Garlock

GYLON® 3510

Case Study: Green Hydrogen Production & Distribution Equipment



Industry

Green Hydrogen Production & Distribution Equipment

Customer

As a leading industrial player in hydrogen production and distribution equipment, our customer contributes to the global development of low-carbon hydrogen as a solution for the energy transition. By its nature, its business model is based on supporting national and European customers active in industry, mobility, and energy, in their efforts to decarbonize their activities.

The customer is a genuine "European native" with centers of excellence in France, Germany, and Italy since the company was established. Its industrial and commercial base is strongly European.

Background

Hydrogen is an energy carrier that complements the renewable energy transition. As an energy carrier with multiple applications, hydrogen plays a key role in the world energy transition. It can be turned into clean fuel to charge hydrogen vehicles, injected into gas networks, used as a raw material for industry, or as an energy storage solution to give the flexibility needed for smart grid monitoring.

Challenges faced

Our customer wanted to ensure that the seals used were suitable for their hydrogen applications. They had to be media-resistant and ensure a long service life. In intensive discussions, they wanted to be informed about tests and results on the subject of hydrogen applications.

Operating Conditions

1. Media: Oxygen, Hydrogen, KOH (28%) (Potassium Hydroxide)

- 2. Temperature: 75°C
- 3. Pressure: 30 bar (g)

Solution and Benefits

Our customer specified GYLON® 3510 for the pipelines in a green electrolyzer 16MW plant. With the characteristic properties of GYLON®, and after successful tests, the customer was convinced to implement GYLON® 3510. Media resistance, service life and the typical character properties of GYLON® 3510 (white) have surpassed all competitor materials many times by far.

For more information, please visit: **www.garlockeurope.com**

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