

HIGH-PERFORMANCE CERAMICS

IMPELLERS FOR PUMPS

Application:

Pumping aggressive media

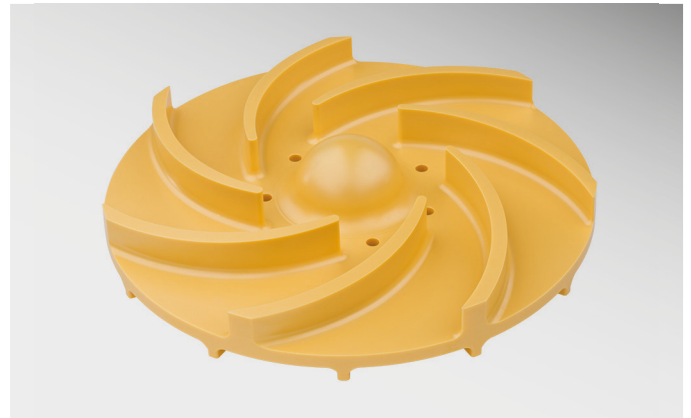
Material:

Aluminium Oxide **F99.7**

Zirconium Oxide **FZM**

The wear and tear of components exposed to flow represents a major problem in process engineering. The combination of abrasion and corrosion means for a large number of the materials commonly used in pump technology pose an extremely critical load.

Components made of **F99.7** and **FZM** are due to their high hardness and very good corrosion resistance ideally suited for use in aggressive media. Modern manufacturing processes make it possible to produce complex geometries from ceramic materials economically to manufacture.

**Application examples:**

- ▶ Nickel processing:
Ore suspension containing HCl
- ▶ Titanium dioxide production:
H₂SO₄ and ilmenite
- ▶ Magnesite processing:
HCl-containing MgCl₂ solution

FZM and **F99.7** should not be used in alkaline media, as well as media with a high fluoride content can be used.

- ▶ Extreme abrasion resistance
- ▶ Good corrosion resistance
- ▶ High temperature resistance
- ▶ Variable geometries

Competence in Advanced Ceramics
Engineering for customized solutions
