#### **Production & Testing Equipment**

## HRPuri

#### 生产及检测设备



**Sintering Furnace** 



**ICP Component Analysis** 



**Bubble Point Test** 



**Air Permeability Test** 



**Filtration Efficiency Test** 



**Anti-Breakage Test** 

High Frequency C & S Analyzer



Hefei Really Purifying Equipment Co. Ltd

Single Fiber Strength Tester



Fiber Fineness Tester



Flow Resistance Tester



**Pore Size Distribution Tester** 



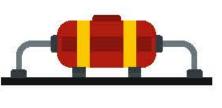
Stiffness Tester



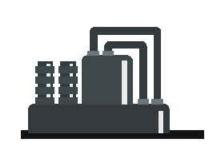
**Corrosion Resistance Tester** 



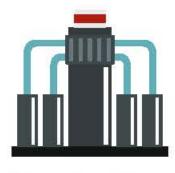




**Titanium Industry** 



**Non-Ferrous Metals** 



**Alumina Roaster** 



New Energy Biomass Power



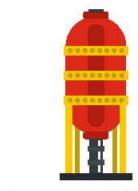
Glass Kiln



Iron & Steel Industry



Cement kiln



Refractory Materials
High Temperature
Materials
Manufacturing



## Our Services 我们的服务





## **Engineering Analysis**

Provide customers with a full range of work condition analysis, including dust collector emission failure, fault checking, etc.



## Filter Bag Selection Recommendations

Senior engineers analyze the most suitable product selection plan according to the working conditions



#### Quality Filter Bag Production

Professional production team provides quality assurance for the whole process of metal fiber filter media production. With years of experience in export product production, Huitong controls the production process and supports relevant testing hardware.



## **Product Installation Guidance**

Provide filter bag installation guidance, sealability testing, abnormal operation diagnosis, on-site operation advice, etc.



#### Guidance On Product Operation and Maintenance

Provide advice on use, maintenance and troubleshooting during product operation according to customer needs



#### **Regular After Visits**

Combined with long-term experience, Huitong has cultivated a well-trained after-sales service team, equipped with a set of professional & efficient after-sales service equipment and tools to provide regular after-sales service visits, collect and analyze operational data & provide optimization advice.



#### **Establish Customer Files**

Collect data to build exclusive customer information and return visit number train files to ensure better customer service



#### **Third Party Service**

Cooperate with third parties to provide various kinds of comprehensive and professional services such as flue gas composition testing, filter bag performance testing, filter bag composition identification, filter bag failure analysis, etc.



## Main achievements





## **Star Product-Metal Filter Bag**

Metal filter bag is made of very fine metal fiber yarn through non-woven laying, vacuum sintering and hydrostatic pressing process. This product has high filtration precision and can achieve ultra-clean emission below 5mg/Nm3, dust removal efficiency up to 99.996%, high denitrification efficiency, combined with dust collector, denitrification rate can reach more than 99%, to achieve near zero emission requirements, widely used in cement kiln, glass kiln, ceramic kiln, chemical plants and other industries of high temperature dust removal.

Traditional filter materials (such as PTFE) for high temperature tolerance temperature is limited, when more than 300 °C, the traditional filter materials basically can not be used, while the metal filter cartridge can be used in 450 °C normal continuous use.

Its characteristics are: strong processability (can be welded to 6m or even longer), good permeability, small pressure loss, easy to blow back, easy to clean, strong regeneration capacity, simple maintenance, long service life, etc.



## High-temperature Flue Gas Dedusting Series Indicators

Model	Fiber (µm)	Porosity (%)	Thickness (mm)	Weight (G/M2)	Permeability (L/Dm2.S)	Strenth (N)	Bending (N)
HT-LA-12	6/30	74	0.44	900	150	1500-2500	2000-5000

<sup>\*</sup>We will determine the right product for you according to the use environment and actual working conditions.

Specification: 40 mesh / 0.25mm / 1220g/m2.

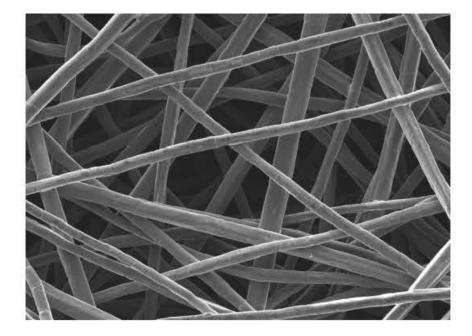
Specification: 48 mesh / wire diameter 0.125mm / 380g/m2, Can be customized according to the actual working conditions.

