

Think Green. Drive Green.



WELCOME TO THE INNER CIRCLE OF POWER.

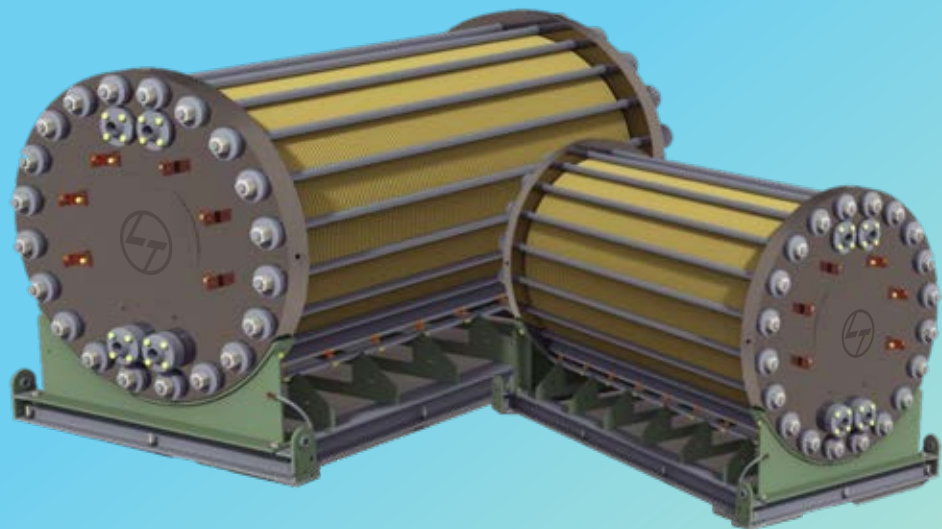
Electrolysers by L&T



About L&T

Larsen & Toubro, India's leading technology-led engineering solutions and services company, has played a vital role in the country's national movements for over 80 years, including its green energy goals. Through ventures across core industries, L&T meets critical economic requirements while enhancing quality of life and creating long-term stakeholder value.

As builders to the nation, L&T stands alongside its clients, driving progress and laying foundations for a happier, brighter tomorrow.



About L&T Electrolysers

L&T Electrolysers Ltd pioneers innovative, sustainable solutions to meet future energy needs and create a greener world. The company is committed to Green Hydrogen, a promising alternative fuel that reduces greenhouse gas emissions and enhances energy security.

The state-of-the-art Electrolyser Manufacturing Facility in Hazira, Gujarat, manufactures pressurized Alkaline electrolyzers based on a license from McPhy Energy, a leading electrolyser technology company.

This makes L&T Electrolysers Ltd the first Indian manufacturer with pressurized Alkaline technology that is capable of meeting the demands of the domestic as well as international markets for Green Hydrogen generation.

L&T's Electrolyser

The Product is a cutting-edge, European-technology-based pressurized Alkaline electrolyser manufactured by L&T. It is engineered for efficiency and flexibility and designed to meet the growing demand for green hydrogen. With advanced features and robust performance, the Product ensures optimised hydrogen production, making it the ideal choice for Green Hydrogen production solutions.

Product Excellence



Next-Gen Efficiency

Best-in-class performance for cost-effective and sustainable green hydrogen production.



Advanced Stack Technology

Leverages next-gen materials and a high-performance membrane for optimal efficiency and durability.



Rapid Response

Hot standby for extended durations; reaches full load in <30 sec, perfect for variable RE power.



Hydrogen Quality

99.999% purity
with high-pressure H₂ & O₂ discharge.



