



BOEDON 宣传册

热气体 过滤

将不可能变为可能



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热气体过滤

04.

最近，钢铁、能源、有色冶金行业迅速发展，生产过程中产生了大量含有粉尘颗粒的热气体，如果直接排放到空气中，必定会污染环境。因此，热气体过滤对环境保护至关重要。

目前市场上普遍使用有机纤维除尘袋。这种除尘滤袋重量轻，价格低廉。然而，它对高温的抵抗力较差，容易损坏。当滤袋上形成蛋糕状物时，会导致堵塞，不易清洁。

市场上还有陶瓷纤维、玻璃纤维等无机纤维滤袋。陶瓷纤维具有良好的耐高温和耐腐蚀性能，但在温度突然升高时易断裂。玻璃纤维具有高强度，但折叠抗力和耐磨性较差。

博顿如何解决？

博顿提供3种金属热气体过滤器。这些过滤器不仅可以有效地克服有机纤维过滤袋存在的高温抗性差、易损坏等缺点，还可以克服陶瓷纤维和玻璃纤维的缺点。金属过滤器可以承受高温或酸碱腐蚀性气体等恶劣的过滤环境，并且在其他非金属材料上具有明显的优势。



博顿 提供什 么？



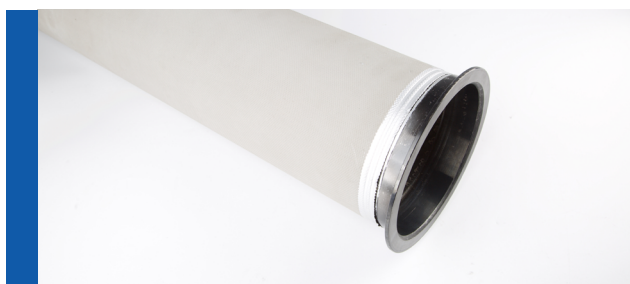
烧结毡过滤袋

- 最高工作温度1000°C
- 良好的孔隙率
- 高污染物容纳能力
- 褶皱提供增强的过滤面积
- 化工、陶瓷、废物焚烧、热电发电等



强化热气体清洗过滤器

- 最高工作温度650°C
- 高强度、稳定结构
- 高过滤精度
- 良好的热震性能
- 能源和化学品、有色冶金、新型煤化工等



标准热气体清洗过滤器

- 最高工作温度450°C
- 出色的除尘能力
- 良好的导电性
- 出色的耐磨性
- 水泥、钢铁、锅炉、玻璃、冶金等

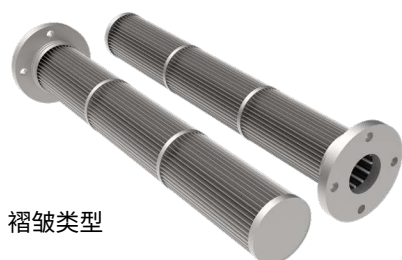
烧结毡 □□□□□

我们提供传统型和褶皱型烧结毡过滤袋，以满足您对高温热气体除尘的需求。

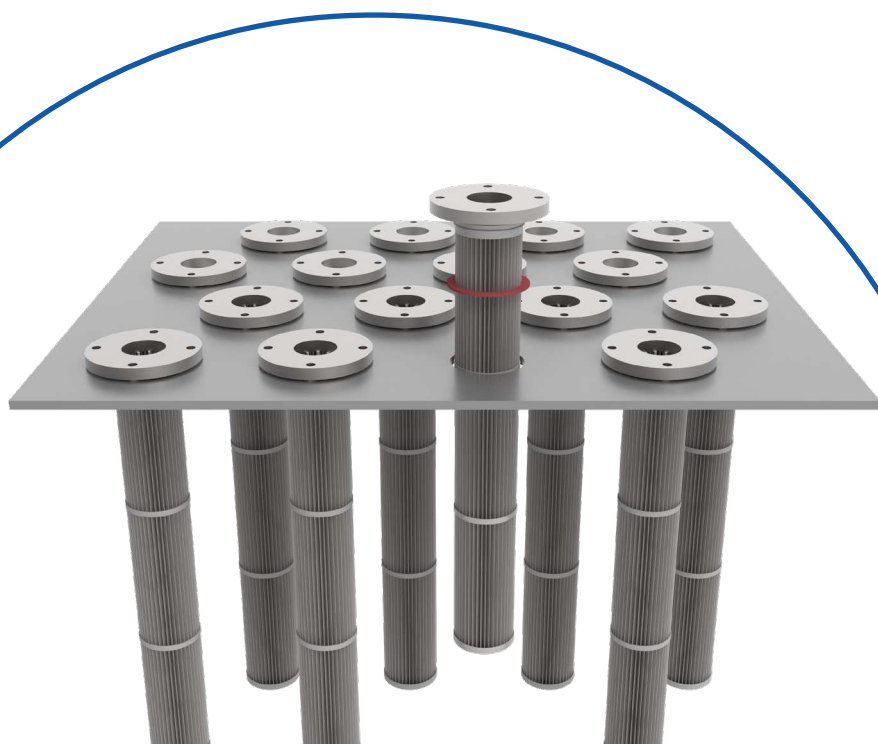
烧结毡过滤袋是一种用于深度过滤的多孔过滤袋。它由高温烧结的束状金属纤维制成，在特殊的无纺布铺设和堆叠后通过层层不同孔径形成孔隙梯度进行焊接。我们的过滤介质由金属笼骨架、粗金属纤维层和细金属纤维层组成。由于其出色的耐高温和耐腐蚀性能，它被广泛应用于涉及高温烟气除尘的各个行业。



