ESS and MAX IV

The European Spallation Source (ESS) and MAX IV are two new large-scale facilities currently under construction in Lund, Sweden.

These two facilities will make the Oresund region a world leading area for material research in the coming years.

The Imaging Industry Portal at DTU can help companies discover the innovation potential that ESS and MAX IV will bring to the industry.

Contact

Contact us if you want to discuss a potential collaboration or if you want us to analyse materials and processes for your company:

Imaging Industry Portal
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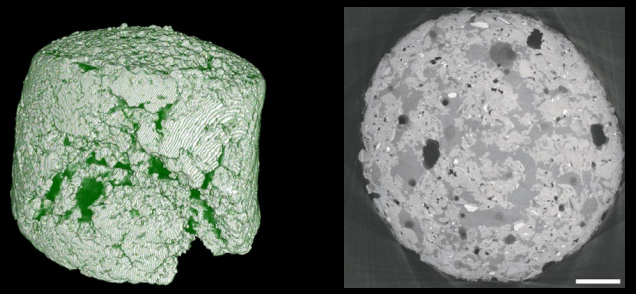
www.imaging.dtu.dk/english/Industry-Portal

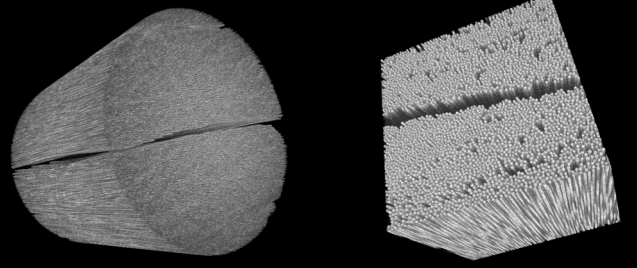
Technical University of Denmark

Imaging Industry Portal

Ammonia storage system during cycling



Unravelling the porous structure of fish feed pellets



Glass fiber from wind turbine blades

A world-class Imaging facility for the Industry

Mission

The Imaging Industry Portal at DTU is dedicated to assist companies in using and implementing 3D Imaging in research, development and production.

It draws on the expertise of a network of researchers to solve companies' most advanced and specialized imaging needs.

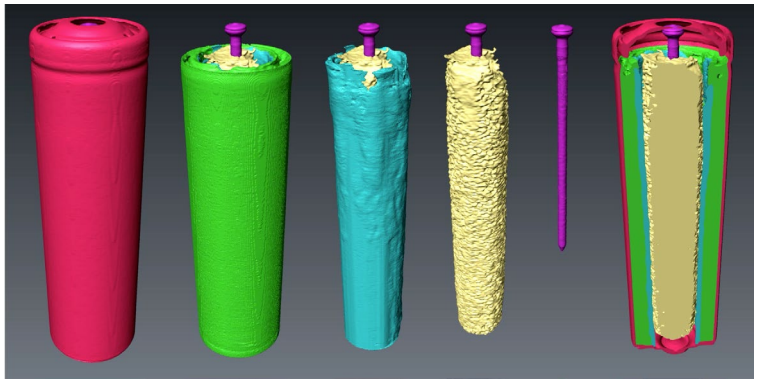
3D Imaging for industrial purposes

3D Imaging, based on X-Ray and neutron technologies, is a non-destructive technique that provides 3D images of the internal structure of materials and components.

One of the most interesting features of 3D Imaging is the possibility to visualize how the structure of a material changes over time, for instance during operation.

This makes 3D imaging a unique tool for product development, product optimisation, and quality control in a wide range of sectors:

- Cleantech
- Construction
- Energy
- Environment
- Mechanics
- Medico Industry
- Nanotech
- Transport
- Agriculture
- Food industry



3D pictures of the different layers in a battery. Source: DTU

Cutting edge research

Researchers at the Imaging Industry Portal are at the forefront of materials research and innovation within 3D imaging technologies. Their expertise covers the whole value chain within imaging: materials study, X-Ray technologies, data analysis, software and computer graphics.

Local instruments

The Imaging Industry Portal's local equipment covers resolutions from 50 nm to 50 µm in samples from 50 µm to 25 cm and offers options for in situ temperature control and gas flow. Other specialized needs may be available upon request.

World-class Imaging facilities

The researchers running the Imaging industry Portal collaborate with several large-scale Imaging facilities around the world.

Companies can benefit from these collaborations, when their project requires measurements, which the Imaging Industry Portal's local instruments cannot support.

Research-based 3D Imaging service

The Imaging Industry Portal at DTU aims at providing the industry with the latest equipment and the most advanced knowledge within 3D imaging and data analysis.

Research collaboration

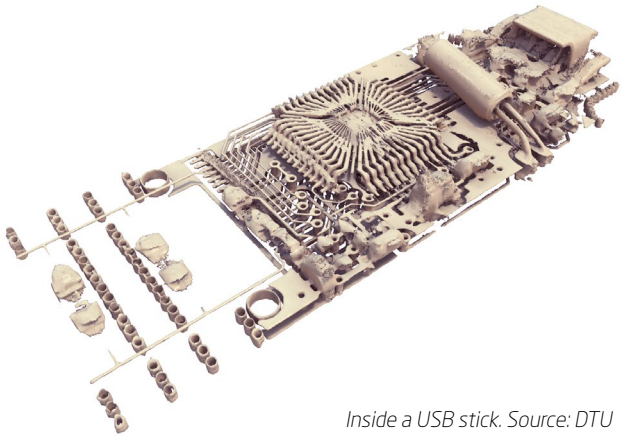
The Imaging industry Portal offers to address problems of the industry from a research perspective.

Companies are thus encouraged to engage in a research collaboration, where a unique team of researchers is set up to develop innovative ways to investigate and solve the companies' problems.

Short-term test experiments

Companies, which are in the process of exploring the benefits of a research-based Imaging service can benefit from a short series of test experiments.

This kind of service can be established as a commercial contract or as an agreement under the *de minimis* regulation, where companies can benefit from public funding to finance a series of test experiments.



Inside a USB stick. Source: DTU