Standard material: 316L, standard size: 1180\*750mm, maximum size: 1500\*1180mm.

## **Metal Filter Cartridge Specifications**



- Conventional filter cartridge specifications: \$130-L6000.160-L6000
- 2. Diameter 60-200mm. conventional diameter: \$130, 160
- 3. Maximum length of single cartridge (without seam): 2000mm
- 4. Conventional cartridge length: L=6000mm, 1200mm or integer times.
- 5, Filter cartridge skeleton: bag cage or perforated plate (optional).
- In special cases, if the upper space of dust collector is not enough, it can be connected by segmented flange.

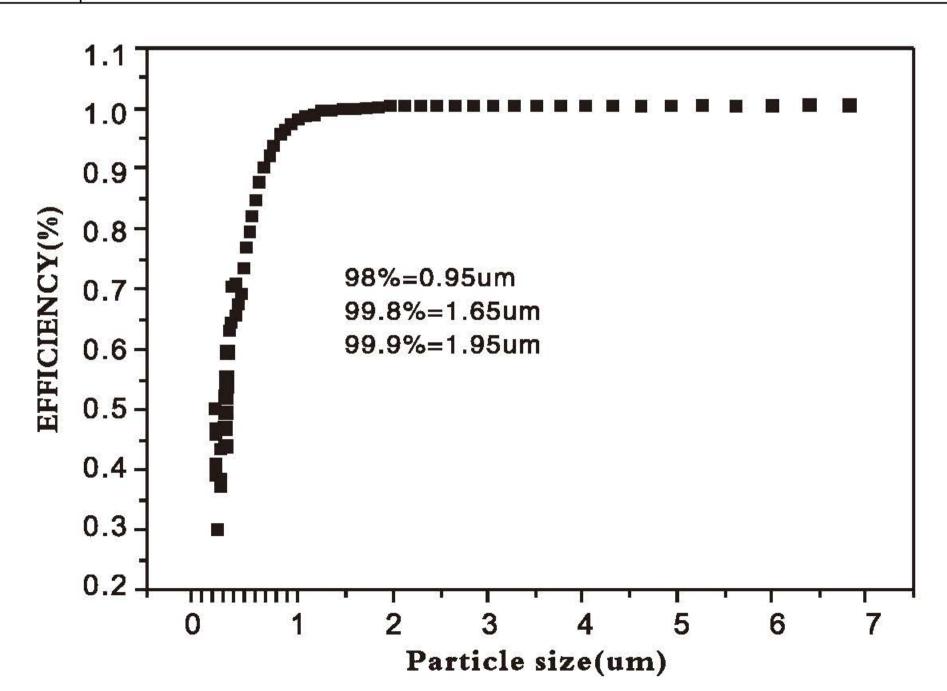


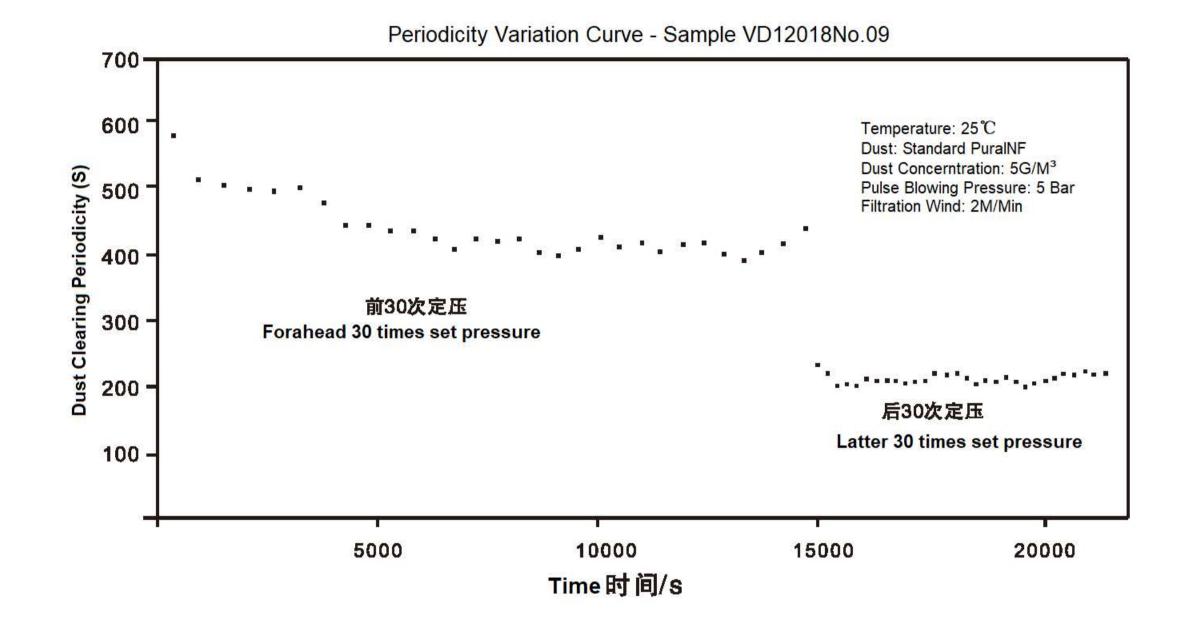


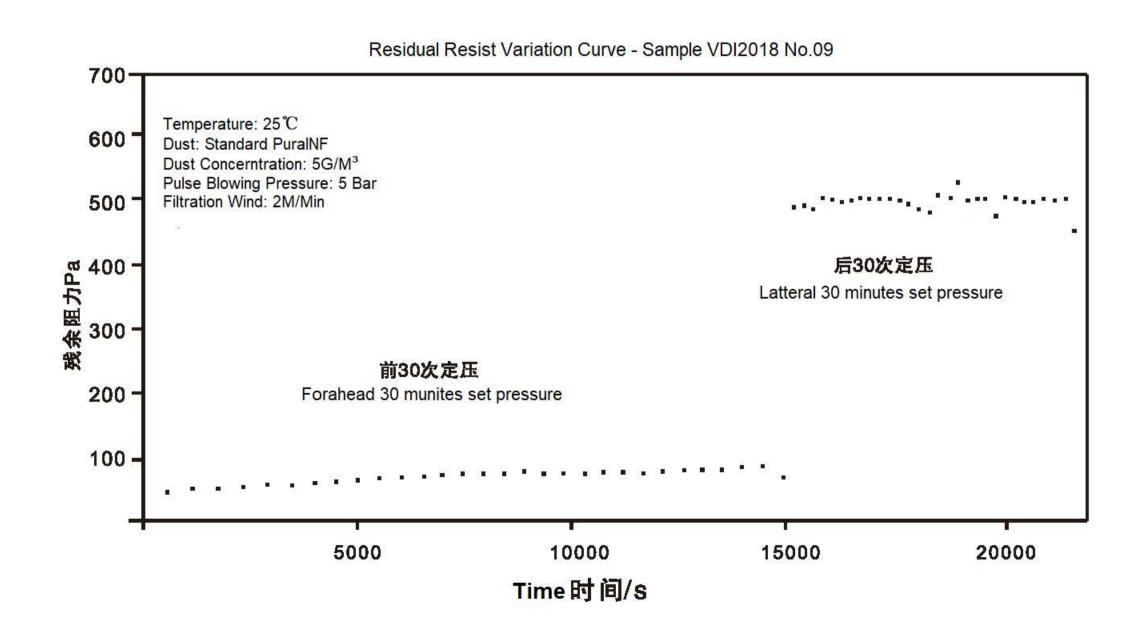
# VDI test report of materials 材料VDI检测报告

### **Filtration Media Testing Report**

Charac	teristics		Filtration P	erformances	1	
Descriptions	Test Items	Unit	A2	B1	<b>C</b> 1	Remarks
Ý	Permeability	L/dm <sup>2</sup> - min	154. 6	306. 4	177. 4	200Pa, 50cm <sup>2</sup>
Basic Data	Basic Weight	g/m²	961	969	1319	
	Thickness	mm	0. 72	0. 64	1. 02	
Resistance	Initial	Pa	18	3	12	At the begining
	Residual	Pa	380	719	695	At end of testing
Dust Removal	Efficiency	%	100	99. 9979	99. 9980	At end of testing
	Stripping Rate	·%	63	28	31	At end of testing
Dust Clearing	Periodicity	S	868	898	1046	The first Period (Forahead 30 P)
	Periodicity	s	490	138	20	The first Period (Forahead 30 P)
Remarks	C1 滤料透气	<b>量偏高,在 100</b>	00次老化过程,自	由于粉尘排放偏高,	当老化至850	次时停止运行。







## Application Case No.1, Alumina Industry



A 1600 tons alumina roaster renovation project of an aluminum company

Combined with the process of electrostatic dedusting, the processing flue gas volume 196,000N m contains dust concentration <100g/M³, and the final emission concentration is required to be lower than 5mg/M³. The actual operation result is that the differential pressure of the filter bag is lower than 600Pa, and the dust emission concentration is lower than 5mg/M³.

