

## Sintered plate filter element performance

The sintered plate is the filtration area where the dusty gas enters the chamber from the air duct. When the dusty gas passes through the surface of the sintered plate, dust is trapped on the PTFE coating on the surface of the plate, The clean gas passes through the plate, enters the clean air space of the chamber through the filter plate port, and is discharged from the air outlet. The dust attached to the outer surface of the sintered plate will fall into the ash hopper below with the pulse blowback or gravity.

Compared with conventional filter devices, the performance and lifespan of sintered plates has been greatly improved. For example, for dust above 0.2  $\mu\text{m}$ , the emission concentration can reach  $<1 \text{ mg/m}^3$ ; stable resistance - advanced PTFE microporous coating film Manufacturing technology enables surface filtration in the dust removal process. During operation, the resistance of the equipment does not change with the change of the cleaning process and the degree of dust adhesion. The resistance is constant and the operating cost of the facility is reduced;

Skeletonless rigid structure achieves super long life - due to the rigid structure of the sintered plate, there is no life problem caused by the wear of the skeleton of the fiber fabric filter bag. Another important performance of long life is that the filter plate has a long trouble-free running time, the good dust removal ability will maintain its stable equipment resistance, unlike the bag filter it does not require daily maintenance. Its pressure resistance, corrosion resistance, wear resistance and air impact resistance are much stronger than those of cloth bags, so service life can generally reach more than 10 years.

In fact, the key point is filter element. Multi-layer metal sintered plate is a new type of filter material with high mechanical strength and overall rigidity, which is made of multi-layer stainless steel wire plate after special laminated pressing and vacuum sintering. The holes of each layer of wire boards are interlaced to form a uniform and ideal filter structure, which makes the material have advantages that ordinary wire boards cannot match, such as high strength, good rigidity, and stable shape of the holes.

Due to the reasonable matching and design of the pore size, permeability and strength characteristics of the material, it has excellent filtration accuracy, filtration resistance, mechanical strength, wear resistance, heat resistance and processability, and the comprehensive performance is obvious. Superior to other types of filter materials. Stable penetration, can effectively remove suspended solids and particles, etc., high strength, good effect, strong corrosion resistance, high filtration accuracy, good heat resistance, easy to clean, and widely used.

Application range of sintered plate filter elements, high pressure medium filtration; oil sand separation in oil fields; machinery, ships, fuel, lubricating oil, hydraulic starting oil; chemical industry equipment; high temperature gas dust removal; food filtration; medical filtration; water filtration.