



CS1255F

5.6m Long Tube Filters Elements

CS1255F Big Tube Filter 5.6m long elements are the high-performance composite solution to the common issues of failing fabric filters.

Product Description

Completing our existing range of 1.8m, 2.4m and 3.0m long CS1255F Big Tube Filters, this new 5.6m long variant is based on the same high-performance composite technology which ensures both a filtration efficiency above 99.99% and the safety inherent to a non-ceramic mineral composite material.

CS1255F is manufactured from 100% exonerated Alkaline Earth Silicates (AES) fibres, with proprietary high temperature bonding agents and is able to resist temperatures up to 1000°C, which removes the need to cool down the gases before they reach the filter elements. Being a spark-proof mineral composite material, CS1255F also removes the need for costly anti-spark arresters. Its homogeneously porous nature also avoids potential issues of preferred paths through the walls of the filter elements, and due to its strong mechanical properties, the filter elements can undergo numerous regenerative cycles via counter-flow pulses of cleaning gases, without the wear & tear usually witnessed on fabric filters when regenerated in the same way.

CS1255F is a safe material to handle, without any of the associated health hazards linked to the use of ceramic filter elements. This material can be handled safely and the elements can be disposed of in a non-hazardous landfill, as long as the elements are not coated in hazardous waste. Sorbents can also be used in conjunction with CS1255F elements a wide variety of pollutant including, but not restricted to: acids, alkalis, heavy metals, furans and dioxins.

Product Advantages

- Free of refractory ceramic fibres: non-hazardous
- High filtration efficiency: >99.99%. Much more efficient than electrostatic precipitators or wet scrubbers
- Able to filter sub-micron particle size
- High Temperature material: operates up to 1000°C, without gases cooling
- Spark-proof and non-combustible
- Regenerated by a counter-current pulse of cleaning gas
- Mechanically strong material, also able to withstand thermal shocks
- Easy to install
- 5.6m version: easy assembly of 2 filter halves via adhesive and dowels
- Lower capital cost than electrostatic precipitators
- Inert to most acid and alkali gases

Test Evidence

On-site accelerated test indicated an estimated 6+ years lifetime equivalent of continuous running without any issue.

Approved Applications

Hot gas filter elements for Atmospheric Pollution Control (APC) or In-line Equipment Protection (ILEP)

APC:

- Incineration of industrial and chemical waste
- Incineration of clinical, animal and domestic waste
- Vitrification of incinerated waste
- Metallurgical processing – ferrous and non-ferrous
- Precious metal recovery
- Soil remediation and reclamation
- Coal derivative manufacture
- Wood waste burning
- Glass, brick and cement industries
- Crematorium incinerators

ILEP:

- Gasification and pyrolytic processes
- Waste to energy plants

Physical Properties

Property	Units	Typical value
Density	kg/m ³	480
Pressure Drop (of Virgin Filter)	"mm water at 28 mm/s face velocity"	28
Loss on Ignition	% @ 700°C	5.4
Flexural Modulus	GPa @ 350 °C	21.3
	GPa @ 500 °C	23.8
	GPa @ 700 °C	25.5
Crush Force	"N @ ambient	"153
	N @ 350 °C"	66"
Filtration Efficiency	%	>99.99
Typical Air Permeability	[l / dm ² · min] @ 200 Pa	8
Filtration Capability	Particle size (micron)	<1
Output Emissions	mg/m ³	<1
Temperature Capability	°C	≤1000

Sizes

5.6m long Big Tube Filter element once assembled on site by customer.

Tools

- Refractory adhesive required - as featured in our instructions
 - 2 dowels required per filter
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Intended use

CS1255F 5.6m long elements to filter out solid waste and pollutants.

Storage

- Store in doors and avoid extreme temperatures and humidity
- Take care not to exceed safe working loads and heights for storage shelves and racks

CS1255F

ARCLEX

FEROFORM

FIREFLY

NITRASIL

REFEL

**REFRACTORY
PRODUCTS**

REFRAVER

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