



BURGESS-MANNING INC.

CycloSep

A New, Cost Effective, High Efficiency Separator Alternative

BACKGROUND

Burgess-Manning engineers have developed the CycloSep as an alternate to our Tuyere Separators. The CycloSep offers our customers a COST SAVINGS while delivering *comparable efficiencies*. The CycloSep is capable of handling large volumes of liquids and solids and can be used as a "knock out" separator.

PRINCIPAL OF OPERATION

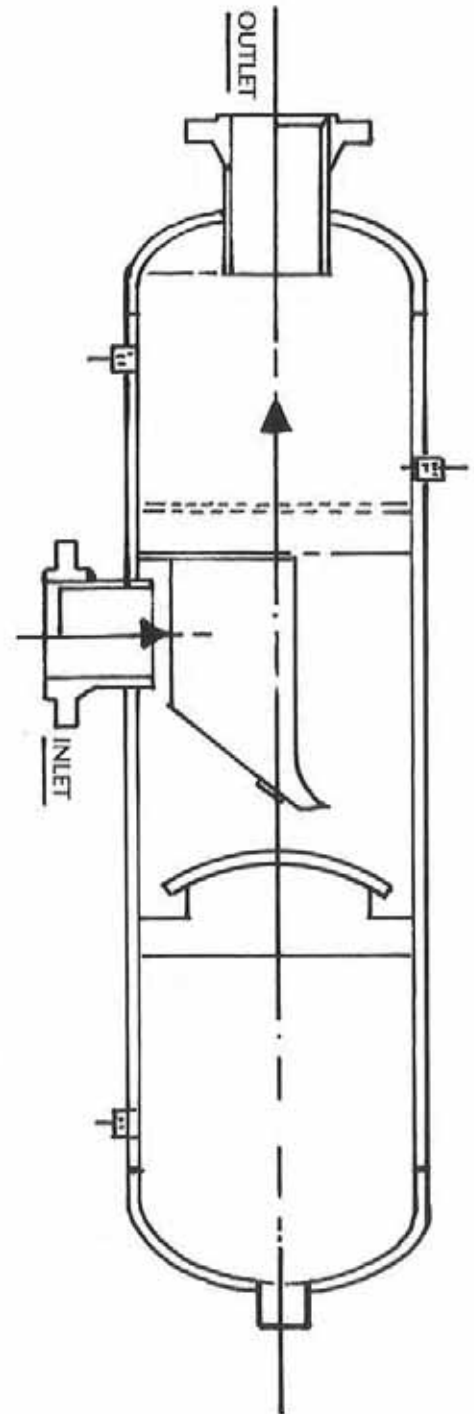
The entrainment-laden vapor enters the vessel and is forced into centrifugal motion by the inlet swirl baffle. The resulting centrifugal action forces the liquid droplets and/or solid particles to the outer periphery of the shell and downward into the collection chamber. Below the inlet swirl baffle is a dished baffle which serves two purposes. First, it supports the vortex created by the imposed centrifugal action in a uniform vertical position. Second, it provides a quiescent lower storage chamber. The cleansed gas then reverses direction and moves upward and out the exit nozzle.

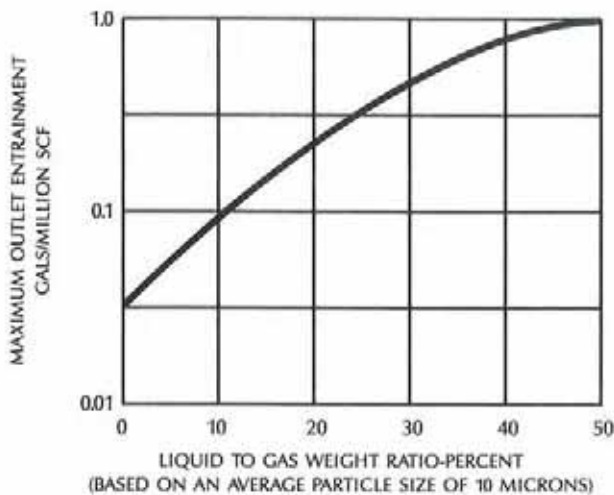
APPLICATIONS

Over the past 10 years, Burgess-Manning has placed hundreds of our CycloSeps in many types of services... including: natural gas, syn-gas, high viscosity oil, polyester flakes, compressor interstage and others.

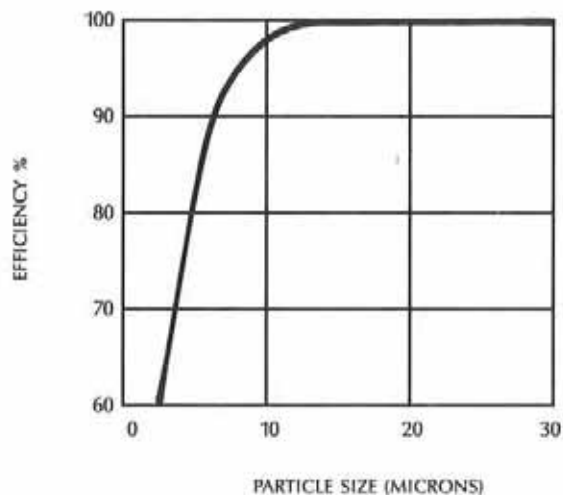
CONFIGURATIONS

The figure to the right is the standard configuration for our CycloSep. However, a side-outlet configuration is also available. For applications involving the separation of dry solids, we can include a dispersal "cone" in the bottom of the vessel, for the easy removal of solids.





Typical Efficiency, Liquid Entrainment



Typical Efficiency, Particle Size

EFFICIENCY

Efficiency is influenced by particle size, distribution and liquid loading. See Figures above for typical performance.

PERFORMANCE AND PRESSURE DROP

Burgess-Manning CycloSep separators offer very high efficiency over a wide range of flows. They remove more than 98% of liquid and solid particles down to 10 microns. The simple, compact design has no moving parts; is self-cleaning to virtually eliminate maintenance; is easy to install and operates with a low pressure drop of less than 1% of absolute line pressure (.25 to .50%).

GENERAL SPECIFICATIONS

All Burgess-Manning separators are built in accordance with the ASME Code for Unfired Pressure Vessels. National Board Stamp and Local, State and Province requirements are available as specified. Two (2) copies of complete Manufacturers Data Reports and one (1) reproducible drawing will be furnished with each vessel. Additional copies will be furnished at nominal cost.

Standard separators are of welded carbon steel bodies with either carbon steel or stainless steel internals.



BURGESS-MANNING, INC.

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