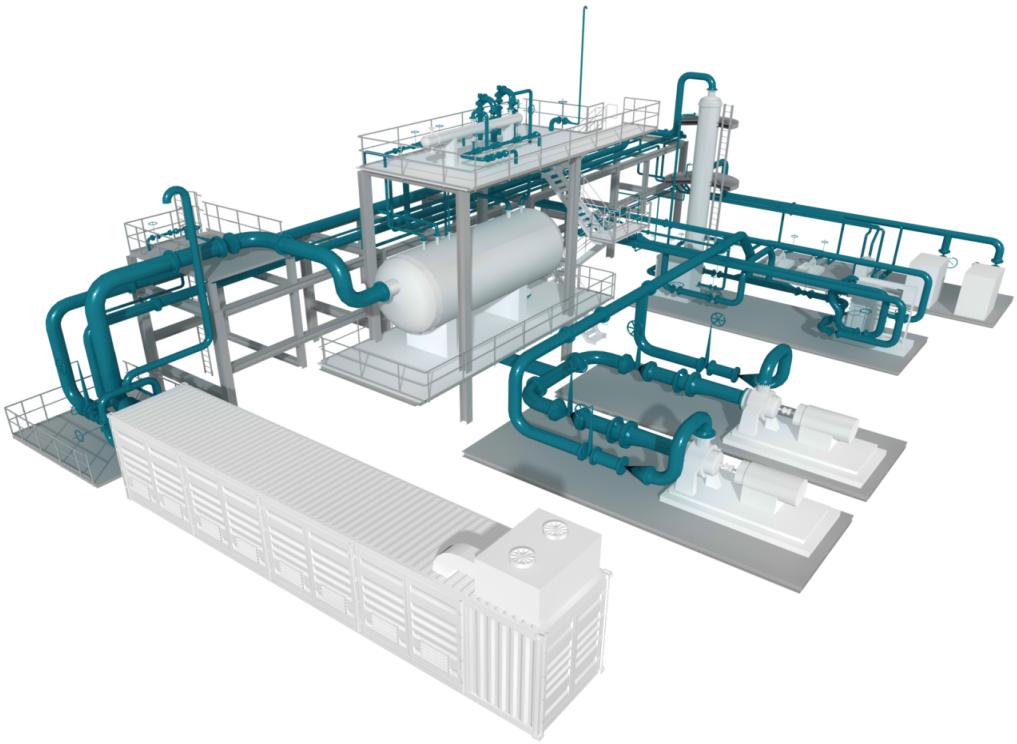
hystar

Orion

20 MW CLUSTER FOR LARGE-SCALE PLANTS



- World’s most efficient electrolyser across the full operating range
- Reliable and inherently safe design - the world’s safest H_2-O_2 gas management
- Scalable solution that fits a vast range of project sizes

Get in touch:

Orion

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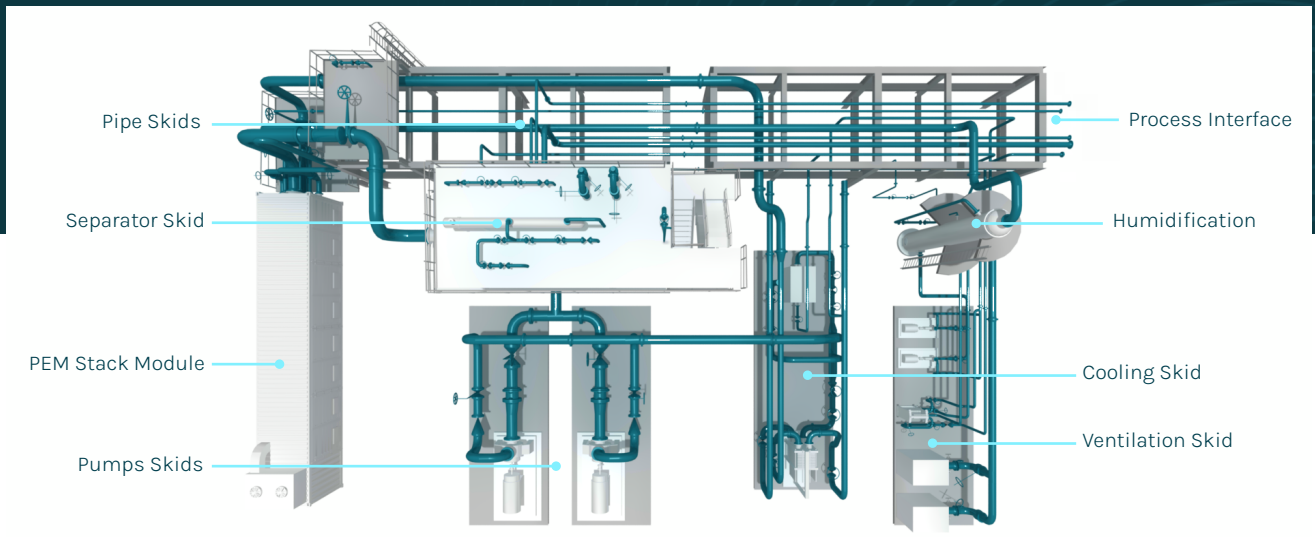

Technical Specifications for one Orion Cluster

Cluster Efficiency[1,2]	48.2	kWh/kg
H_2 Output[1,2]	368	kg/h
H_2 Outlet Pressure	4	bar(g)
H_2 Outlet Temperature	60	°C
H_2 Purity[2]	99.97	%
Operating range	0-100	%
Dimensions	35 x 22	m

[1]At rated (100%) production capacity at the Beginning of Life (BOL) and standard ISO conditions (15 °C, 101.325 kPa).
[2]Dry gas basis (gas is provided fully saturated).

The standardised Orion cluster is a scalable solution engineered for seamless integration into large-scale electrolyser projects. Developed in collaboration with leading EPC partners, it delivers the critical core of a high-performance electrolyser plant.

Designed to maximise efficiency, reliability, and operational simplicity, each cluster functions independently, enhancing turn-down capability and overall system flexibility. Its skid-based architecture enables efficient transport and rapid integration, while a robust redundancy strategy and a design for service ensures exceptional availability and uptime.

Plant concept developed in collaboration with McDermott