



# FIREFLY CS1150F

## Hot Gas Candle Filters

The FIREFLY range of non-ceramic refractory products are extensively used across various industries, which require a high performance insulation material. FIREFLY CS1150F are high quality hot gas filters, developed by Tenmat Wear.

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Product  
Description

CS1150F products are manufactured from 100% exonerated Alkaline Earth Silicates (AES) fibres, with proprietary high temperature bonding agents. CS1150F has been formulated to produce Candle Filters exhibiting excellent strength:weight ratios and toughness, even at extreme temperatures.

The CS1150F Candle filters can be found across various industries, where harmful pollutants are required to be filtered from hot gases given off during incineration processes in order for companies to meet emissions targets.

This is an exonerated product in accordance with the European Directive 97/69 EC on Classification, Packaging, and Labelling of Dangerous Substances.

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Product  
Advantages

- Low Thermal Conductivity
- Thermal Shock Resistance
- Free of harmful fibres
- High Temperature Resistance
- Elements do not Tear
- Superior Resistance up to 1,000°C
- 100% AES Filters
- 100% Spark Proof
- >99.99% Filtration Efficiency
- Cleaner Emissions
- Unique Microstructure
- Resistant to Most Chemicals
- Sizes Available for a Large Range of Applications

## Approved Applications

Typical industries of application are:

- Crematorium
- Industrial waste incineration
- Cement plants
- Gasification plants
- Metal reclamation plants

## Physical Properties

PROPERTIES	UNITS	TYPICAL VALUE
Density	Kg/m <sup>3</sup>	480
Pressure Drop (of Virgin Filter)	mm water @ 28 mm/sec 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
Air Permeability	l dm <sup>-2</sup> min <sup>-1</sup>	8
Filtration Capability	Particle size (micron)	< 1
Output emissions	mg m <sup>-3</sup>	< 1
Temperature Capability	°C	≤1,000

## Storage

- To be stored in a dry location
- Take care not to exceed safe working loads and heights for storage shelves and racks

## Working Life

Service life is typically 3–5 years, depending on the application

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**ARCLEX**

**FEROFORM**

**FIREFLY**

**NITRASIL**

**REFEL**

**REFRACTORY  
PRODUCTS**

**REFRAVER**

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**Advanced materials.**  
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Tenmat Wear warrants the materials it produces will conform to Tenmat Wear specifications and approved drawings where applicable. It is entirely the customer's responsibility to make the final product choice and satisfy themselves of the suitability of the product for the intended application, carrying out testing where required. For construction projects, all products which the customer is intending to use on a particular project must be approved in writing by the customer's building designer, system designer or design control professional, to ensure compliance with the latest regulations.

The information contained in Tenmat Wear data sheets is presented in good faith. The values are "typical only" and are based on test results generally in accordance with BS2782, ASTM, a variety of other main test bodies along with Tenmat Wear internal test methods. These values should not be relied upon for specification purposes or the primary selection of materials. As the data sheet values are typical only, Tenmat Wear does not warrant the conformity of its materials to these properties or the suitability of its materials for any particular purpose. It is the responsibility of the customer to do the necessary testing and satisfy themselves the product is suitable for the intended application.

