SUCCESS STORY
Industrial Cooling

SECTOR
Station H2

CONTEXT

Customer : McPhy

Sector of activity :
Hydrogen Station

Location : San Miniato (Italie)
Year : 2024

Installed equipment :
EKO.E IP/ST/SP/EC/II 0051SE

Description of the equipment :
R290 Propane refrigeration unit
* Air cooling
* VFD on the compressor
* Hydraulic skid
*Drycooler 430kw

Total capacity :
12KW | 0°C/5°C @+35°C

THE CUSTOMER

McPhy Italia, a subsidiary of the French group McPhy, is strengthening its electrolyzer testing capabilities at its San Miniato site (Italy) with test benches ranging from 50 kW to 1 MW for alkaline stacks, while preparing for the introduction of AEM (Anion Exchange Membrane) technologies aimed at hydrogen production.
These facilities replicate real industrial operating conditions to ensure the performance, reliability, and durability of electrolyzers, while also collecting essential data for process optimization.
Within this context, CTA is providing a cooling solution using the natural refrigerant R290, specifically designed to meet the critical thermal requirements of the test benches. To ensure stable and efficient cooling, a 430 kW dry cooler has been integrated, complete with a full hydraulic skid and automated control system, enabling precise and continuous temperature regulation.
Thanks to this solution, CTA enables McPhy Italia to carry out reliable, safe, and high-performance testing, while complying with the most demanding environmental and industrial standards. This collaboration highlights CTA's expertise and its key role in the success of electrolysis projects and the energy transition.