

Test Centre for Hydrogen Technology in collaboration with FORCE Technology

Test Centre for Hydrogen Technology offers tests and analyses in the field of hydrogen production, infrastructure and use. The aim is to help the energy sector with the demanding transition to hydrogen and Power-to-X.

The Centre is situated at both Danish Gas Technology Centre's facilities in Hoersholm, north of Copenhagen, and in FORCE Technology's facilities in Broendby, west of Copenhagen. Mobile test facilities are also available and can be located where needed.

The Test Centre offers tests and analysis within production, transportation and use of hydrogen and is able to service all kinds of hydrogen technologies from boilers, fuel cells and sector coupling plants in sizes from KW to GW.

Portfolio of services provided by Test Centre for Hydrogen Technology

- Material and component testing
 - Hydrogen compatibility and sensitivity testing
 - Hydrogen permeation testing
 - Fracture mechanical testing
 - Large-scale component testing
- Measurement of emissions from consuming equipment and exhaust gases from energy consuming and chemical processes
- Efficiency and safety of energy systems
- Metrological services
 - Certification and calibration of hydrogen flow meters
 - Certification of hydrogen filling stations
- On-site inspection services onshore and offshore
- Modeling and calculation
 - Flow simulations of hydrogen
 - Strength and fracture mechanical modeling in a hydrogen atmosphere
 - Digital Twins
 - Gas diffusion through polymers and steel

Test Centre for Hydrogen Technology is a collaboration between Danish Gas Technology Centre and FORCE Technology, supported by the Green Labs DK programme.





