### Conversion of a standard conventionnal test bed to a H2 test bench



THERE ARE MAINLY TWO PARTS THAT NEED TO BE CONSIDERED DURING THE RETROFIT OF AN ENGINE TEST BENCH

## RETROFIT MEASURES FOR THE SAFETY SYSTEM

- Definition of the necessary ex-protective measures
  - Gas sensors
  - Air exchange rate
  - Additional ATEX ventilation
  - ...
- Description of the adaption of the safety system



## HYDROGEN SUPPLY INFRASTRUCTURE

- Hydrogen specification for engine test benches
  - Volume flow
  - Pressure
  - Quality
  - Use cases
  - Engine power range

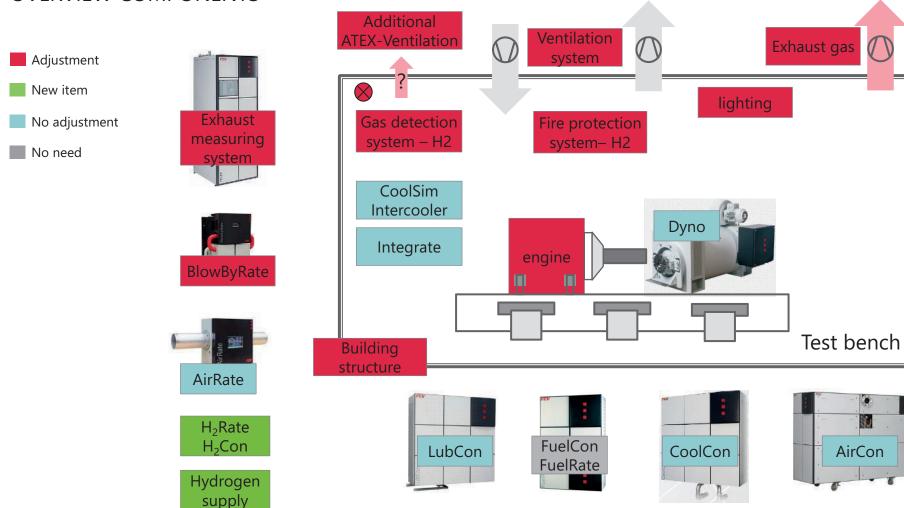


**Important:** We can offer planning & consulting services in advance to support our customer in finding best concept

# Retrofitting of an Engine Test Bench for Hydrogen Operation **Necessary Adjustments and Items**



#### **OVERVIEW COMPONENTS**



Frequency converter

**Automation** System

Subdistribution unit

Safety system

**ATEX** regulations

Fire protection

Official permits