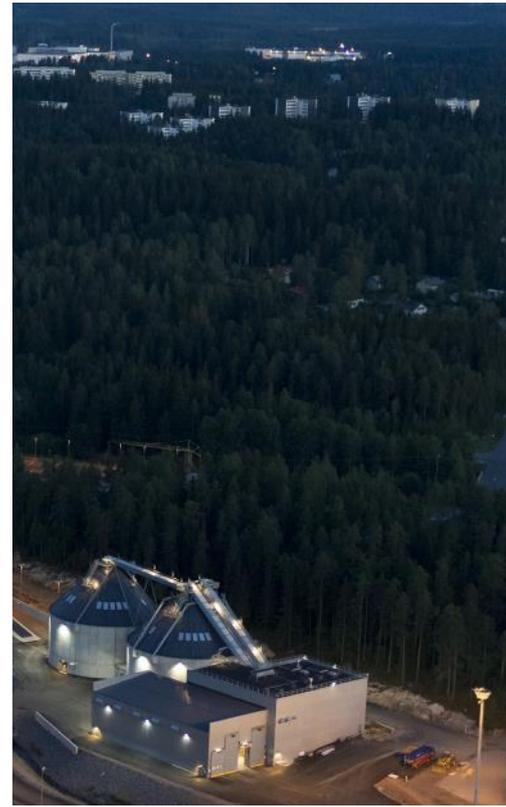


TENMAT

ADVANCED MATERIALS



FIREFLY



FILTER ELEMENTS FOR HOT GAS FILTRATION

HOT GAS FILTER ELEMENTS

TENMAT FIREFLY hot gas filter elements are manufactured from bio-soluble materials and inorganic bonds, enabling them to be used at temperatures in excess of 1000°C.

FIREFLY filter elements are designed to remove particulate pollutants from hot gases. *FIREFLY* filters operate at temperatures and efficiencies higher than those achievable with any conventional filtration systems. Other chemical pollutants such as acid gases and dioxins, can be removed with the use of selective reagents or sorbents.

FIREFLY filter elements can capture particles less than 1 micron in diameter. The resultant emission levels are typically lower than 1 mg/m³. They are proven to offer cleaner emissions compared to electrostatic precipitators or wet scrubbers.

The filter elements are self supporting and do not require metal cages, which saves time on installation. This is also of value in corrosive environments.

Customer Benefits

- Do not tear
- Emission level below 1 mg/m³
- No need for gas cooling
- No need for metal cages
- Reduce energy consumption
- Protect vital components
- Non-ceramic

Key Features

- Resistance in excess of 1000°C
- 99.99% filtration efficiency
- 100% spark-proof
- Self-supporting
- High strength
- High chemical resistance

Material Grades

- CS 1150F - Lengths up to 1.5 m
- CS 1255F - Lengths from 1.8 m

APPLICATIONS

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 incinerator

ILEP

- Gasification and pyrolytic processes
- Waste to energy plants



AVAILABILITY

	CS1150F			CS1255F		
External Diameter (mm)	60	60	60	150	150	150
Internal Diameter (mm)	40	40	40	110	110	110
Length (mm)	1000	1250	1500	1800	2400	3000
Flange Diameter (mm)	80	80	80	190	190	190
Surface Area (m ²)	0.19	0.23	0.28	0.83	1.11	1.40

TECHNICAL DATA

PROPERTY	UNITS	CS1150F	CS1255F
Temperature Capability	°C	> 1000	> 1000
Density	kg / m ³	480	450
Pressure Drop (of Virgin Filter)	mm water	28 (velocity = 28 mm/s)	35 (velocity = 12.6 mm/s)
Loss on Ignition	% @ 70 °C	5.4	6.3
Typical Air Permeability	[l / dm ² · min] @ 200 Pa	8	8
Filtration Efficiency	%	> 99.99	>99.99
Minimum Particle Size	micron	< 1	< 1
Output Emissions	mg / m ³	< 1	< 1

The information contained in this data sheet is presented in good faith. They are typical test results tested generally in accordance with BS 2782 and ASTM test methods and should not be used for specifications.

TENMAT does not warrant the conformity of its materials to the listed properties or their suitability for any particular purpose. For further information please contact our Technical Sales Department on +44 161 872 2181.

SEALS

TENMAT seals have been specifically designed to work in conjunction with *FIREFLY* filter elements to ensure tightness throughout the life of the filter. The seals are flexible and absorb minor deflections in the header plate while dampening vibrations.

TENMAT seals are manufactured from high quality exonerated fibers and they are highly compressible yet strong. RF1000FL is used for most applications. RF1200FL is used for ultra high temperatures and/or reducing-atmosphere applications. Please consult **TENMAT** for support on appropriate seal selection.

	STANDARD DIMENSIONS	
To Fit Filter Grade	CS1150F	CS1255F
External Diameter (mm)	80	215
Internal Diameter (mm)	60	153
Thickness (mm)	9	20



FEROFORM **RAILKO** *FEROGLIDE* *FEROBIDE*

REFRAVER **REFEL** **ARCLEX**

FIREFLY **NITRASIL** **SINDANYO**

TENMAT is committed to the highest standards in customer service and our international staff is looking forward to assist you.

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