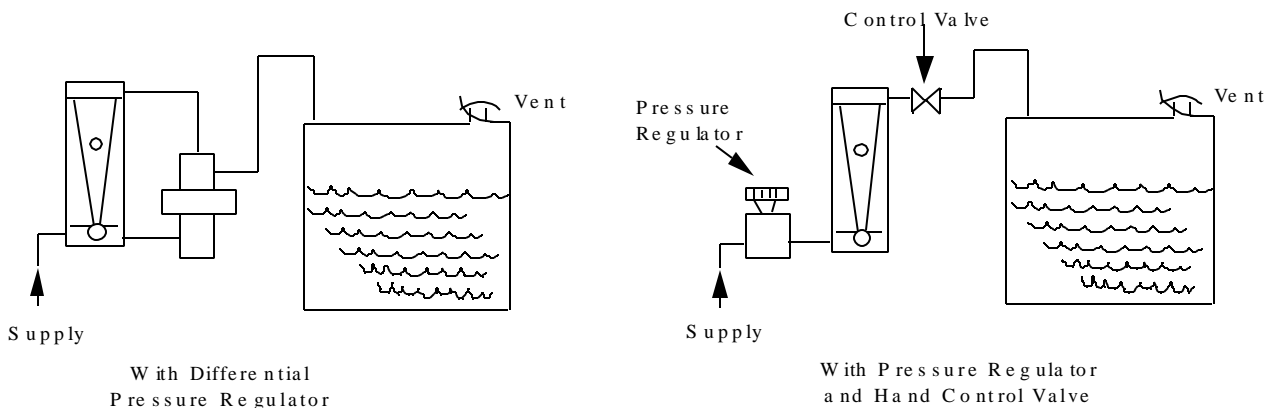
The use of a properly sized rotameter is the least expensive and most convenient way to set and monitor a purge gas into a tank for the purpose of blanketing the liquid with the purge gas and excluding oxygen.

Where Used

Chemical Companies
Petroleum & Petrochemical Companies

Food & Beverage Companies

How Installed



Method Of Operation

When a liquid in a tank cannot come in contact with air, a tank purge system fills the tank with the purge gas, excluding all air. The liquid is then introduced and in continuous process systems air cannot re-enter the tank because of continuous venting of the purge gas. The rate of flow of the purge gas is dependent on the size of the tank and the size of its vent(s). For small and relatively "tight" tanks purgemeter flows are usually adequate. For large tanks and/or those with larger vent areas, larger flow meters may be required.

Model Selection

10A6131N - with a Differential Pressure Flow Controller for low flow rates.

10A2235 - used with a pressure regulator - for higher flow rates

10A4500 - and control valve

NOTES:

Note: All Application Bulletins are subject to change without notice.

Pub No. AB-V-003
Issued: September 1, 1999
Copyright © 1999 by ABB Automation Inc.



ABB AUTOMATION INC. Instrumentation Division
125 East County Line Road • Warminster, PA 18974
Phone: (215) 674-6000 • Fax: (215) 674-7183