传统类型



褶皱类型



烧结毡过滤袋

规格

材料：不锈钢（304、316L、310S、314等）、FeCrAl

工作温度：最高1000°C。

孔隙率：75% - 88%

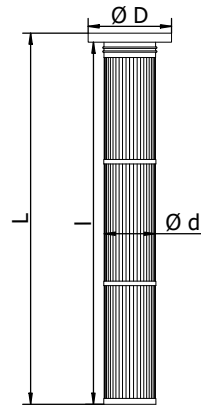
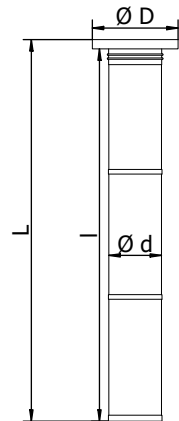
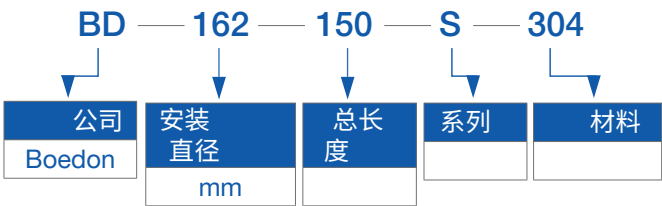
连接方式：法兰

初始阻力：30-100 Pa

排放浓度：< 5 mg/Nm³

清洁方式：

定期清洁或在线脉冲清洁

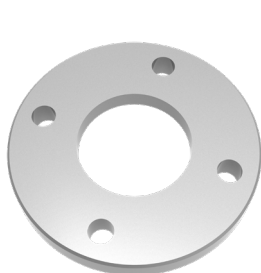


Popular Specification of Sintered Felt Filter Bags

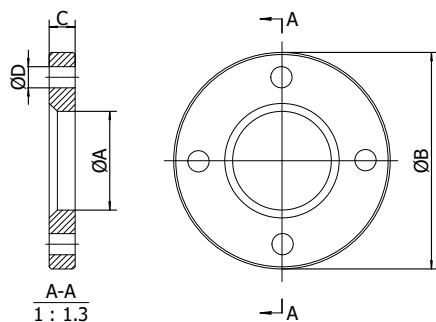
型号	安装直径 (mm) 总长	度 L (mm) 长度 l (	mm) 直 径 D	(mm) 直 径 d	(mm) 过 滤面	积 (m²)
BD-162-150-S	162	1500	1466	177	143	0.76
BD-162-150-F	162	1500	1466	177	143	2.03
BD-162-75-S	162	750	716	177	143	0.38
BD-162-75-F	162	750	716	177	143	1
BD-162-50-S	162	500	466	177	143	0.25
BD-162-50-F	162	500	466	177	143	0.66
BD-133-150-S	133	1500	1466	153	118	0.62
BD-133-150-F	133	1500	1466	153	118	1.62
BD-133-75-S	133	750	716	153	118	0.31
BD-133-75-F	133	750	716	153	118	0.8
BD-133-50-S	133	500	466	153	118	0.21
BD-133-50-F	133	500	466	153	118	0.53
BD-125-150-S	125	1500	1466	142	108	0.59
BD-125-150-F	125	1500	1466	142	108	1.49
BD-125-75-S	125	750	716	142	108	0.29
BD-125-75-F	125	750	716	142	108	0.73
BD-125-50-S	125	500	466	142	108	0.2
BD-125-50-F	125	500	466	142	108	0.48
Notes: • Installation diameter refers to the diameter for filter installed on the installation plate. • Other specifications are available upon request.						

