

INERTIAL FILTERS



Delivering Specialised Engineering Solutions

Our unique inertial filtration system is designed to minimize the ingress of foreign particles into an enclosure or building. The module is designed to meet airflow requirements of the housed equipment and is generally maintenance free during its life cycle. Fine dust that can be encountered on mine sites and sand from dust storms can create a major maintenance problem for power station operators across the whole spectrum of operation.

The major benefit of this type of filter is the extended life of combustion air filters and engines in extreme environments. Barclay Engineering has supplied this product design on many major power projects throughout Australia, South East Asia and the Middle East.



KEY APPLICATIONS

- **Power Projects.** Inertial Filters provide superior protection against foreign particles entering genset enclosures, generation halls, modular power stations and compressor enclosures in extreme environments.
- **Mining projects.** Cost savings from self cleaning systems are a huge factor in remote mine sites. The self-cleaning feature of our filters means less maintenance and down time.
- **Globally recognised.** Barclay Engineering has supplied this product design on many major projects globally and is preferred by customers who require a high performance, cost effective and low maintenance filtration system in harsh environments.

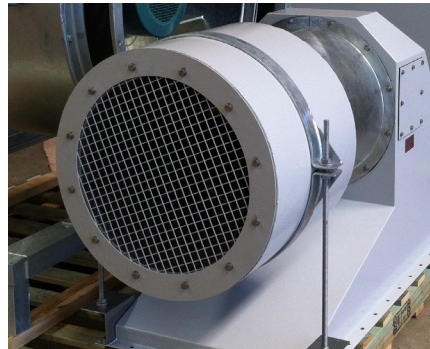


HOW IT WORKS

The filter (vane pack assembly) consists of pressed steel blades, steel housing, collection sump and bleed air fan. The system comes complete with AV mounts and flexible connections for the main fan to the enclosure wall (Dependent on installation type).

Dusty air is drawn in through the vane pack assemblies and is made to turn sharply at high velocity. The air is drawn through the vanes, whilst the heavier dust or other type or particles travel past the blades and are collected into a dust chute. These particles then fall to the sump, where it is then ejected externally by the bleed air fan. Due to the vane pack design there is also very little moisture transmission from heavy rain. It is recommended that in the application is in an extremely high rainfall area, that consideration be given to fitting moisture eliminator cartridges into the assembly.

This method of filtration can achieve up to 95% efficiency @ 10um.



BLEED AIR FAN

As the bleed air fan ejects the sump catchment, there is no requirement for regular maintenance.

The system is mostly fabricated from galvanised sheet or stainless steel, depending on the severity of the operational environment. After manufacture the equipment can be powder coated or painted to customer specifications. The structural support is hot dip galvanised.



TRANSITION

The transition section can be customised to suit any requirement. From a straight single unit, to multiple ducts running from a single filter. Engineered to maximise the efficiency of the unit.

Want to know more? Please call our experienced staff to learn more about how our Inertial Filters can provide a high performance, cost effective and low maintenance solution to your filtration requirements.

For further information and a quote to suit your application, please contact us