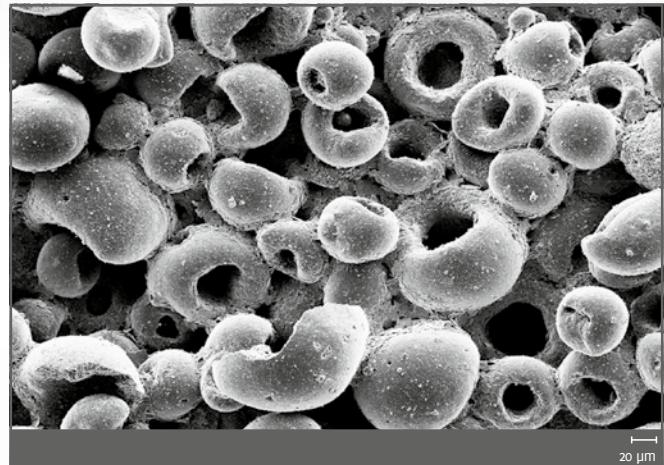


ZrO₂/Y₂O₃/Polymer Turbine Abradable – TBC-Coating

Grain Size Distribution

039	-106 +45 µm
041	-125 +36/45 µm

Other grain sizes on request



Micro section

Chemical Composition

ZrO ₂	base
Y ₂ O ₃	6.5 – 8.5 %
HfO ₂	< 2 %
SiO ₂	< 0.1 %
Al ₂ O ₃	< 0.1 %
Fe ₂ O ₃	< 0.1 %
MgO	< 0.1 %
CaO	< 0.1 %
TiO ₂	< 0.1 %

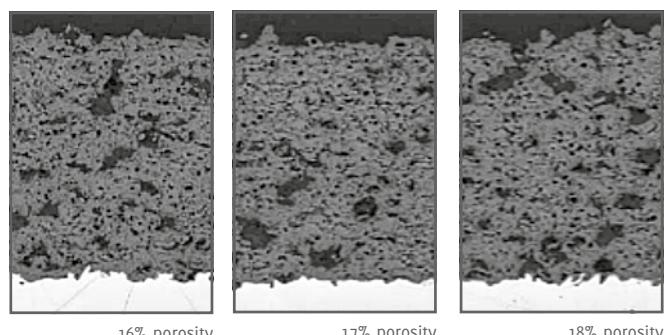
These properties are typical but do not constitute specifications

Coating Properties

- Hardness: ~ 1400 HV_{0.3}
- Max. Application Temperature: 1300 °C

Property Profile (Coating)

- Excellent thermal shock resistance
- More complete melting and increased porosity resulting from particle morphology and density
- Low monoclinic phase
- Low silica, high resistance to sintering
- High purity
- Low thermal conductivity
- High temperature resistance
- Good thermal shock behavior
- Low thermostatically reactivity
- Thermal expansion near superalloys
- Low monoclinic content
- Low-k materials
- Phase stable coatings



16% porosity

17% porosity

18% porosity

