



TECHNOLOGY DESCRIPTION

The oxide ceramic fibre composite material WHIPOX® (Wound Highly Porous Oxide Ceramic Matrix Composite) was originally developed to component maturity for re-entry vehicles. WHIPOX® is non-brittle, high-temperature resistant, and ideal for applications in oxidising and corrosive media. WHIPOX® is offered as standardised semi-finished products (e.g. sheets, grids, tubes) as well as a customised solution (components and systems).



INNOVATIVE ASPECTS

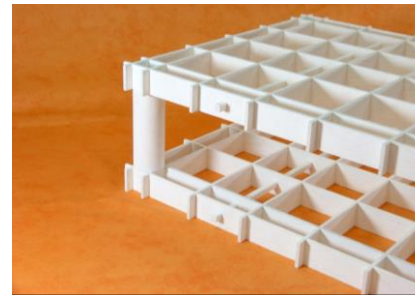
WHIPOX® combines the positive properties of metals and ceramics:

- Thermal shock resistant
- High temperature stable up to over 1,300°C
- Oxidation and corrosion resistant
- Resistant to metallic melts
- High tensile and flexural strength
- Low component weight
- Ductile, non-brittle fracture behaviour
- Electromagnetic transparency
- Electrical insulator
- Low thermal conductivity and low heat capacity



TECHNOLOGY READINESS (in space application)

TRL 9 (2024)



COUNTRY OF ORIGIN

Germany

LATEST UPDATE

06/2024

TAGS #HT resistant #low weight #ductile #elect. insulator #high strength #oxidising

APPLICATION AREAS

Aviation Construction & Civil Engineering Energy Electrical & Electronic Engineering Health Safety & Security Space technologies

SPACE
FOR BUSINESS
BUSINESS
FOR SPACE

TECH CARD

