

Title:

NIP II - FuE - Verbund: Continuous and economical monitoring of hydrogen pressure vessels using integrated sensors; Sub-project: Production of hydrogen pressure vessels and sensor integration

Brief description:

The main objective of the HZwo:SafeTank research project is the development and integration of a continuously operating monitoring system with various sensors and corresponding evaluation methods. Such a monitoring system can drastically reduce the safety factor in dimensioning. This results in both material and CO₂ savings. Increased (perceived) safety also strengthens customer acceptance and trust.

Motivation:

- Increasing safety of hydrogen storages
- CO₂-reduction (decarbonization)

Objectives:

- Integration/application of sensor technology in the production cycle
- Monitoring of the CF-reinforced structure

Duration:

January 01, 2024 to June 30, 2026

Funding and project sponsor:

ptj; BMDV

Partners:

FAE Elektrotechnik GmbH & Co. KG, Heidenau

ETO SENSORIC GmbH, Nürnberg

CONTAG AG, Berlin

Brandenburg University of Technology Cottbus-Senftenberg, Cottbus

diondo GmbH, Hattingen

Chemnitz University of Technology, Chemnitz

Contact person:

Norbert Schramm, norbert.schramm@lse-chemnitz.de