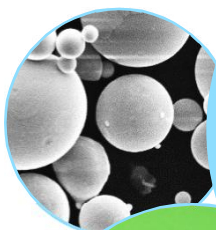


About us

We are material experts specialized on powder based materials. We offer services from early stage feasibility studies and market surveys to pilot scale production of materials and component demonstrations.



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Our material expertise combined with application know-how enables proper selection of materials to meet demands of operation environment.
//



ASK US MORE!

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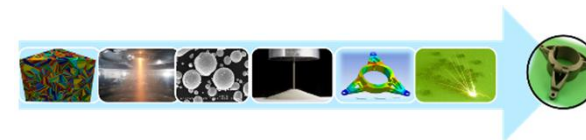
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www.vtt.fi/powder

Powder Piloting Service

Material Solutions...
...from powder to product



VTT TECHNICAL RESEARCH CENTRE OF FINLAND LTD
Sinitaival 6, Tampere
P.O. Box 1000, FI-02044 VTT, Finland



Powder Piloting Service

Powder Piloting Service for design and pilot scale processing of powder based materials and components.

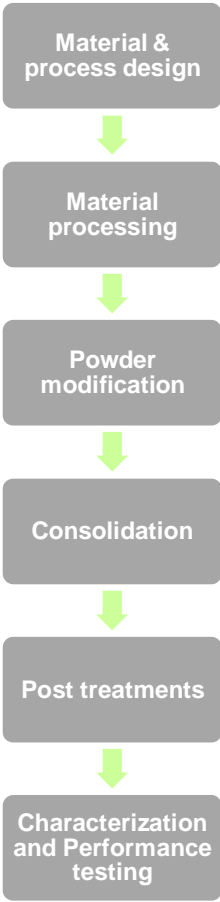
• Easy way for checking feasibility of ideas and inventions confidentially

• Pilot scale processing of materials and components

• Whole chain from raw material synthesis to component performance testing available

We can boost up your development needs and adoption of resource efficient manufacturing and alternative materials for substitution.

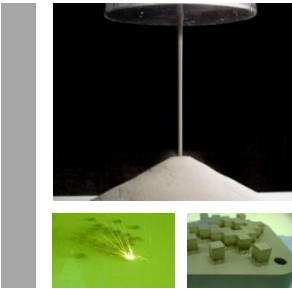
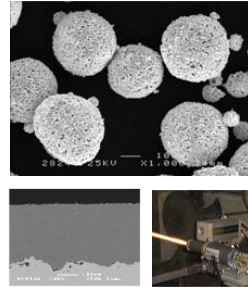
See our references:
www.vtt.fi/powder



Material solutions

Coatings

- Cost efficient solutions against wear, corrosion and high temperatures
- Tailoring material properties to fulfil performance criteria of harsh operation environments

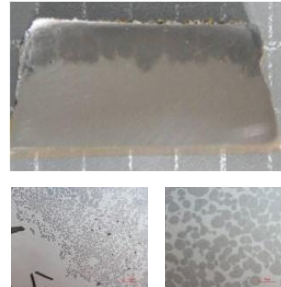


Components

- High performance components with cost-efficient and sustainable manufacturing
- Tailoring component to meet the highest demands and standards

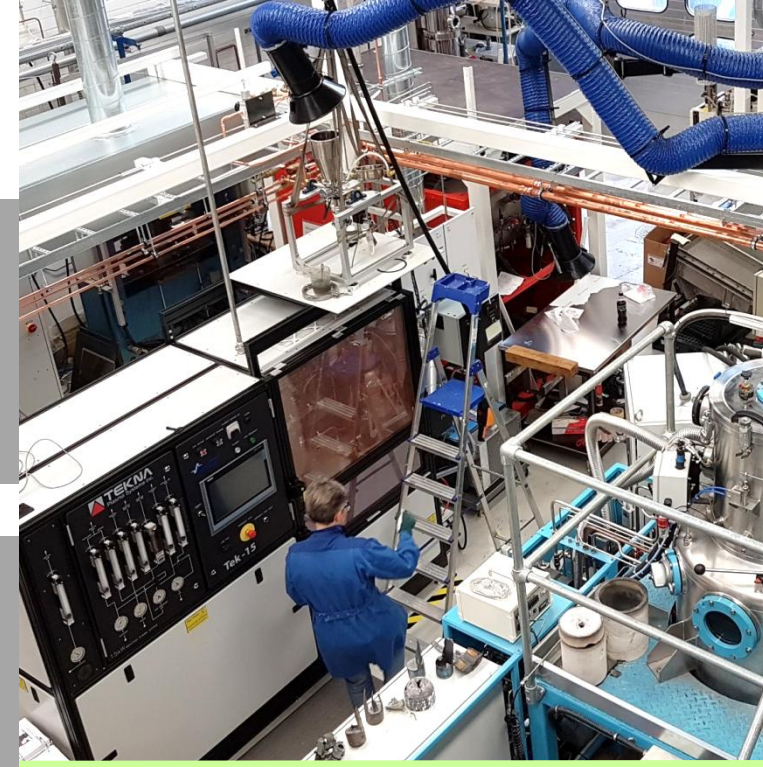
Functional additives

- Graded or locally reinforced structures, added functionality like integrated catalytic properties or electro-magnetic properties



Circular Economy

- Alternative raw materials based solutions
- Utilization of secondary materials and industrial side-streams



Pilot facilities

Powder manufacturing

- Gas Atomisation
- Spray Drying
- Plasma Spheroidization
- Mechanical Alloying & Mixing
- Powder Classification

Powder consolidation

- Additive Manufacturing (AM)
- Hot Isostatic Pressing (HIP)
- Powder Injection Molding (PIM)
- Self-Propagating High Temperature Synthesis (SHS)
- Thermal Spraying
- Laser Cladding

Post treatments and characterization

- Heat Treatments
- Surface Treatments
- Performance Testing & Validation
- Powder characterization

