

The Delta Environmental range of shaker filter/collectors are suitable for a wide variety of industrial and agricultural applications where continuous cleaning of the filters is not required and where the contaminated air passes through the extraction fan set. Filtration is achieved by passing contaminated air through static filter sleeves. The type and size of filter sleeve will reflect the specific application and product being filtered.

The filter/collector size is rated for individual projects where the type of dust or waste, particle size and quantity of waste is known. Frequently used in joinery and similar wood waste environments, we will always aim to use the lowest possible filtration airspeed to provide the best level of efficiency and to maintain reliable operation. In this application, it is common for the filter/collector to run for 2 – 4 hours between shutdown when the filters are shaken, usually automatically.

These filter/collectors are manufactured to each individual customer order, fabricated in high grade pre galvanised steel, and using a modular manufacturing concept with the optimum size of filter sleeves that suits each particular application. This type of construction allows for future expansion of the modules if extraction requirements increase.

Contaminated air passes through the fan unit before filtration and our robustly engineered fans are well proven and offer high levels of reliability, even when handling some of the most demanding and abrasive materials. The fan type and style reflects the type of application and can be manufactured in mild or stainless steel, or with a wear resistant alloy specifically designed for highly abrasive applications.

Filter/Collector type Single Modulex: An outdoor filter/collector installation with a 15kW extraction fan set rated for 12000M³/hr with a filter area of 69M² to provide a low filter velocity for maintained high efficiency, fitted with six steel collection buckets. The cleaned air is exhausted to atmosphere externally to the factory area.



Filter type Double Modulex: An outdoor filter installation with a 30kW extraction fan set rated for 17000M³/hr, handling large quantities of softwood waste. This filter is fitted with a rotary valve discharge into a pneumatic transfer blow-line to transfer the waste into a sealed container for final disposal, alongside the filter.

The extracted and cleaned air is returned to the factory to prevent heat losses during winter.



**Filter type
Single**

Modulex: An elevated modular filter mounted on a heavy steel frame and fitted with a rotary valve discharge facility to discharge directly into a collection skip.



Filter/Collector type "Bagging unit": A "Duplex" twin bag filter/collector unit, suitable for indoor use only, with an integral fan/motor. This type of unit can be fitted with fans from 1.5kW to 7.5kW and up to four collection bags. A simple and low cost system suitable for joinery and similar applications. The size of filter sleeves can be increased in length to provide a low filtration velocity to suit different materials/applications.



Filter/Collector type Single Modulex: A six bag Filter/Collection unit under construction on site. This "Modulex" concept can be delivered in flat pack for local assembly which can be convenient where access is limited and when the units are installed indoors. Alternatively, they can be delivered assembled and lifted into position with a fork lift or crane, depending on site conditions.

Single Modulex Filter mounted on Silo: This shows a single module Filter with auto shaker, designed to handle 5000M³/hr and installed where waste product is blown into a silo that requires the contaminated air to be filtered before returning to the workplace. The simple, low cost type of Modulex concept with auto shaker is ideally suited to this type of difficult application. This is part of a system designed and engineered by Delta where waste product is granulated, passed over a magnet in a pneumatic conveying blow-line to capture ferrous material, before being stored in the silo prior to being fed to a waste burning unit for heating of the factory workplace.