High Flexibility

Turndown up to 40% for seamless adaptation to demand fluctuations and RE variability



Design & Safety

Compliance to International Codes and Standards for
ISO/IEC/NFPA/ASME/PED

Technical Specifications

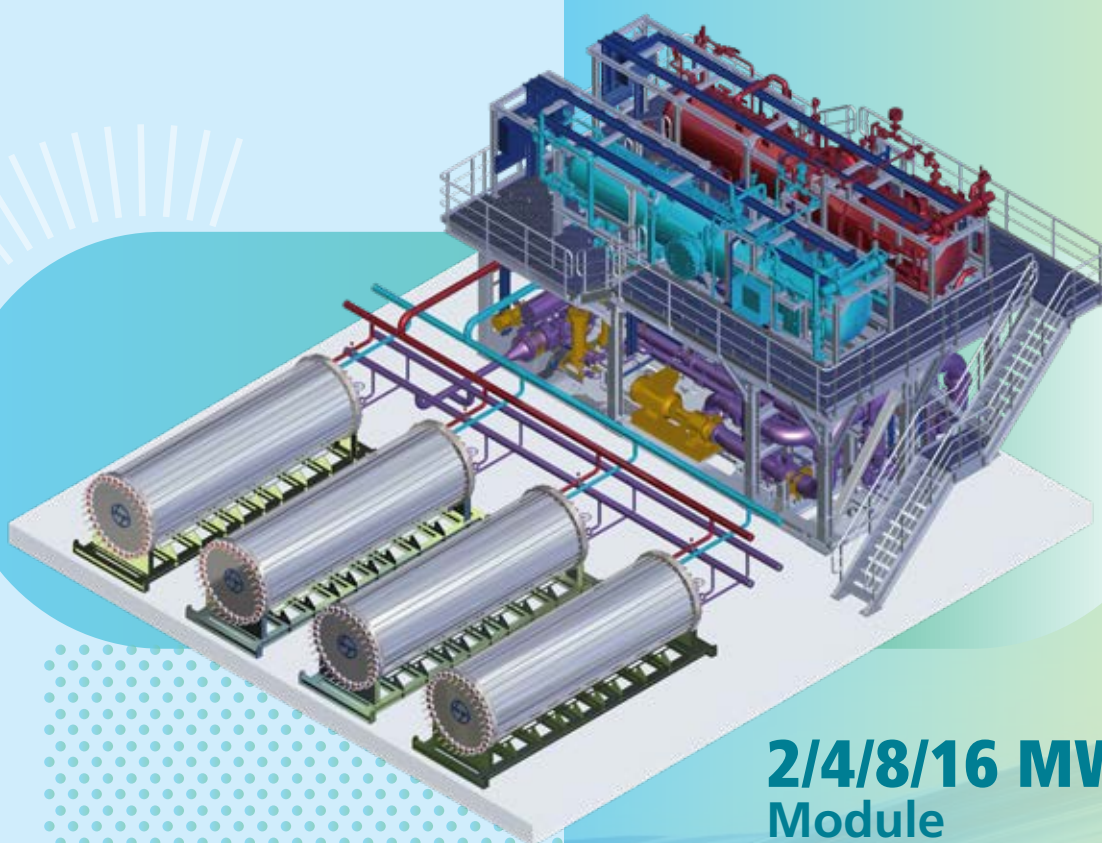
Product Fact Sheet

Power Class	1 MW	2 MW	4 MW	8 MW	16 MW
System Design Life (Mechanical)	+ 20 Years				
H ₂ Flow Rate	200 Nm ³ / hr	400 Nm ³ / hr	800 Nm ³ / hr	1600 Nm ³ / hr	3200 Nm ³ / hr
H ₂ Purity	> 99.9999% after HPS				
O ₂ Purity	99% at Electrolyser Outlet				
H ₂ Delivery Pressure	~ 26 - 28 bar (g)				
O ₂ Delivery Pressure	~ 28 bar (g)				
Stack DC Consumption	4.2 - 4.5 kWh/Nm ³				
Operation Range	20 – 100%				
Reaction Time	< 30/60s from hot stand-by to 100 %				
Ramp-Up / Down	>5%/s 20 %/s				

