

Future non-destructive Testing processes

Institut für Kunststofftechnik, University of Stuttgart

Project idea: Future non-destructive Testing Processes

Call area 9: Strengthening our knowledge in support of the European Green Deal

Contact

Company/Institute: University of Stuttgart, Institut für Kunststofftechnik
Contact person (Name & Function): Dr.-Ing. Wolfgang Essig (Chief Engineer)
E-Mail: wolfgang.essig@ikt.uni-stuttgart.de
Telephone Number: +49 711 685 62880

Project Description

Research on non-destructive testing (NDT) of pressure vessels used for future mobility like fuel-cell vehicles.

Direct implementation of the monitoring process into the structural development.

→ Data continuity throughout the entire life-cycle, enabling industry 4.0 production and monitoring

Project Objectives

- Guideline for NDT 4.0 application into development processes
- Use case study incl. manufacturing of prototypes
- Strengthen the acceptance of high pressure vessels for consumer products regarding technical safety

Project idea: Future non-destructive Testing Processes

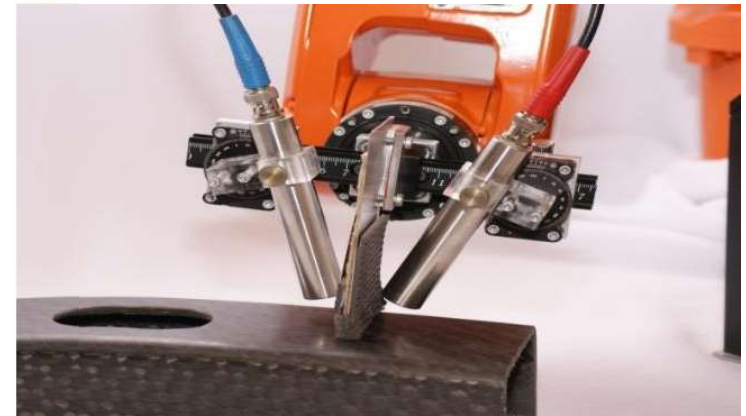
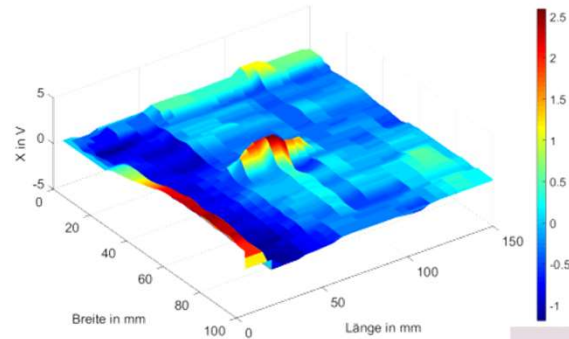
Call area 9: Strengthening our knowledge in support of the European Green Deal

Our know-how...

- Leading institute for plastics technology, material science, processing and design with a.o. focus on bioplastics, circular economy and fiber reinforced plastics
- Renowned workgroup for non-destructive testing of composites and plastic materials
- Application of all relevant NDT technologies (a.o. μ CT-X-ray, Phased-array and air-coupled ultrasonic testing, eddy-current testing, thermography, shearography and local defect resonance), manual and automated inspection

We are looking for...

- Partners with experience in manufacturing and application of lightweight pressure vessels
- Partners with knowledge of data management and analysis
- Provider of fuel-cell applications
- Maintenance, repair and overhaul companies



Thank you for your attention and we are looking forward to hearing from you!