

*safety in test > safety in flight*

**TESTFUCHS**

# HYDROGEN UNDER CONTROL

Reliable hydrogen technology down to -253°C

[WWW.TEST-FUCHS.COM](http://WWW.TEST-FUCHS.COM)

## OUR MISSION AT TEST-FUCHS

TEST-FUCHS contribution to speed up the transformation towards sustainability in the aviation sector. We use technology to build a solid base to understand the complexity of the upcoming change for the whole industry. Our talents develop based on our experience and your expertise solution to move the transition forward.

### OUR EXPERIENCE OVER DECADES HELPS TO SOLVE YOUR CHALLENGES FAST AND RISK REDUCED

#### TEST-FUCHS BACKGROUND & KNOW-HOW



Systems and Components



Cryogen



GSE



Testing



Data Solutions (IoT)

#### TEST-FUCHS HYDROGEN DEMONSTRATOR

LH2 System and Valves - Testing - Digital Twin



- Hydrogen Applications
- Reliability
- Market price
- Lightweight design
- Condition monitoring
- Connectivity
- Low power consumption

### WE SERVE THE FOLLOWING SECTORS WITH OUR HYDROGEN SOLUTIONS

LH2 Systems & Valves



#### ON - AIR

LH2 Storage and LH2 management (System, Valves, Control, Cryogen, Connectivity, Predictive Maintenance)



#### AIRCRAFT GSE

Integration of Fuel Cell & Electrical power trains applications in Aircraft GSE for civil and military applications



#### IN - MOTION

LH2 Storage and LH2 management (System, Valves, Control, Cryogen, Connectivity, Predictive Maintenance)

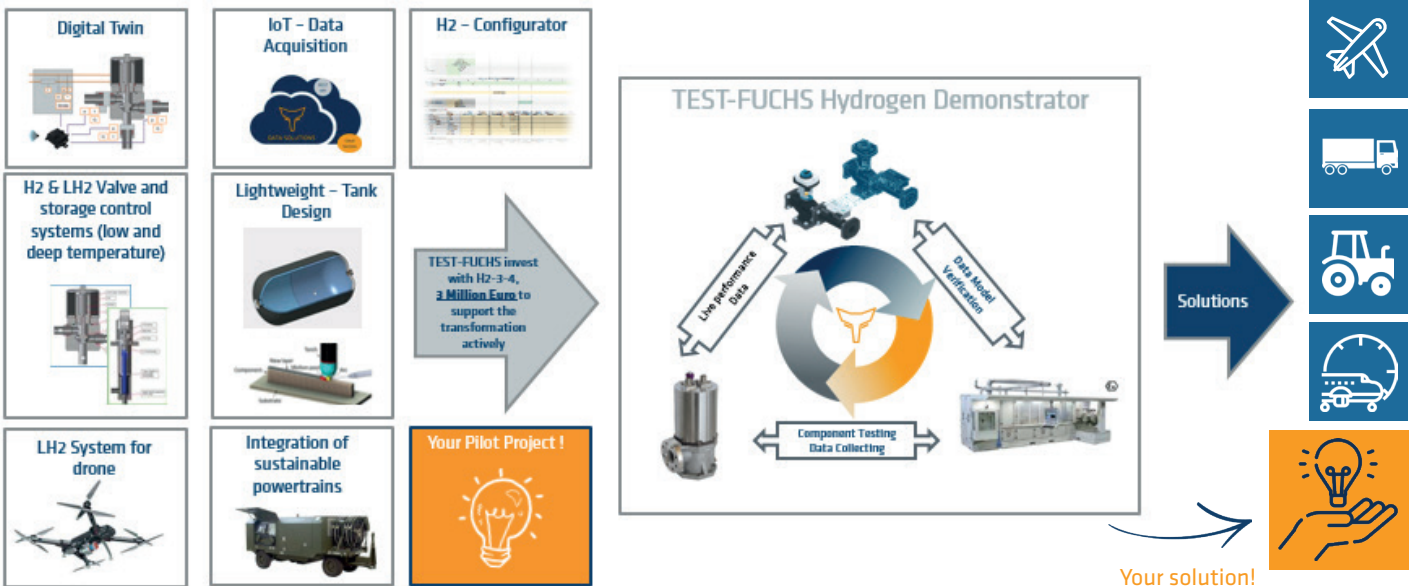


#### AIRPORT GSE FLEET

Live Power Monitoring - Data Lake - green substitution solutions - optimisation - retrofit

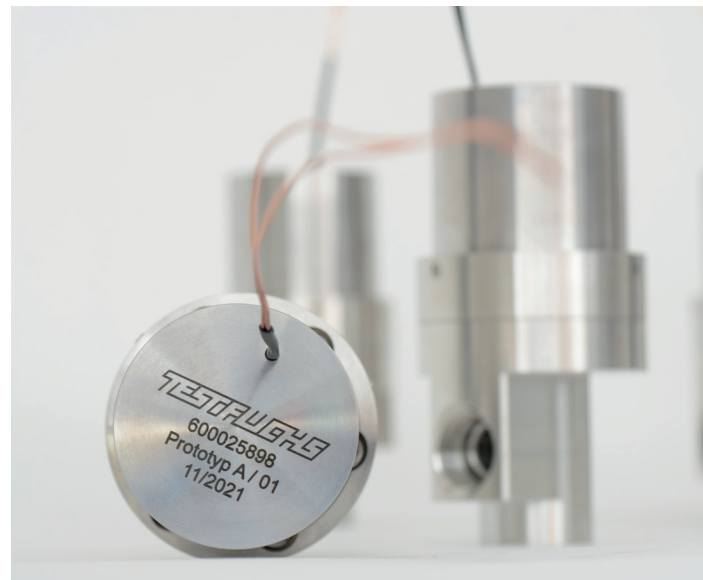
Green Power Solutions

## OUR APPROACH AT TEST-FUCHS



## H2-EXPERIENCE (GAS & LIQUID)

- Shut-Off Valves
- Check Valves
- Flow Control Valves
- Pressure Relief Valves
- Safety Valves
- Couplings



## 3-2 FCV DIGITAL TWIN

### INNOVATION PROJECT: 20000021

#### Objective

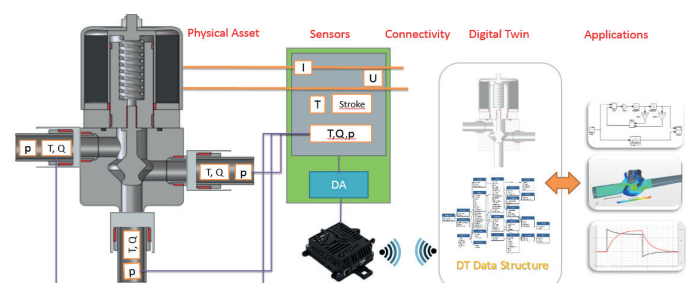
- Development of an applicable Digital Twin
- Development of a SMART LH2 Component
- In-situ applicable
- Analysis, Condition Monitoring, Forecast

#### Status

- Project started
- Valve available
- Cooperation with Fraunhofer

#### Delivery

- End of project March 2022



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