



TECHNICAL CERAMICS

RAJET

Ceramic Injection
Molding (CIM)



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PRODUCT PROPERTIES

CERAMIC INJECTION MOULDING (CIM) is a near-net-shape moulding process based on the principle of thermo-plastic moulding. It offers almost unlimited possibilities in terms of design.

In this way, demanding geometries such as thin wall thicknesses and the smallest holes can be implemented in a way that is suitable for the final shape. All types of threads can also be represented here.

The ceramic injection molding process is suitable for the mass production of complicated parts and is **characterized by high productivity and good automation possibilities**. Here, too, a sintering process is carried out to achieve the final contour. We have a very well-stocked machine parc and our employees are well trained.

TYPICAL VALUES	RAJET AL99	RAJET AL 96	RAJET 3YSZ
Material base	Alumina >99,6%	Alumina 96%	Zirconia ~95%
Density [g/cm ³]	~3,9	~3,7	>6
Flexural Strength [MPa]	>350	~300	~1200
Coefficient of linear expansion 20-600°C 10 ⁻⁶ /K ⁻¹	6-8	6-8	~10
thermal conductivity [W/mK]	~30	~24	~2
Thermo shock resistance	good	good	good
Max.operation temperature	1600	1400	1000

YOUR BENEFITS

Thanks to the reliability of our materials in use, **you immediately increase your process reliability**

Excellent process reliability **stabilizes your subsequent processes towards your customer**

In a nutshell:

You receive high-performance and economical products that directly strengthen your own performance on the market

AVAILABLE MATERIALS ARE:

- RaJet AL99 (Alumina >99.6%)
- RaJet AL96 (Alumina 96%)
- RaJet 3YSZ (3 Mol.% stabilized Zirconia)



Your Inquiry – Fast & Precise Quotation

For a fast and precise quotation, please send us a drawing of the component along with details on quantities and tolerances. We will be pleased to advise you personally.

Mr. Michael Rott

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