

AIFILTECH · High-Temperature Flue Gas Purification

MULCERAFIL all-in-one ceramic fiber filter tube ultra-high temperature gas filter tube

Ceramic Fiber Filter Tubes

Overview

The MULCERAFIL all-in-one catalytic filter element blends a nano-catalyst into the inorganic fibre granules so that the catalyst is distributed evenly through the filter wall. While filtering dust at high efficiency...

Key Advantages

 Filtration efficiency
> 99.9% (typical conditions)

 Max. temperature
900 °C (continuous & peak)

 Dust emission
< 2 mg/m³ (typical conditions)

 NOx removal
> 95% (NH₃/NO_x ≈ 1.0, 240 °C, NHSV 5,000)

 Dioxin removal
95%–99% (200–300 °C)

Technical Data

Max. temperature	900 °C (continuous & peak)
Filtration efficiency	> 99.9% (typical conditions)
NOx removal	> 95% (NH ₃ /NO _x ≈ 1.0, 240 °C, NHSV 5,000)
Dioxin removal	95%–99% (200–300 °C)
HCl removal	> 95%
SO ₂ removal	> 80%
VOC removal	> 99%
Dust emission	< 2 mg/m³ (typical conditions)
Element form	Tube-shaped, no cage required
Wall thickness	10–20 mm (catalyst evenly distributed)
Brand	AIFILTECH
Customisation	Available

Applications

Waste incineration

Metallurgy

Glass

Cement

Chemical plants

Hazardous waste treatment

Biomass boilers

Steel sintering

All data above are obtained under specific test conditions; the actual solution must be engineered to site conditions. Values listed here refer to standard models — AIFILTECH provides custom design and sizing based on actual gas volume, temperature, dust characteristics and emission limits.