**DESCRIPTION**

Water electrolysis is considered the most suitable technology for long-term hydrogen production at industrial scale. Specifically, the alkaline electrolysis is the world leader among the different types of electrolyser technologies, mainly due to its lower cost and higher production capacity.

In this way, FHA operates an alkaline electrolysis pilot plant under the development agreement with the Swiss technology leading company **Industrie Haute Technology** (IHT). The following research lines are being taken: new membrane testing, balance of plant optimization or mechanic redesign of cells and critical components of the electrolyzer. All of this focuses on both **cost reduction and sustainability improvement** of the process.

The hydrogen produced during the electrolysis tests, is used for both **stationary** (fuel cell cogeneration, uninterruptible power supply fuel cell, etc.) and **mobile hydrogen applications** (hydrogen urban two-seater vehicle, hydrogen forklift, etc.) at FHA facilities.

**FEATURES**

- Nominal power: 200 kW
- H₂ production capacity: 30 Nm³/h
- O₂:production capacity: 15 Nm³/h
- Operating pressure: 33 barg
- Operating temperature: 85 °C
- H₂ purity: 99,6 %
- O₂ purity: 99,2 %