Reverse Air Bag Filters
**Industrial Bag Filters**

**Reverse Air Bag Filters**

**Operation:**
The operating process of our dust collectors is simple. The dust-laden gases enter large hoppers and are distributed between the filter bags. Filtration takes place from the inside to the outside of the bag, passing through a “dust filter cake”. The filtered gases then exhaust freely to the atmosphere ([Diagram 1](#)).

Cleaning of the filter bags is done automatically either continuously or intermittently. It is achieved by a reverse-flow fan creating a suction inside the hopper of the compartment to be cleaned. This hopper is isolated from the main dusty gas stream. Filtered gas is used to clean the bags, from the outside towards the inside, and is returned to the main dirty gas stream after passing through the reverse-flow fan.

Each compartment is fitted with large access doors and internal walkways in the clean gas compartment.

**Operation:**
The dust-laden gases enter through the hopper, as for the baghouse. This hopper can be common to all compartments. Filtration, again, takes place when passing from the inside to the outside of the bags. The cleaned gases are collected at the top outlet of the gas-tight compartments before being discharged to the atmosphere. Some of the clean gas is used in the cleaning process.

The automatic cleaning of the bags is done by a reverse-flow fan blowing filtered gases into the compartment to be cleaned. The compartment is isolated from the dusty gas stream for this purpose.

The reverse-flow of filtered gases passes through the bags to be cleaned and is mixed with the dirty gases going to the on-line compartments (Diagram 2).
Industrial Bag Filters
Reverse Air Bag Filters

Selected references:

Pressure Bag House
Zirconia Furnace - Gas Cleaning

Suction Bag House
Fume Abatement System - Kilns & Dryer

Suction Bag House
Fume Abatement System - Kilns & Dryer