

Ceramic Hot Gas Filters

● *elements are stable at high temperatures*

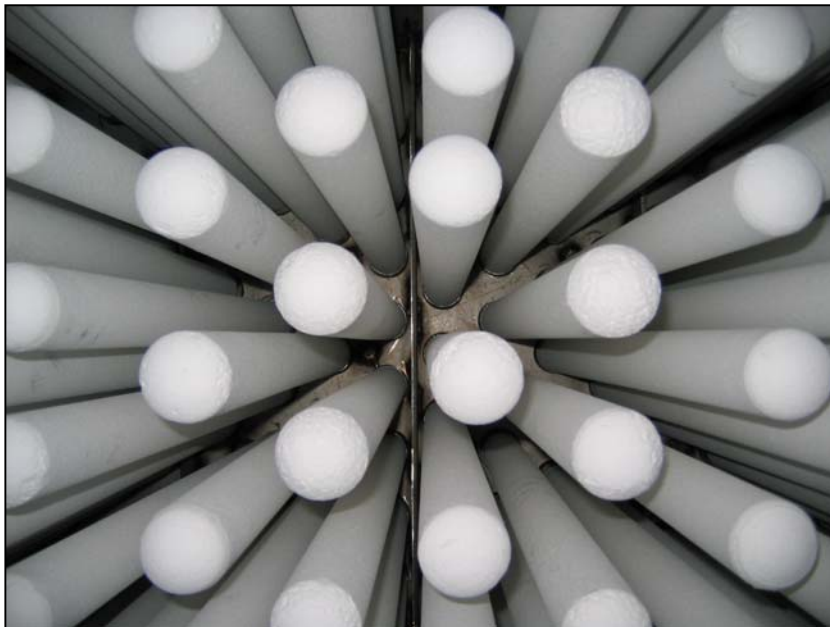
- can withstand temperatures up to 900°C
- avoid 'de novo' dioxin formation by filtering at above 400°C
- avoid corrosion by filtering at above the acid gas dewpoint
- are resistant to spark carryover from the process
- can withstand major process temperature variations
- reduce plume formation by allowing hotter gas discharge

● *ceramic filters are highly efficient*

- remove particulates to $< 1\text{mg/m}^3$
- comply with all particulates emissions legislation
- capture the more harmful sub-micron particles

● *elements are chemically inert*

- are suitable for a wide range of chemical processes
- demonstrate excellent resistance to acid gas corrosion



Ceramic filter elements viewed from below

● *elements have a rigid structure*

- are low maintenance because they have no moving parts
- achieve continuously efficient filtration due to stable conditioning layer

● *ceramic filters integrate well with other processes*

- remove acid gases by dry scrubbing with lime or sodium bicarbonate
- eliminate slurries from wet scrubbers by pre-filtering hot gases
- avoid blinding gas treatment catalysts by pre-filtering hot gases
- protect heat exchangers and recuperators from fouling

● *ceramic filters are straightforward to use*

- on-line reverse pulse cleaning avoids process disruption
- solids discharge is on-line and easy to perform
- high temperature capability tolerates large process variations



Solids discharge to 200 l drum via air powered slide valve and drum seal

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