Item	Unit	Data
1, Flue gas purification treatment air volume	M³/H	196000
2, Inlet dust concentration	G/ M³	≤100
3, Metal fiber filter bag specification	MM	Ф160*6000
4, Quantity of filter bags	Pieces	1890
5, Filtration air flow speed	M/Min.	≤ 1.0
6, Ash cleaning pressure	MPa	0.3 ~ 0.6
7, Flue gas temperature	°C	160
8, Instantaneous maximum temperature	°C	≤ 450
9, Filter bag resistance	Pa	≤ 1200
10, Filter bag life	Year	≥ 5
11, Emission standard	Mg/ M³	≤ 5

## Main achievements 主要业绩

#### **Application Case No.2, Alumina Industry**

#### An aluminum industry plant

1350 tons alumina roaster renovation project, using pure bag de-dusting process. The processing volume of flue gas is 380,000M³/H, the dust concentration is <100g/M³, and the final emission concentration is lower than 10mg/M³. The actual operation result is that the differential pressure of the filter bag is lower than 600Pa, and the dust emission concentration is lower than 10mg/M³.



Item	Unit	Data
1, Flue gas purification treatment air volume	M³/H	380000
2, Inlet dust concentration	G/ M³	≤100
3, Metal fiber filter bag specification	MM	Ф130*6000/4000
4, Quantity of filter bags	Pieces	2184/416
5, Filtration air flow speed	M/Min.	≤ 1.0
6, Ash cleaning pressure	MPa	≤ 0.5
7, Flue gas temperature	$^{\circ}$	160
8, Instantaneous maximum temperature	°C	≤ 450
9, Filter bag resistance	Pa	Initial ≤500, Final ≤800
10, Filter bag life	Year	≥ 5
11, Emission standard	Mg/ M³	≤ 10

#### **Application Case No.3, Alumina Industry**



An aluminum industry company

1350 tons alumina roaster 1#2# furnace renovation project, using a combination of electric bag dust removal process.

The flue gas volume is 300000M³/h, and the dust concentration is <100g/M³. The final emission concentration is required to be lower than 10mg/M³. The actual operation result is that the differential pressure of filter bag is less than 600Pa, and the dust emission concentration is less than 10mg/M³.

Item	Unit	Data
1, Flue gas purification treatment air volume	M³/H	300000 * 2Sets
2, Inlet dust concentration	G/ M³	≤100
3, Metal fiber filter bag specification	MM	Ф160*7500
4, Quantity of filter bags	Pieces	1512 * 2Sets
5, Filtration air flow speed	M/Min.	≤ 0.9
6, Ash cleaning pressure	MPa	≤ 0.5
7, Flue gas temperature	°C	160
8, Instantaneous maximum temperature	°C	≤ 450
9, Filter bag resistance	Pa	Initial ≤500, Final ≤800
10, Filter bag life	Year	≥ 5
11, Emission standard	Mg/ M³	≤ 10

## Main achievements 主要业绩

#### **Application Case No.4, Cement Industry**

#### A cement company

1000T/D special cement clinker rotary kiln supporting dust removal and denitrification integration transformation project, using a combination of electric bag dust removal process.

The volume of treated flue gas is 153620M³/h, and the dust concentration is <100g/M³. The required final emission concentration is less than 10mg/M³. The actual operation result is that the differential pressure of filter bag is less than 800Pa, and the dust emission concentration is less than 10mg/M³.



Item	Unit	Data
1, Flue gas purification treatment air volume	M³/H	153620
2, Inlet dust concentration	G/ M <sup>3</sup>	≤100
3, Metal fiber filter bag specification	MM	Ф130*7000
4, Quantity of filter bags	Pieces	1456
5, Filtration air flow speed	M/Min.	≤ 1.0
6, Ash cleaning pressure	MPa	≤ 0.5
7, Flue gas temperature	°C	280 ~ 350
8, Instantaneous maximum temperature	°C	≤ 450
9, Filter bag resistance	Pa	≤ 900
10, Filter bag life	Year	≥ 5
11, Emission standard	Mg/ M³	≤ 10

#### **Application Case No.5, Glass Industry**



A glass products company

The actual operation result of glass kiln supporting dust removal and denitrification is less than 700Pa, and the dust emission concentration is less than 10mg/M<sup>3</sup>.

The actual operation result is that the differential pressure of filter bag is lower than 700Pa, and the dust emission concentration is lower than 10mg/M<sup>3</sup>.