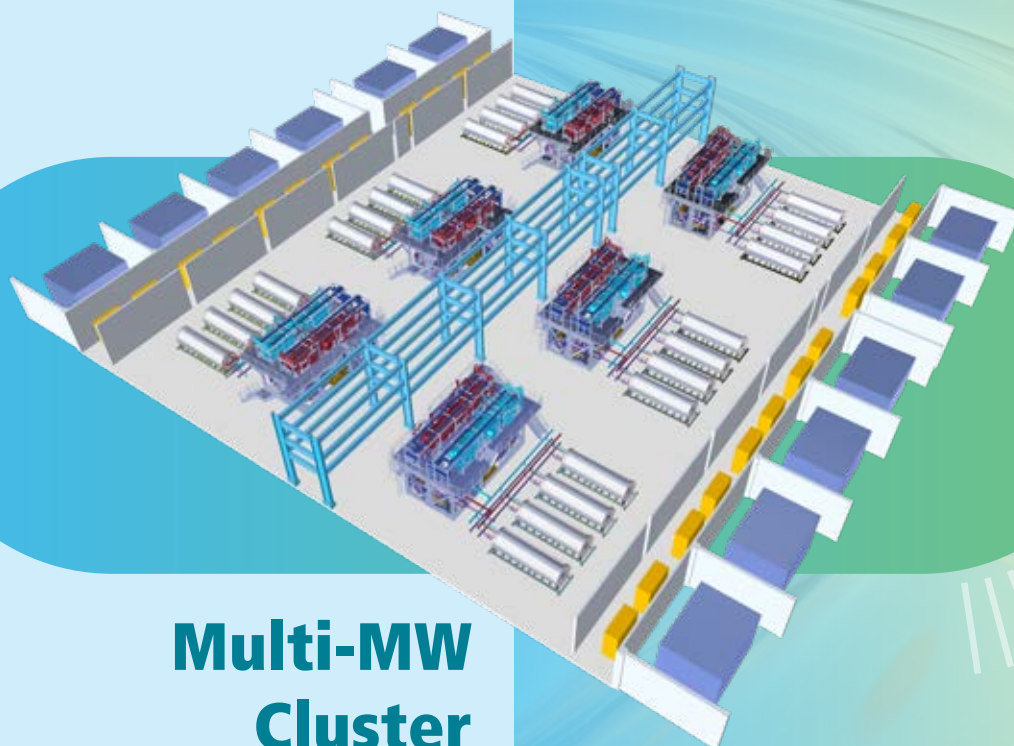
Modular Solution



0.5/1/4 MW
Stacks



**2/4/8/16 MW
Module**



**Multi-MW
Cluster**

Proven Technology

McPhy has a strong track record as an electrolyser supplier, consistently delivering significant MW scale Electrolysers. Many of these units are currently in different stages of operation and commissioning, with notable installations. Since 2013, McPhy is supplying MW scale Electrolysers. These electrolysers are employed across various applications in different industries, primarily for on-site, on-demand industrial hydrogen production to meet customer needs encompassing Steel, mobility, power generation, P-to-X, ammonia, methanol, etc.

L&T, a prominent technology-driven engineering and construction company in India, is deeply committed to sustainability. In alignment with India's "Make in India" to "Made in India" initiative, we are actively involved in co-creating a value chain in Green Hydrogen. Our primary focus lies in manufacturing advanced Pressurized Alkaline technology-based Electrolysers, drawing inspiration from McPhy's well-established success in mature global markets. The Made in India Electrolyser we offer is renowned for its high reliability and efficiency in green hydrogen production, making it an ideal choice for a wide range of industries and a promising investment opportunity for businesses of all sizes.



