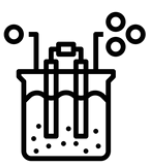


Photo: TNO

SINGLE- AND MULTI-CELL ELECTROLYSER TEST UNITS



Electrolyser Test Systems

Easy to use, robust and reliable test systems

Parallel configuration: Test multiple cells at the same time and benefit from the high data quality due to the uniform test conditions

Various options for product analysis

Software Integration/Process Control

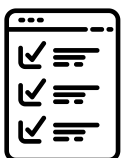


Technologies

Water electrolysis like PEM, AEL and AEM

CO₂ electrolysis

Solid oxide electrolyser



Features

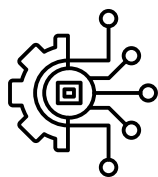
Flexibility to acid/base technology

Pumps for high-pressure liquid feed

Temperature control/Pressure control

Liquid composition control

Liquid sampling



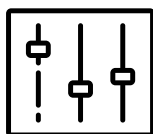
Automation

Fully automated by PLC and control PC
Recipe editor for automated test procedures
Trending visualization
GC software fully integrated into database
Data export to excel and external databases



Safety

Design according international safety standards and CE
Interlock doors
Ventilation failure detection, gas detection LEL
Temperature alarms
Liquid level probe and clogging protection
Pressure relief valves and differential pressure transmitter



Options

Solid oxide electrolyzer configuration with pre heated steam feed
Gas feed control (e.g. CO₂)
Optional pH control, Potentiostat
Multiple cells
Automated liquid sample robot, Gas analysis by GC or Sensors

Avantium R&D Solutions offers innovative and tailored R&D products and contract R&D. TNO is a globally recognized leader in research and innovation. TNO and Avantium partner to further develop and improve electrolyser test stations.

Avantium will bring in its uniquely innovative expertise in accelerating R&D, manufacturing and commercial skills, while using the know-how of TNO on electrolysis test units, their long-term experience operating the TNO Faraday lab and insight in the user requirements of the electrolysis in the different applications.

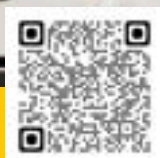


Photo: TNO