



Filtration Group

Process Technologies Division

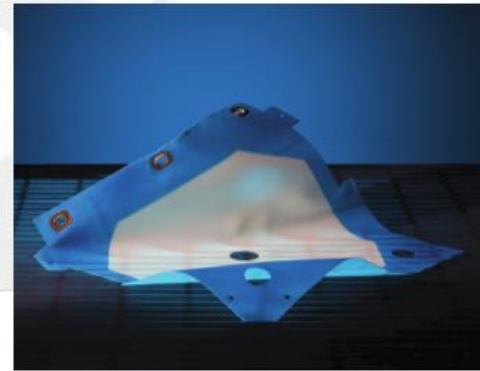
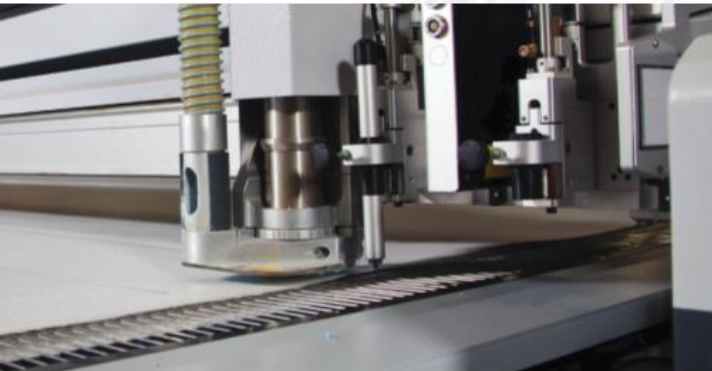


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Cerafil™ Hot Gas Filter Candles



CLEAR EDGE™
Filtration

Filtrair®

GLOBAL FILTER

IONELL™

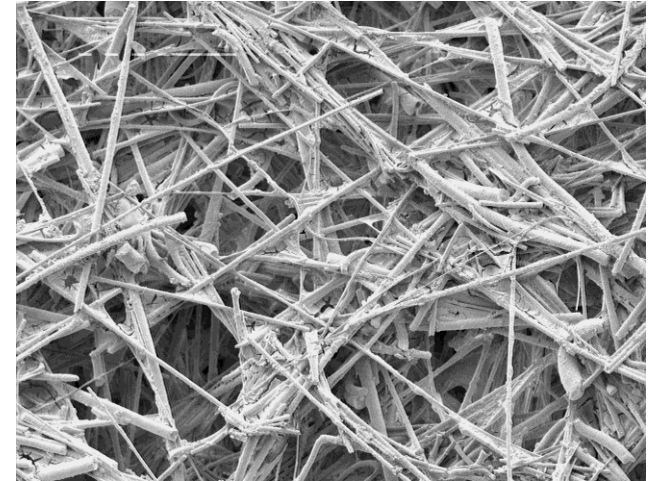
What are Ceramic Filter Candles?

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- Rigid candles are employed like fabric bags in the filter housing
- Capable of operating at elevated temperatures
- Applied to hot processes where clean off gas is required
- On the market since the mid 1980s
- 100's of references worldwide





- XS, white Aluminosilicate fiber, 900°C, very resistant against chemical attacks (standard)
- Green, MgAl mineral fiber - strong and bio soluble
- TopKat, catalytic ceramic candle - toxic gas removal catalyst included
- Various dimensions up to 3 m and diameter 150 mm

