

Delpix: X-Ray Tomography

Background

X-ray tomography, also known as “scanner” has been widely used in the medical industry for many years and has revolutionized medical radiography. However, due to the **time needed to reconstruct volume images, insufficient resolution, and high equipment cost**, it is not commonly used in the manufacturing industry. German firms currently serve 80% of this largely untapped market. The Delpix project aims to **overcome the technological obstacles blocking the wider use of X-ray tomography** among manufacturers and in production chains.

Innovation

The Delpix project aims to develop **rapid X-ray tomography technology** that can **improve quality control on a production line**. By building an X-ray tomography platform (the only one of its kind in France), the project team will be able to:

- Develop a **new generation of flat-panel X-ray detectors** that are both cheaper and more robust
- Develop **new software to reconstruct volume images** at a speed greater than 20 and reduce image artifacts
- **Process volume data electronically** in order to detect part defects automatically
- **Measure the dimensions** of internal part structures

Partners

Corporate

Trixell - Thales

SME

Cybernetix - Digisens - Noesis - Metrologic

Research laboratories

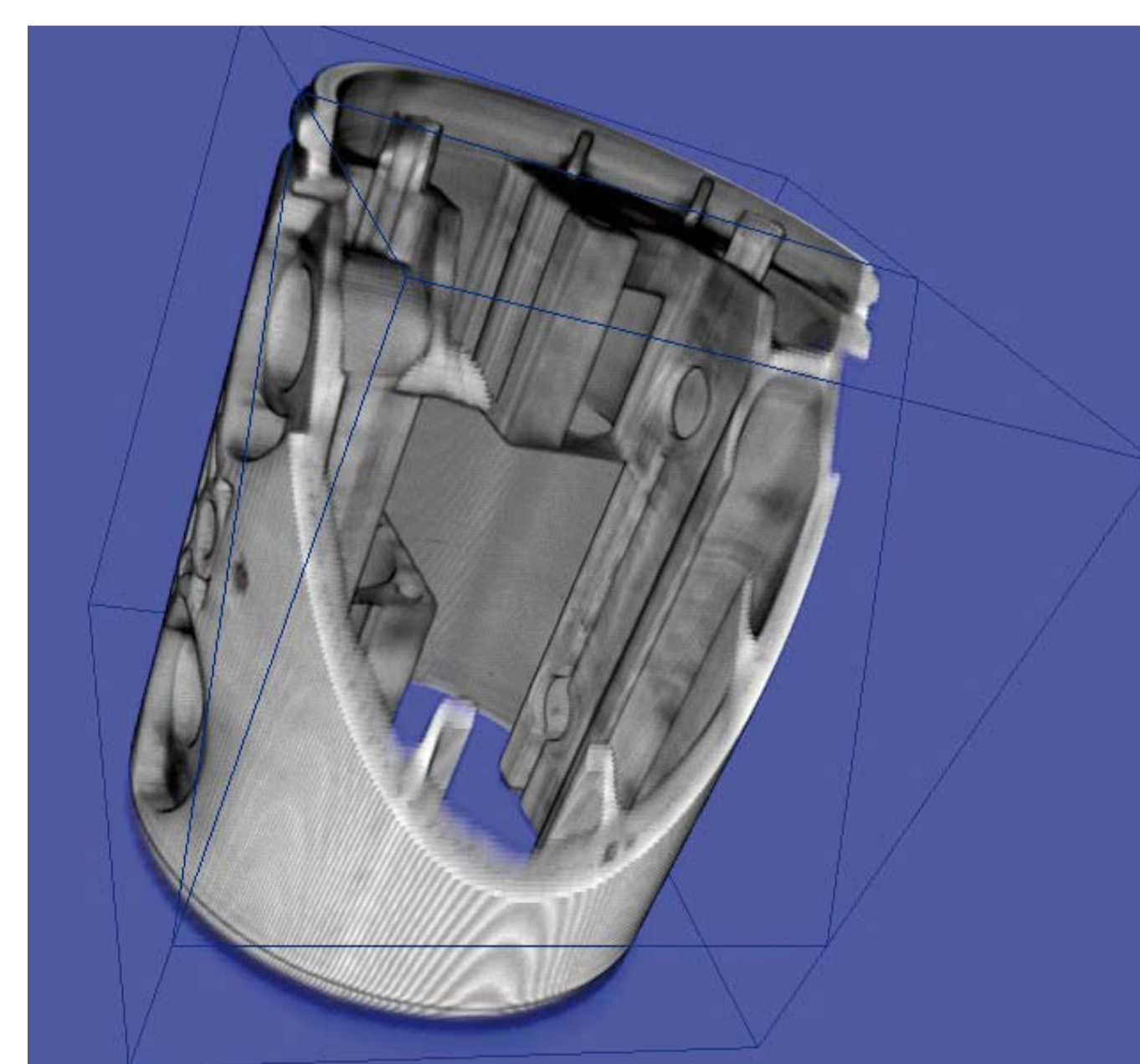
INPG-GIPSA - INSA Lyon

Key figures

Budget: €9.4 million

Duration: 3 years

Human resources allocated: 21 FTE



▲ Volume images generated by x-ray tomography ►