烧结毡过滤袋

Connection



Flange plate



Flange structure plan

Filters are generally provided with a flange for connection to enhance its high temperature and high pressure resistance.

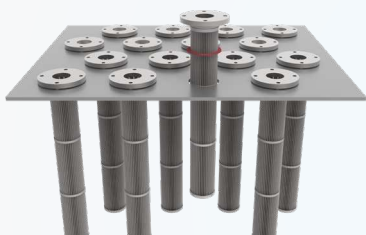
- ϕA (flange ID): 108 mm, 118 mm, 143 mm.
- ϕB (flange OD): 142 mm, 153 mm, 177 mm.
- C (flange thickness): 34 mm
- ϕD (flange hole diameter): 15 mm, 19 mm
- Number of holes: 4
- Special sizes are available upon request.

烧结毡过滤袋

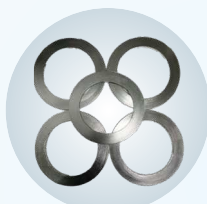
Seal Fittings

Seal Gasket

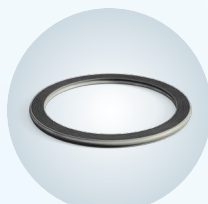
The filter is sealed by tightly compressing the seal gasket onto the back of the flange to the upper surface of the installation plate. The roughness of the upper surface of the installation plate and the fitting surface of the flange shall be well designed to perfectly match with the chosen seal gasket as it directly determines whether the seal is reliable and leak-free.



Flange & seal gasket installation



Metal
seal gasket



Semi-metallic
seal gasket



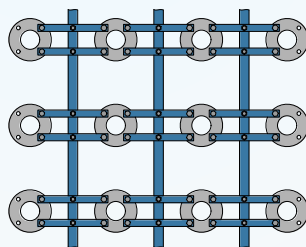
Asbestos rubber
seal gasket



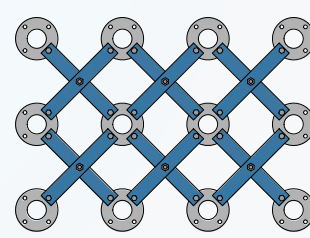
PTFE
seal gasket

Hold Down Bar

Hold down bars are the seal fittings between flange holes and the installation plate for fixing. Both parallel and cross hold down bars are available for your option.



Parallel hold down bars



Cross hold-down bars

烧结毡过滤袋

Application



Metallurgy

- Submerged arc furnace gas dust removal in iron alloy, ferronickel, silicomanganese industries



Power Plant

- Thermal power plant coal fired boiler dust removal



Cement

- Rotary kiln fuel gas dust removal, etc.



Ceramic

- Aluminum oxide, high titanium slag dust removal



Chemical

- Gas purification and filtration
- Calcium carbide furnace gas dust removal

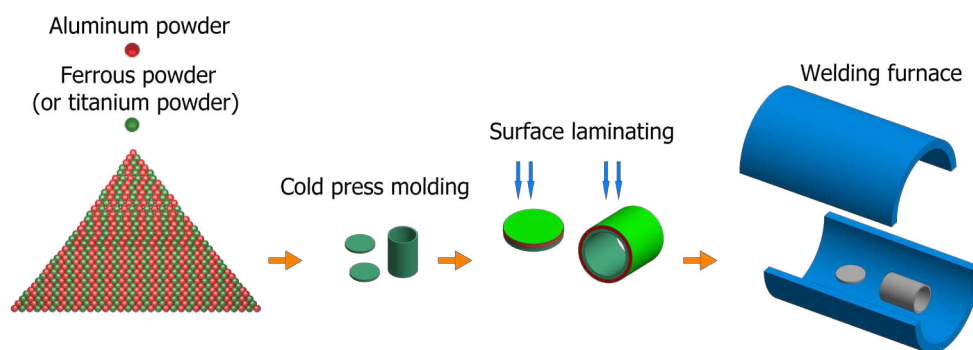
Strengthened Hot Gas Cleaning Filter

We offer strengthened hot gas cleaning filter with good thermal shock resistance to meet your demands on hot gas dust removal.

