

Jacobs Process Analytics, Inc

Aspirators

Model ASP-500T6 and Model ASP-500T4

Sample System Components



Model ASP-500T6

One of the problems in operating a continuous gas analyzer is the delivery of an unaltered sample to the measuring unit. Frequently, the gas to be sampled is at atmospheric pressure, or at a slight vacuum, so that some means must be used to force the gas to flow to the analyzer.

Pumps of various kinds have often been used in gas sampling systems to produce the necessary differential pressure, but pumps fail fairly quickly in the presence of corrosive gases and abrasive particulate matter. Breakdowns can be frequent and repairs are sometimes costly.

A far more satisfactory answer to this problem in many installations is the Jacobs Process Analytics, Inc. (formerly Lockwood & McLorie) aspirator. Hundreds of these convenient devices which operate as vacuum pumps have been used

in sampling systems since 1967 and have given very nearly trouble free service.

As shown above the aspirator is a very simple device with no moving parts to wear out. Standard materials of construction are a Teflon* body with a Kel-F** jet insert. Other materials can be furnished on request. (Tee-type aspirators in 316SS, Teflon*, titanium, hastalloy-C, etc are also available.)

Because Teflon* and Kel-F** are quite inert, corrosion has not been experienced. The simplicity of the aspirator precludes expensive repairs.

Performance

The primary use of the aspirator is to draw gas samples from the atmosphere, from stacks, or from processes to a continuous gas analyzer. In addition, they have been used for pumping or lifting liquid samples, filling reagent tanks and for controlled dilution of liquid streams.

Nearly any fluid can be used as motive power and most fluids can be pumped with these aspirators. However, where the fluid to be moved is gas, gas or air should be used as the motive fluid. Where liquids are to be pumped, the motive fluid should be liquid.

* Teflon is a DuPont trademark.

** Kel-F is a 3M Company trademark.

Jacobs Process Analytics, Inc.

_Ph. 423-967-2019

www.JacobsAnalytics.com