



**Dyson Technical Ceramics™** Zirconia Ceramic Filters are used in the filtration of Steel and Nickel/Cobalt based superalloy castings. DysonTC's Zirconia Ceramic Filters offer resistance to high temperatures, while maintaining excellent erosion resistance. The fine textures of the filters provide excellent filtration properties, giving the caster cleaner melts and reducing the need for grinding/machining. Advanced production techniques help to give the filters an even 3D lattice, resulting in a smooth, non-turbulent melt flow.

Dyson's Zirconia Filters are supplied in a range of dimensions and aperture sizes, depending on casting requirements.

Dyson's vast experience in the refractories industry, ceramic specialist at our R&D facility and the use of high purity raw materials and Dyson extensive knowledge of zirconia ceramics results in high quality standards and products that perform well, consistently.

Also available are a wide range of Isostatically pressed crucibles in materials such as: Alumina, Zirconia Boosted Alumina, Magnesia and Zirconia. Further to this Dyson also supply Zirconia and Zircon backing material providing the right level of insulation and support to maximise crucible life-spans.

### Dyson Zirconia Ceramic Filters

#### Key Features/Benefits:

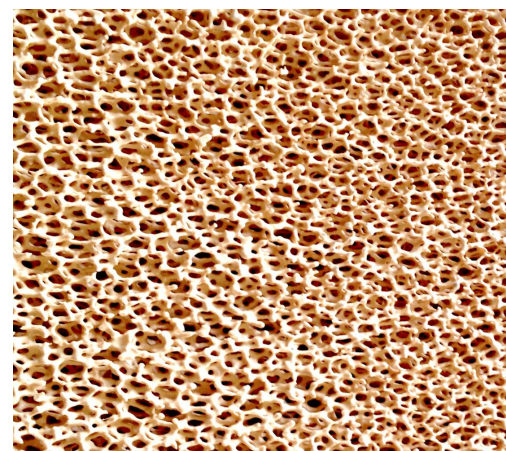
- Dimensionally accurate
- Wide range of filter sizes available
- Fine textured and even 3D lattice resulting in a smooth, non-turbulent metal stream.
- Available Pour Sizes: 10 - 60ppi

#### ZCF-96 - Key Properties

- Resistance to high temperatures
- High Purity Zirconia
- Excellent erosion resistance
- Excellent thermal shock resistance
- MgO Stabilised
- 80 - 90% Porosity

#### Also Available:

- Isostatically Pressed Crucibles
  - Zirconia
  - Alumina/Zirconia
  - Magnesia
- Zirconia and Zircon Backing Material
- High Performance Zirconia Nozzles.



### Zirconia Ceramic Foam Filters Material Data

#### General Specifications

Size Specifications	Available in a wide range of sizes, please contact for further details
Pour Density	10ppi - 60ppi

#### Material Properties

Product Ref.	Porosity (%)	Bulk Density (g/ml)	Creep Resistance (%)	Compressive Strength (MPa)	Max. Service Temp. (°C)
ZCF-96	87	0.92	≤3.8	2.5	1760*1

\*1 Ideal working temperature range: 1580°C - 1760°C

#### Filtering Capabilities

Carbon Steels:	1.4 -2.7 kg/cm <sup>2</sup>		Stainless Steels:	1.9 - 4.0 kg/cm <sup>2</sup>
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