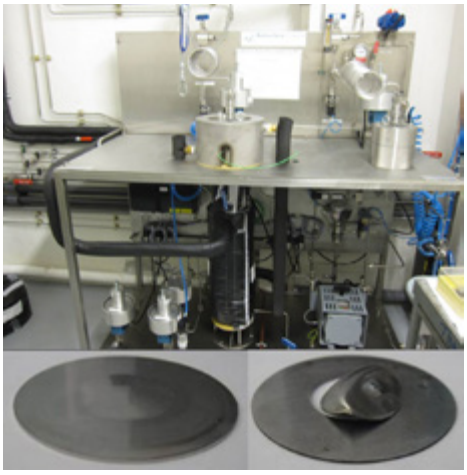
Are your Materials Hydrogen-Compatible?

Liten has developed new insights into the effects of hydrogen on the integrity of metal alloys and polymers with the goal of understanding how materials behave in presence of hydrogen in different use cases. Liten has resources specifically dedicated to this research:



BURST DISC AND TUB TEST EQUIPMENT

- P < 1000 bar
- Pure H2 and mixtures
- Wet atmosphere
- According to ISO 11114-4 method A

MECHANICAL TESTING

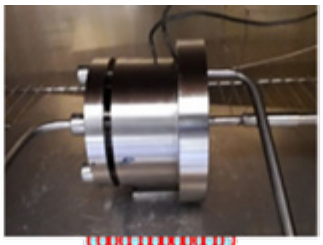
- P < 400 bar
- T < 250°C
- Pure H2 and mixtures

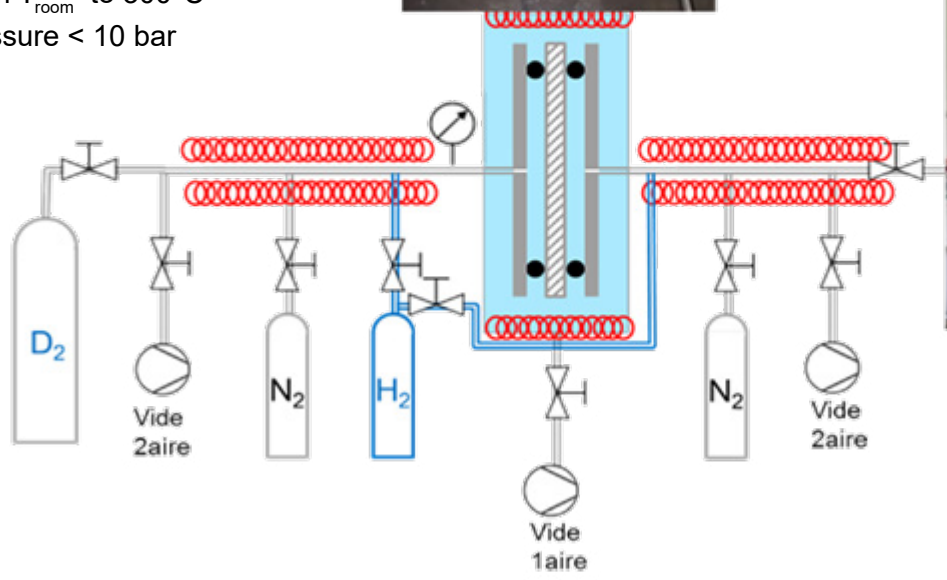
LEAKAGE APARATUS

- Seals
- H2 and NG/H2
- Methodology
- Pressure : 1,03 to 1,1 bar

GASEOUS PERMEATION

- Pure H2 /D2 and mixtures
- Numerous cell designs
- Various types of materials (polymers, metals…)
- From T_{room} to 300°C
- Pressure < 10 bar



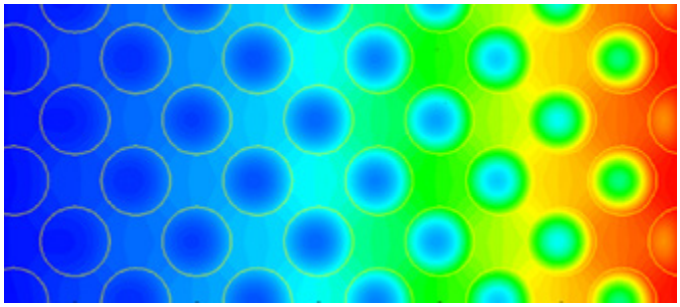


HYDROGEN PERMEATION UNDER TENSILE LOADING

- Up to 10 bar; T_{room}

HYDROGEN PRESSURE VESSELS

- Up to 100 bar; T_{room}



MODELLING AND SIMULATING

- H diffusion
- Damage
- CEA owned software

OUR PARTNER'S BUSINESS FIELDS

Gas networks, hydrogen suppliers, designers of devices exposed to hydrogen, steel manufacturers, hydrogen end-users...

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INTERESTED?

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