L&T Electrolyser Manufacturing

■ Facility - Key Highlights ■



Manufacturing Location

Hazira, Gujarat



Product Line

Stack & Process Unit



Technology

Pressurized Alkaline Electrolysis

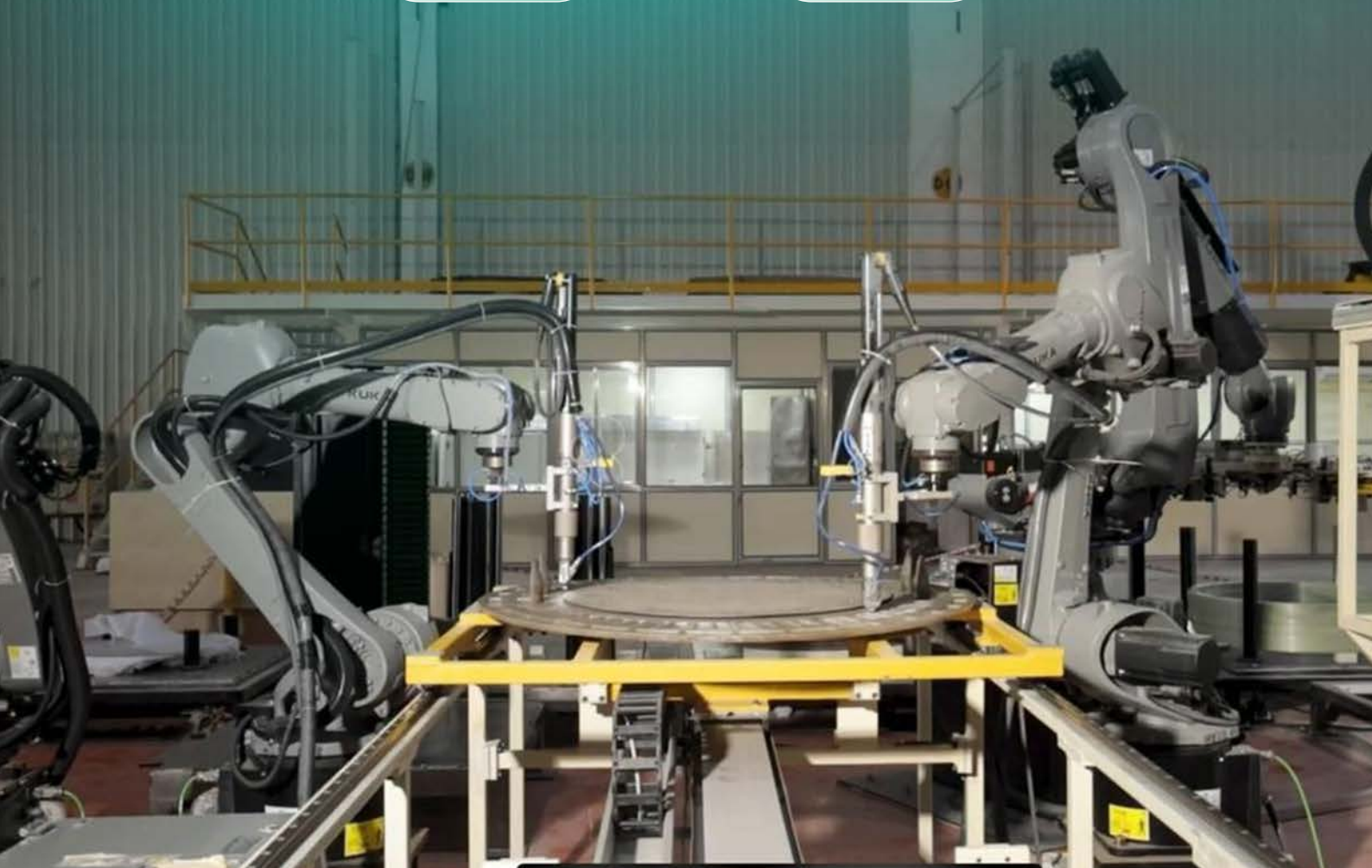


Capacity GW Scale



Proximal Advantage

Connected to Industrial Corridor and port



INDIA'S FIRST FULLY INTEGRATED GH2 Plant

Demonstrating L&T's Indigenous Manufactured Electrolysers



200 Nm³ / hr (~1 MW)

Fast Ramp – Up / Down

Industrial usage for Oxygen

Hotstand by-24 hrs
(Daily Start / Stop)

Cofiring H₂ and
NG in Furnace

Pressurized H₂ and
O₂ delivery

Expertise Advantage

L&T's profound commitment to sustainability and reliability shines through this product - a testament to their expertise. L&T offers an extensive supply chain support, high precision craftsmanship, and engineering excellence, all encapsulated in the product. The company goes the extra mile by providing Indigenous service solutions, ensuring long service life for these electrolysers. This unwavering long-term service commitment makes L&T an invaluable and dependable partner for Green Hydrogen Production, contributing to the growth of a greener economy.

L&T Electrolysers Limited

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