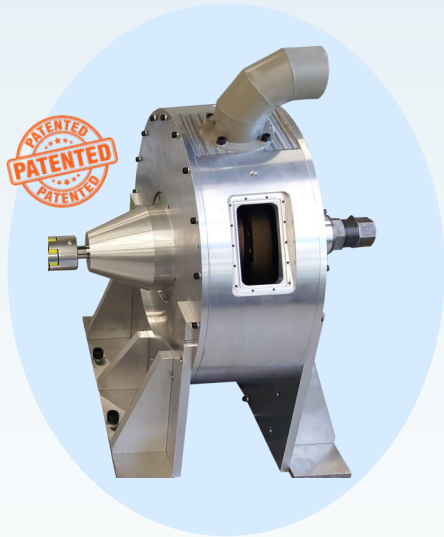


Our innovations support your training and research in the laboratory

The magic behind:



Innovative Co-rotating Scroll Motor / Compressor with water injection

- ◆ ***Oil-free***
- ◆ ***Efficient***
- ◆ ***Reversible***
- ◆ ***Powerful***



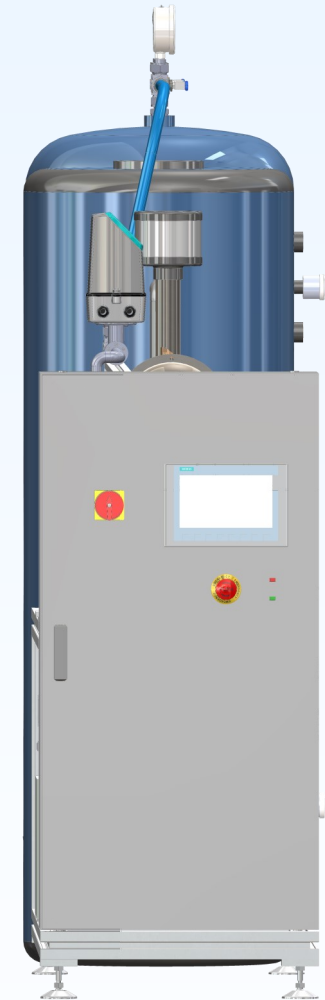
The clean power of Compressed Air

Enairys Powertech Ltd

EPFL Innovation Park D
CH-1015 Lausanne
Switzerland

+41 21 550 5347
info@enairys.com
www.enairys.com

Versatile Didactic and Experimental CAES* Test Setup



The clean power of Compressed Air

CAES: Compressed Air Energy Storage

Enabling Distributed CAES technologies in engineering education and applied research

Enairys Powertech Ltd in a Cleantech company based at the Innovation Park of the Swiss Federal Institute of Technology Lausanne (EPFL).

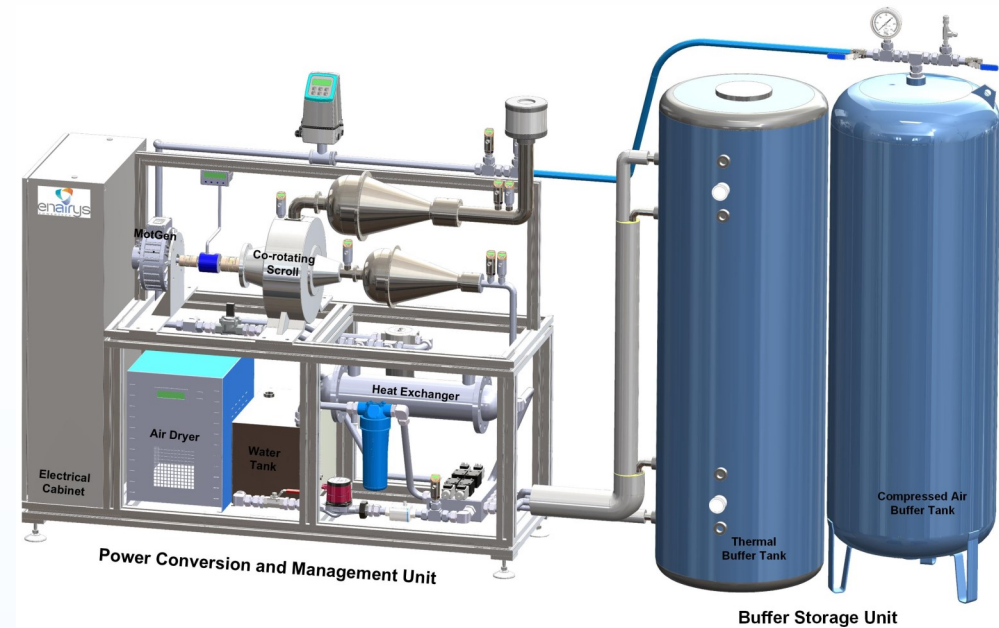
The company Develops clean, smart and cost-effective energy storage and management systems, as well as inland shipping solutions all based on compressed air; thanks to its innovative and patented air compression and expansion technologies.

Enairys has a strong academic foothold allowing a good understanding of the constraints and needs of engineering education and applied research, that underly the development of this innovative tool.

Main Benefits

- ◆ Versatile test setup suitable for teaching and research purposes.
- ◆ Multiple areas of experimentation: Mechatronics, Heat Transfer, Industrial automation and Energy Engineering,.
- ◆ Effective learning through emulation of real renewable applications' conditions.
- ◆ Innovative environmentally friendly energy storage & management technologies.
- ◆ Easy to use, flexible and evolutive didactive and experimental equipment
- ◆ Cost competitive solution.

Versatile Didactic & Experimental Test Setup for Renewable Energies Storage & Management... based on Compressed Air



Main technical specifications

- Electrical Source / Load: 3-phase 3x400V, 16A max
- Photovoltaic source (or SAS): 200V DC max, 4kWp
- Super Capacitors auxiliary storage: 200V DC max, 4kW max

- Compressed air buffer tank: ~250 litres, 10bar max
- Thermal buffer tank: ~300litres, 80°C max
- 25+ Sensors & transducers

Engineering Training Experiments

- ◆ Volumetric Fluid Machinery : Air Compressor / Air Motor
- ◆ Convective Heat Transfer : Tubular Heat Exchanger
- ◆ Mechatronics: 4-Quadrant Electrical Drive
- ◆ Industrial Automation: PLC Programming

Applied Research Experiments

- ◆ Hydro-Pneumatic Energy Storage (HyPES)
- ◆ Super Capacitors (or Batteries) Auxiliary Storage
- ◆ Intermittent Renewable Energy (Photovoltaic) Storage and Management