

## Hydrogen Workshop

### Beschreibung

**During the workshop, participants design and size a complete hydrogen supply system, including nitrogen purging**

The following questions will be addressed during our workshop:

- Where should a check or safety valve be placed?**
- Why should we use double-block-and-bleed configurations?**
- Where should O<sub>2</sub> and H<sub>2</sub> sensors be installed?**
- How to integrate a purging system?**

#### **Participants work in groups of up to 4 people**

Group work is encouraged during the workshop, fostering collaboration, idea exchange and shared problem-solving among participants.

#### **Workshop Activity**

Design and sizing of a complete hydrogen supply system including nitrogen purging. During the workshop, participants engage in designing and sizing a comprehensive hydrogen supply system, incorporating nitrogen purging

#### **Requirements**

Participants are required to bring a calculator/cell phone and a laptop/tablet

#### **Level 1:**

Design and sizing of a hydrogen system from H<sub>2</sub> production to gas treatment and storage in a low-pressure tank.

#### **Level 2:**

Design and sizing of a high-pressure system from compression and gas distribution to high-pressure storage at 450 bar.

#### **Level 3:**

Design and sizing of a pressure panel. Pressure reduction from 450 to 25 bar.

#### **Level 4:**

Design and sizing of a nitrogen purging system.

#### **Level 5:**

Operation and safety.

#### **Level 6:**

Technically permanent leak tightness regarding operation and maintenance.