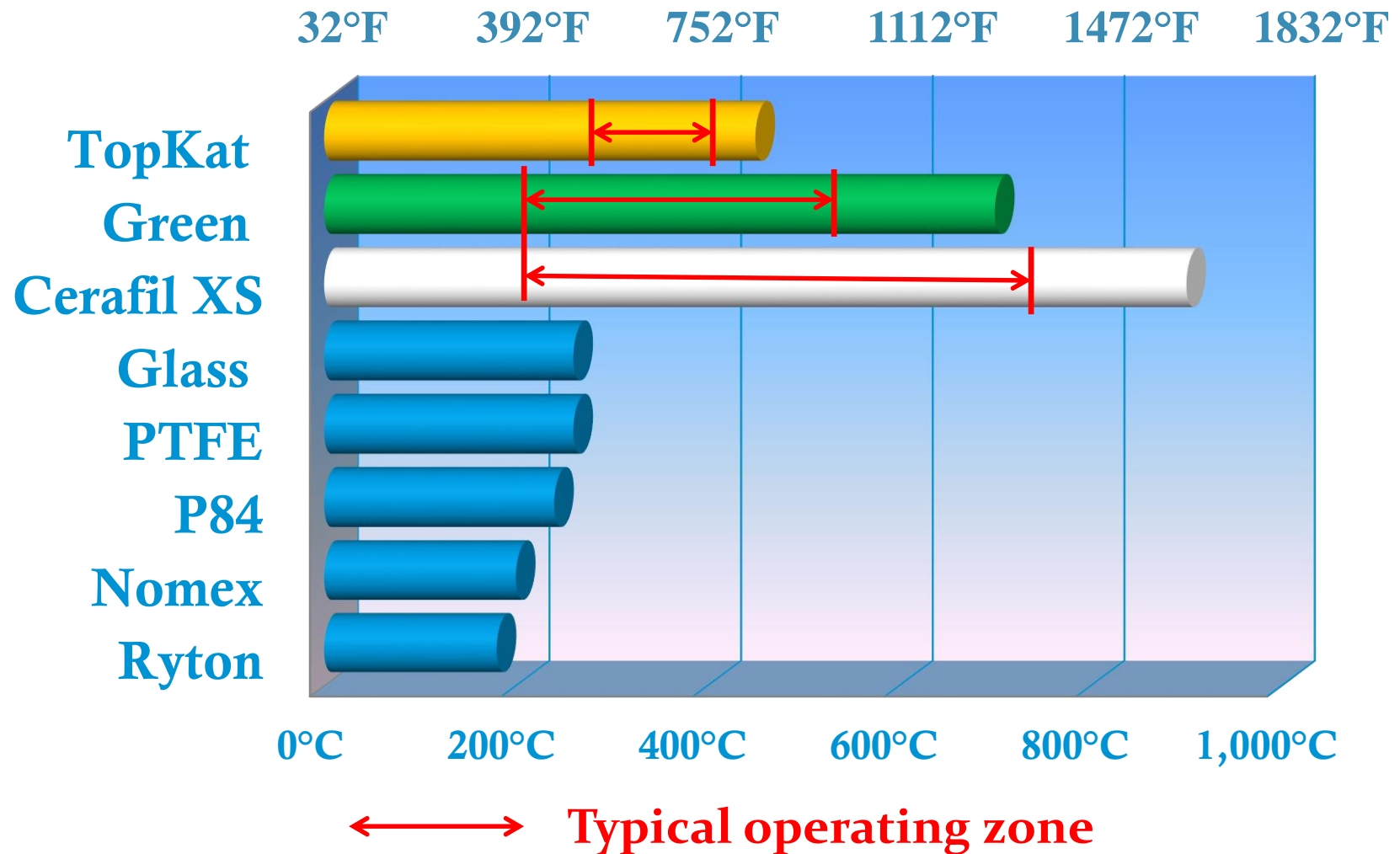


- High efficiency
 - Less than 2 mg/m³ emissions
 - Handles sub-micron particles
- High temperature capability
 - Temperature resistant up to 900°C
- Corrosion resistant
 - virtually chemically inert
- Works well in conjunction with a dry scrubbing agent

Maximum Operating Temperatures

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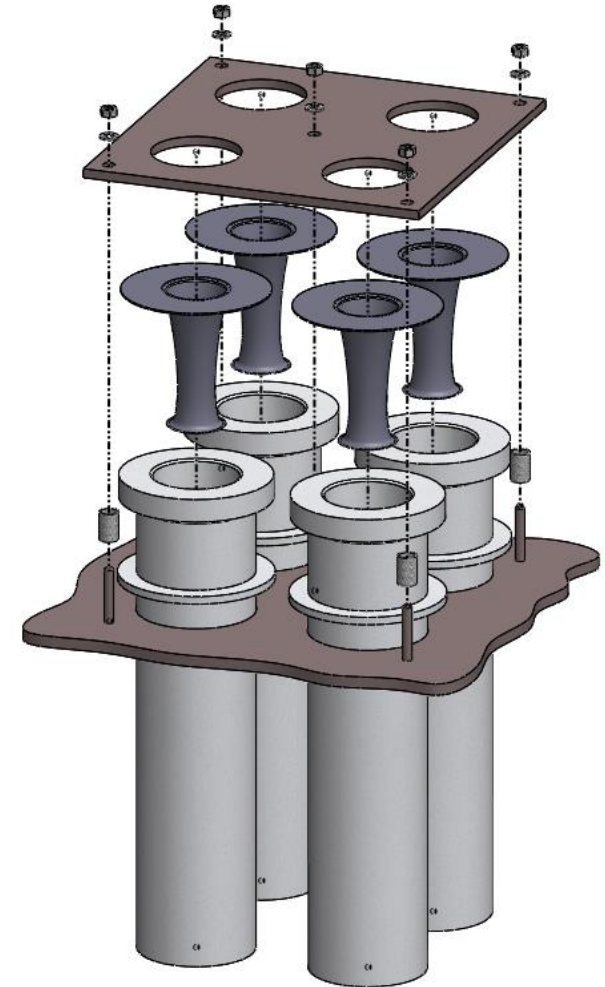
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Clamping - Typical

