



Magma's range of Zirconia Atomising Nozzles are manufactured for use in the Powder Metallurgy industry. Nozzles are available in a wide range of shapes and sizes, many to the requirements of individual customers.

Our comprehensive range of nozzle designs are available to suit the high temperature resistance, high temperature production, low temperature gas and water atomisation for most alloys, including alloy powder production, nickel based alloys, aluminium and copper alloys.

Through our R&D efforts and commitment to enhancing our customer's expectations, Magma is able to provide leading solutions in terms of performance in the metal powder atomising sector.

Working in partnership with our clients, Magma has the flexibility and knowledge to specify and design Zirconia ceramic nozzles, capable of enduring the most extreme conditions. Please contact our sales team for further information.

Magma Ceramics & Catalysts
Low Road, Earlsheaton, Dewsbury,
West Yorkshire, WF12 8BU, UK

Telephone: +44 (0)1924 468201
Fax: +44 (0)1924 459429
Email: info@magmaceramics.com

www.magmaceramics.com



Zirconia Atomising Nozzles

continued

Description

A freeze cast Zirconia material designed with excellent wear resistance properties.

Maximum Service Temperature

2000°C

Typical applications

Crucibles and Nozzles used in melting and atomising Superalloys.

Prime features

- Very Good Thermal Shock resistance
- Excellent abrasion resistance
- Excellent erosion resistance
- Chemically stable and non-wetting in contact with steel alloys

Specifications

- Quality Assurance to ISO 9001:2008

Magma Production Capabilities

- High pressure pressing
- High temperature sintering

Properties

Physical

Bulk Density (g/cm ³)	4.3 – 4.6
Apparent Porosity (%)	18 – 24
Modulus of Rupture (N/mm ²)	20 – 26

Chemical (wt%)

Al ₂ O ₃	<1.0
SiO ₂	<2.0
Fe ₂ O ₃	<0.5
CaO	<0.5
MgO	<5.0
Na ₂ O + K ₂ O	<0.5
ZrO ₂ + HfO ₂	>90.0
CeO ₂	<6.0
TiO ₂	<0.5

Please note that all values quoted are based on test pieces and may vary according to component design. These values are not guaranteed in anyway whatsoever and should only be treated as indicative and for guidance only.

Magma Ceramics & Catalysts
Low Road, Earlsheaton, Dewsbury,
West Yorkshire, WF12 8BU, UK

Telephone: +44 (0)1924 468201
Fax: +44 (0)1924 459429
Email: info@magmaceramics.com

www.magmaceramics.com

