

## 1) Super-long-bag pulse filter



The super-long-bag pulse filter is designed for projects with insufficient site area. This filter system adopts current equalization at the side, efficient soft-cleaning technology, large-flow-amount poppet valve, large-volume header and double-layer sealing poppet, etc. It is characterized by high efficiency, small floor area, low consumption of steel, stable operation and convenient maintenance and management, etc. It solves many key problems, which happened to flow distribution, large-flow-amount filtering, pulse cleaning, high-density dust removal and decrease in filtering resistance, choosing of filtering velocity as well as filtering efficiency, etc.

It has passed technical appraisal of Economy and Information Technology Commission. It can be generally applied for the flue gas dedusting in the industries such as electricity, metallurgy, building material, etc.

## 2) Filter for electric coal-fired boiler



Filtration area: 1540m<sup>2</sup>~34200m<sup>2</sup>

Flow rate: 90000 m<sup>3</sup>/h~2050000m<sup>3</sup>/h

Suitable project situation: Purification of 35T~1025T boiler flue gas (6MW~300MW boiler unit)

The internationally advanced technology such as special staged inlet/outlet flow distribution and flow-balancing of hopper are adopted instead of conventional inlet style of inclined pipe.

## 3) Filter for waste incineration



Filtration area: 430m<sup>2</sup>~4810m<sup>2</sup>

Volume: 20000 m<sup>3</sup>/h~270000m<sup>3</sup>/h

Mature long bag (8m as the longest) pulse cleaning techniques; proprietary technique of inlet flow balancing. It can work for long time under the temperature of 260°C (the peak is 280°C), and can meet various working conditions.

Keep fluidity of flue gas to decrease corruption. Devices of electric heating or steam heating are also set for filter.

There are choices of low and middle pressure for cleaning according to different conditions, and it is guaranteed of 1

million times or over 5 years for efficiency.

The bag cages are made by automatic welding to ensure the smoothness of ones. Considering the characteristics of waste incineration, organic silicon is used to ensure the higher anti-corrosion and longer service life.

PLC automatic electric control is adopted for high automation. And nobody is needed for operation and maintenance.

Glass fiber, glass fiber + PTFE, Gore-Tex + PTFE or pure PTFE, etc. are selected as the filtration material. Considering the characteristics of waste incineration, 36 months is guaranteed for bag's service life .

The dust content of purified flue gas will be lower than  $30\text{mg}/\text{Nm}^3$  (even as low as  $10\text{mg}/\text{Nm}^3$ ).

It is widely used for the incineration of medical waste, dangerous castoff and municipal waste.

#### 4) High pressure off-line pulse jet bag filter



Filtration area:  $93\text{m}^2 \sim 4361\text{m}^2$

Volume:  $6900\text{m}^3/\text{h} \sim 314000\text{m}^3/\text{h}$

- I Utilizing the off-line three-phase cleaning technology to avoid the re-attachment of dusts on bags; cleaning bags thoroughly
  - I Utilizing new side-jet technology to reduce the quantity of diaphragm valves by 6-20 times
  - I Using imported diaphragm valves, which diaphragm combination can be operated more than 1,000,000 times
  - I Cleaning devices controlled by monolithic control panel with two control methods: time-setting / manual
- I Efficient three- phase cleaning unit used for highly concentrated dust (ultimate inlet dust air up to  $1,000\text{ g}/\text{Nm}^3$ ), instead of two-phase dedusting and lowering the investing costs
  - I The advanced fastening method of top spring expansion as well as the high-quality cages from the imported welding line can not only ensure the air tightness but also extend the lifetime of bags
  - I Widely used for dust control and recycling in many industries such as building material industry, metallurgical industry, chemical industry, founding industry and so on