Strengthened hot gas cleaning filter features large flux, low resistance and fast filtration speed. It can reduce the chemical reaction of organic molecules, reduce the clogging and make the back flush or pulse dust removal much easier. It uses a cage skeleton as a supporting structure to increase its strength. The flange connection design ensures the sealing effect and prevents the leakage.

Filter Media Production Flow

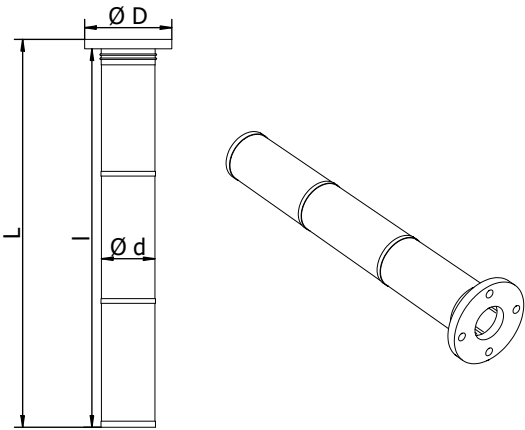
Generally, FeAl or TiAl is made into metal powder blanks by molding or cold isostatic forming. And then the surface is coated and vacuum sintered.



STRENGTHENED HOT GAS CLEANING FILTER

规格

Working temperature: 450 °C – 650 °C
Wall thickness: 1 mm – 2 mm
Dust content after filtration: ≤ 5 mg/Nm³
Retained dust particle size: ≤ 0.1 μm
Air permeability: 100 m³/(m²·h)



	BD	T	60	150
Company	Filter Type		Installation Diameter	Total Length
Boedon	Strengthened Hot Gas Cleaning Filter		mm	mm

Popular Specifications of Strengthened Hot Gas Cleaning Filters

型号	Installation Diameter (mm)	Diameter D (mm)	Diameter d (mm)	Total Length L (mm)	Length l (mm)	Filter Area (m ²)
BD-T-60-150	60	90	56	1500	1466	0.28
BD-T-60-175	60	90	56	1750	1716	0.33
BD-T-60-200	60	90	56	2000	1966	0.38
BD-T-60-225	60	90	56	2250	2216	0.42
BD-T-60-250	60	90	56	2500	2466	0.47
BD-T-60-300	60	90	56	3000	2966	0.57
Notes: • Installation diameter refers to the diameter for filter installed on the installation plate. • Other specifications are available upon request.						

Features & Application

Features

- Withstand high temperature ranging from 450 °C to 650 °C.
- High filtration efficiency
- High strength, stable structure
- Make the online dust cleaning easier.
- Excellent resistant to corrosive gases
- Good thermal shock resistance

Application



Metallurgy

- Non-ferrous smelting arsenic removal, dust removal and purification, etc.
- High-precision gas-solid separation of high-temperature gases



Chemical

- Sulfuric acid combustion furnace dust removal
- Combustion finery dust removal and purification, etc.