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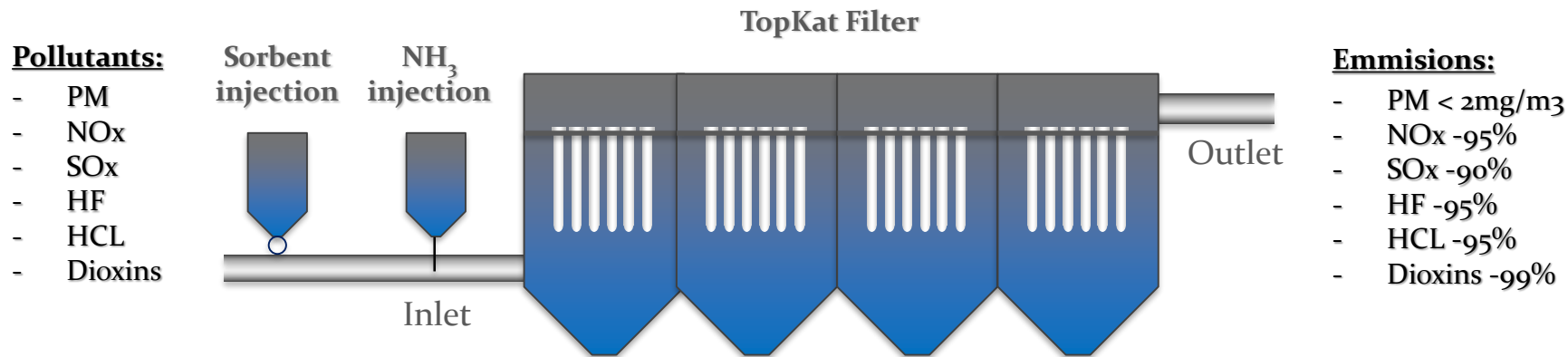
The new way of flue gas cleaning!



Cerafil TopKat Based APC

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ADVANTAGES:

- Low Emissions
- Works at exhaust gas temperature
- Compact system
- Small footprint
- Lower investment costs
- Lower maintenance costs



Process	Dust loading (g/Nm ³)	Particle size (μm)	Emission level (mg/Nm ³)	Inferred Efficiency (%)
Waste incineration	5	< 10	< 5	99.88
Zirconia production	8	< 3	< 1	99.99
Nickel refining	12	< 10	< 1	99.99
Alumina production	18	< 50	< 1	99.99
Cement	60	< 3	< 5	99.99

Performance - Comparison

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- Typically, Cerafil can handle ca. 63 cfm per Candle (4 cfm/ft²)

	Glass Industry	Cement - Clinker Cooler
Volume flow (cfm)	148,320	164,800
Inlet dust load (gr/scf)	0.45	26.2
No. of Candles	2500	2400
Pressure drop (in. W. C.)	8 - 9	6.5 - 7.5
Dust emission (gr/ft ³)	< 0.001	< 0.001

- For actual performance – a pilot study is recommended

Examples of Cerafil longevity

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- Aluminium powder: 5 years
- Glass furnace: 6+ years
- Catalyst manufacture: 4 years
- Wood waste incineration: 6 years
- Meat waste incineration: 5 years
- Lab waste incineration: 11 years
- Asphalt reclamation: 5 years
- Fluid bed metal cleaning: 5 years
- Zirconia production: 9 years



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