Item	Unit	Data
1, Flue gas purification treatment air volume	M³/H	88153
2, Inlet dust concentration	G/ M³	≤20
3, Metal fiber filter bag specification	MM	Ф160*6000
4, Quantity of filter bags	Pieces	480
5, Filtration air flow speed	M/Min.	≤ 1.04
6, Ash cleaning pressure	MPa	≤ 0.2~0.3
7, Flue gas temperature	°C	300
8, Instantaneous maximum temperature	°C	≤ 450
9, Filter Bag loaded pressure	MPa	0.8
10, Filter bag resistance	Pa	≤ 900
11, Filter bag life	Year	≥ 5
12, Emission standard	Mg/ M³	≤ 10

## Main achievements 主要业绩

**Application Case No.6, Refractory Industry** 

#### A steel company

A high-grade alkaline refractory project for technical improvement and expansion of flue gas desulfurization/denitrification/dust removal project.

Adopt pure bag de-dusting process, processing flue gas volume 81,200 M<sup>3</sup>/h, dust concentration <3g/M<sup>3</sup>, requiring final emission concentration below 5mg/M<sup>3</sup>.



Item	Unit	Data
1, Flue gas purification treatment air volume	M³/H	81200
2, Inlet dust concentration	G/ M³	≤3
3, Metal fiber filter bag specification	MM	Ф160*6000
4, Quantity of filter bags	Pieces	500
5, Filtration air flow speed	M/Min.	≤ 1.0
6, Ash cleaning pressure	MPa	≤ 0.5
7, Flue gas temperature	$^{\circ}$	360
8, Instantaneous maximum temperature	$^{\circ}$	≤ 400
9, Filter bag resistance	Pa	≤ 900
10, Filter bag life	Year	≥ 5
11, Emission standard	Mg/ M³	≤ 10

#### **Application Case No.7, Biomass Power Generation**

A biomass power generation company

1\*130t/h water-cooled vibrating grate boiler flue gas dedusting, desulfurization and denitrification renovation project, using pure bag dedusting process.

The flue gas volume is 420000M³/h, the dust concentration is less than 20g/M³, and the final emission concentration is less than 10mg/M³.

The actual operation result is that the differential pressure of filter bag is less than 600Pa, and the dust emission concentration is less than 10mg/M<sup>3</sup>.



Item	Unit	Data
1, Flue gas purification treatment air volume	M³/H	420000
2, Inlet dust concentration	G/ M³	≤20
3, Metal fiber filter bag specification	MM	Ф160*7000
4, Quantity of filter bags	Pieces	2016
5, Filtration air flow speed	M/Min.	≤ 1.1
6, Ash cleaning pressure	MPa	≤ 0.3~0.6
7, Flue gas temperature	°C	350
8, Instantaneous maximum temperature	°C	≤ 450
9, Filter Bag loaded pressure	MPa	0.8
10, Filter bag resistance	Pa	≤ 1200
11, Filter bag life	Year	≥ 5
12, Emission standard	Mg/ M³	≤ 10

# Flue Gas Technical Data Survey 烟气相关参数调查

A Flue gas dust solid particle composition parame	eters:
solid particulate matter composition:	
2. Solid particulate concentration (mg/N M³): stand	dard condition
4. average particle size value of solid particles (μm)	
5. Viscosity of solid particulate matter: (1)High	(2) Middle (3) Low (4) Non
6. Dust particle mobility: (1) good (2) Middle	(3) Bad
7. Dust explosive or not: (1) Explosive (2) Not Exp	olosive
B, the flue gas gas component parameters:	
1. flue gas volume ((N M³ /h) : standard condition	
2. Flue gas temperature (°C) :	
3. Instantaneous maximum flue gas temperature(°	-):
4. Gaseous composition of flue gas:	
5. flue gas relative humidity:	
6. water vapor content (%):	ncontration ratio
7. presence or absence of corrosive gases, type, cor	
SO2 (mg/N M³) , NOx(mg/N M³)	, HCI (Mg/N IVI-)
C, process selection:	
1. dust removal process selection:	
(1) All in filter bags, (2) electrostatic dust remo	oval & filter bag combination
2. Process parameters design:	
(1) Expected filtration air speed m/min: (2)	Expected filtration area (M²)
(3) Filter bag specifications: (4) Dust e	
(5) Emission concentration(mg/N M³): NOx	
(6) = 1 1 ( (1) 1 (1) 0.00	
3. Denitrification process: (1)SNCR (2)S	SNCR+SCR
Desulfurization process:	
Dry desulfurization: (1) Yes, medium:	(2) No