



FABRIC FILTERS

Leading Technology . . . Innovative Solutions

Clyde Bergemann EEC offers a wide range of fabric filter systems designed to control particulate emissions in a variety of utility and industrial applications. With the fabric filter, a particulate laden gas stream passes through the filter bag so that the particulate is collected on the surface of the fabric. Fabric filters are high efficiency collection devices capable of collecting fine particulate from the gas stream. Typical collection efficiencies exceed 99.9%. Clyde Bergemann EEC, formerly **Environmental Elements Corporation (EEC)**, offers both Pulse-Jet and Reverse Air Fabric Filter Systems.

PULSE-JET FABRIC FILTERS

The Clyde Bergemann EEC Pulse-Jet Fabric Filter System consists of individual fabric filter modules, each containing up to 720 filter bags each 6 inches in diameter and ranging in length from 10 to 28 feet. With pulse-jet filters, gas flows from the outside to the inside of the bags. The bags are mounted on cages to keep them from collapsing from the force of the flue gas. Dirty gas enters the patented Stepped Inlet Manifold and is uniformly distributed among the modules. Gas enters each module through a vaned inlet elbow near the top of the hopper where a patented Inlet Vane System uniformly turns and distributes the gas flow upward, depositing the dust on the exterior surface of the bags. Clean gas passes through the fabric and into the outlet manifold through air-operated poppet dampers. Periodically the fabric is cleaned by a pulse of compressed air injected into each filter bag through a venturi nozzle. Pulse cleaning dislodges the dust cake collected on the outside of the bag and allows it to fall into the hopper for evacuation. Cleaning can be performed either on-line or off-line depending upon customer preference, bag life issues or emission performance requirements.

The patented Stepped Inlet Manifold uniformly distributes the gas into each module and provides a single flanged connection to the

ductwork. The design of the manifold and gas distribution package used in our fabric filters is based on more than 40 years of field and flow model experience and has been designed to achieve the following essential objectives:

- Minimize system mechanical pressure drop
- Balance gas flow and dust distribution among modules
- Minimize dust fall out in the inlet manifold

The stepped inlet manifold provides a significant improvement in flow distribution compared to conventional tapered designs. Improved distribution is achieved without relying on increased fabric pressure loss to balance the individual module gas flow. Each turn within the manifold is individually vanned to prevent flow separation and minimize fall out.

The patented Inlet Vane System of each module assures an even distribution of dust laden gas to all the bags, minimizes re-entrainment of any dust in the module hopper and eliminates localized areas of high velocity which cause premature bag failure. The results of these proprietary systems are uniform distribution of gas and dust and reduced mechanical pressure drop . . . **the secret to LONG bag life.**





Serving the Power Generation, Pulp & Paper, Iron & Steel, Rock Products, Wood Products, Petrochemical and Waste-to-Energy industries

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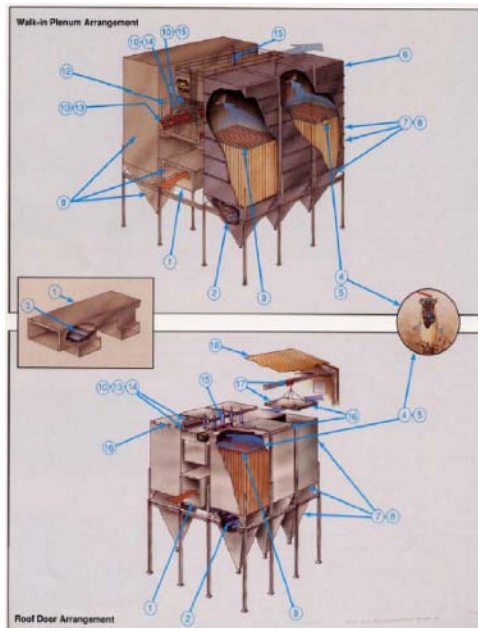
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Spare and Replacement Parts

Toll Free: 800-PART EEC
800-727-8332

Emergency Service - 24 hour Help Line

Toll Free: 800-928-HELP
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Typical Clyde Bergemann EEC Pulse-Jet Fabric Filter

