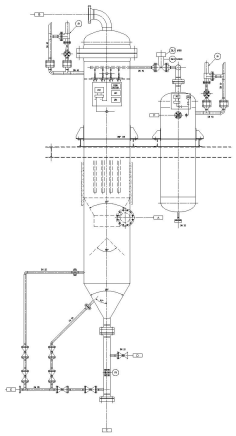
BLOWMATIC - FINE FILTERS

Types of Blow Back filters installed in refinery and petrochemical plants.



BLOW BACK Description:

The Bea Technologies blow back filters are used for the process applications that need the separation of solid contamination /Fines from utility gases streams in refinery catalytic processes or which are used for the delivery and recovery of chemical powder products in Petrochemical Plants .
The Bea Technologies Blow back filters can be equipped with metallic sintered filtering cartridges or Polymeric hose with high solid retention capability and separation efficiency.
The robust and reliable gas back wash system of Blow back filters designed by BEA Technologies is suitable to operate with high and low pressure and assures a high regeneration efficiency of filtering elements.

The Bea Technologies blow back filters can be equipped with local control panel (PLC type) for automatic control of the equipment or directly connected to DCS of the plant.
Special applications for high pressure can be developed and designed upon customers request.

BLOW BACK specifications:

- The range of capacity of BEA Blow back filters comes from 50 m3/h up to 30.000 m3/H
- The range of operating temperature of BEA Blow back filters is from - 50 °C up to 400 °C.
- The range of operating pressure of Blow back filters is from 300 mm H2O column up to 25,0 Barg.
- Special application for high pressure can be designed in accordance with customer's requirements .
- The BEA Blow back filters can be equipped with metallic sintered filter cartridges or Polymeric bags characterized by high solid retention capability and separation efficiency.
- A robust and reliable gas back wash systems , both for low and high pressure, designed to obtain an high efficient regeneration of the filtering elements .
- The gas back wash systems of BEA Blow back filters are suitable for operate with Compressed Air , Nitrogen or Hydrocarbon Gases .
- The BEA blow back filters can be equipped with local control panel (PLC type) for automatic control of the equipment

In particular the Bea Technologies Bow back filters are used for::

- ***The separation and removal of catalyst broken powder*** in the the FCC unit regeneration loop (Hydrocarbons refinery plants)

- ***Recovery from transport gas stream*** of plastic powder and chips(Plastic production plant).

- ***Removal of plastic powder and chips on leakage gas systems*** to flare (Plastic production plants) .

Following are the general refinery/petrochemical processes where BlowBack filters are installed:

1) **CCR and Octanizer Units Regeneration section – *licensed by Axens and others*.**
* First Upper Hopper Fines Filter - Upper Surge Drum Fines filter.
2) **Hydrotreating Units.**
* Separation of fine particles from exhaust gas.
3) **Petrochemical Units**
* Polyethylene - Polyolephins production unit.
* Polypropylene production unit.
* Gas Treatment Unit.
4) **Residual Fluid Catalytic Cracking Complex. *Licensed by Axens*.**
* Separation of catalyst fines from nitrogen stream..

BEA Technologies designs and manufactures filter elements and filter packages for the removal of water, oil, HC condensate and solid particles from the OIL & GAS fed to column, reactors, Hydrocrakers to protect internal critical parts and catalysts from any potential damage. The filter packages are manufactured in carbon steel or S.S. according to specifications and provided with actuated valves to automatically control filter operations. The filter housings and packages are carefully tested and controlled before final release.

Features:
- Increased filtration area for outstanding accumulation capacity of solid contaminants.
- High retention efficiency for separation of micronic particles damaging the critical parts.
- Automatic filtration systems are provided of upstream and downstream actuated shut-off valves

Benefits:
- Full purification of GAS for protection of process equipment and recovery of process gas.
- Design optimized to increase the SERVICE LIFE and performances of catalyst beds.

Mounting and testing of filter in workshop.

Final packing of filters for shipment