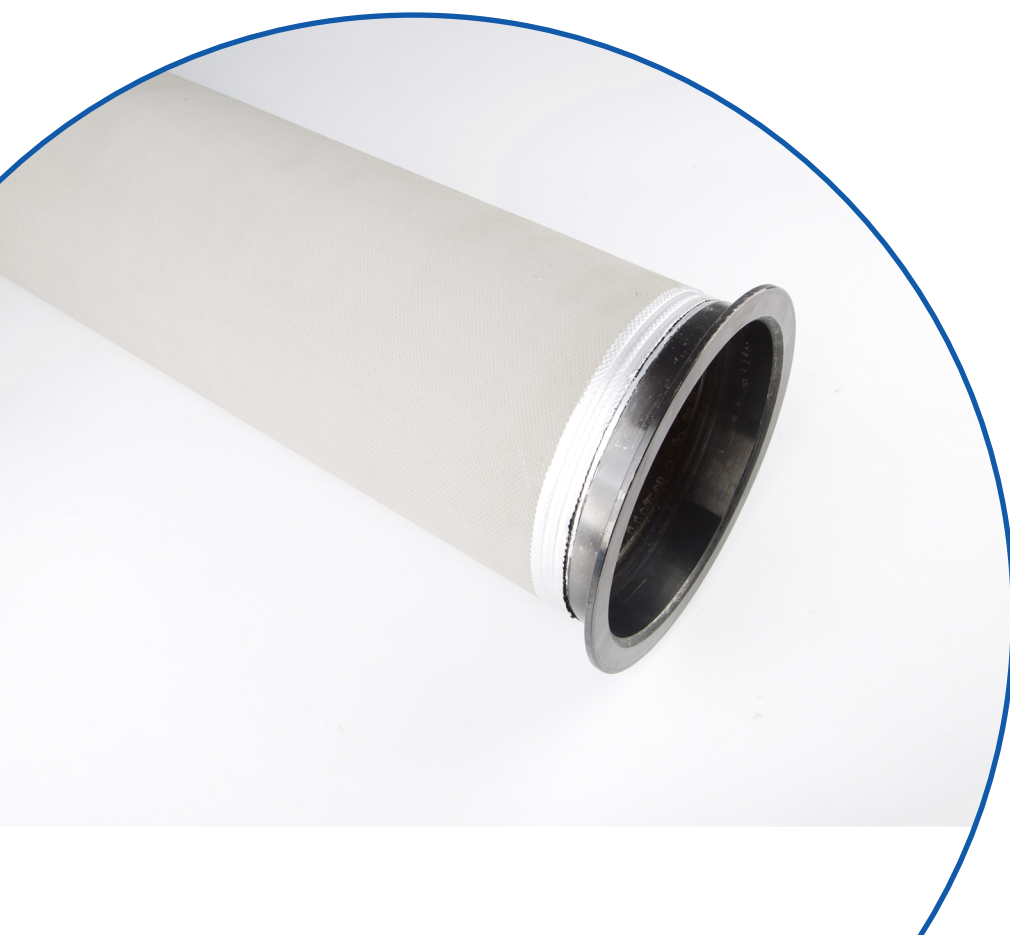
Oil & Gas

- Flue gas generated during oil extraction
- Flue gas dust removal in other energy industries

Standard Hot Gas Cleaning Filter

We can offer sintered porous candle filter with good air permeability and stable separation effect to meet your chemical filtration demands.

Standard hot gas cleaning filter is a kind of filter bag made of metal powder by sintering into flexible metal powder sintered filter sheet, then cut into suitable size to fit for the cage bone, and welded to the cage bone. Its filtration efficiency is 2 times of the bag filter under the same working conditions and resistance. A metal ring is welded at the opening of the flexible metal membrane for installation and positioning. Hexagonal metal gasket is used for the sealing of the metal ring and the installation plate to prevent the leakage of dust removal gas.



STANDARD HOT GAS CLEANING FILTER

规格

Working temperature: $\leq 450\text{ }^{\circ}\text{C}$

Wall thickness: 0.5–1 mm

Porosity: 30% – 70%

Dust content after filtration: $\leq 5\text{ mg/Nm}^3$

Retained dust particle size: $\leq 0.1\text{ }\mu\text{m}$

Air permeability: $100\text{ m}^3/(\text{m}^2\cdot\text{h})$

	BD	R	130	200	
	↓	↓	↓	↓	
Company	Filter Type		Installation Diameter	Length	
Boedon	Standard Hot Gas Cleaning Filter		mm	mm	

Popular Specification of Standard Hot Gas Cleaning Filters

型号	Installation Diameter (mm)	Diameter d (mm)	Length l (mm)	Filter Area (m^2)
BD-R-130-200	130	128	2000	0.82
BD-R-130-250	130	128	2500	1.02
BD-R-130-450	130	128	4500	1.84
BD-R-160-200	160	158	2000	1
BD-R-160-250	160	158	2500	1.26
BD-R-160-450	160	158	4500	2.26
Notes: • Installation diameter refers to the diameter for filter installed on the installation plate. • Other specifications are available upon request.				

STANDARD HOT GAS CLEANING FILTER

Features & Application

Features

- Maximum operating 450 °C
- 2 times of dust removal capacity compared with bag filters.
- Corrosion resistance, can withstand corrosive gases.
- Metal structure offers great abrasion resistance.
- Good electrical conductivity
- Good performance and easy machining performance

Application



Power Plant

- Coal-fired boiler flue gas purification and dust removal



Cement

- Cement industry fuel gas purification and dust removal



Iron & Steel

- Sintering machine produced flue gas dust removal
- High-precision gas-solid separation of high-temperature gases



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Weave Impossible to Possible



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