



Green Hydrogen at Work™

The Plug LX-15T and LX-30T

Available at capacities of 15 or 30 metric tons per day, Plug Liquefaction systems are the product of extensive continuous improvement, engineering refinement, and operational feedback cycles from the field.



Ultra-Efficient Hydrogen Liquefiers for a Global Economy

Plug is focused on innovation and efficiency gains at every stage of the hydrogen value chain, pushing for generational improvements that enable the lowest cost per molecule. This drive to optimize both capital and operational efficiency means not just bigger returns from your project, but also greater growth for the hydrogen market overall.

Our hydrogen liquefiers are the perfect example of value-added innovation in the field of applied hydrogen technology. Engineered for strong field and financial performance, as well as superior energy and minimal hardware, these streamlined systems are positioned to help operators worldwide put green hydrogen to work.

The Plug LX-15T and LX-30T System Specifications

Superior Energy Efficiency

Using gaseous instead of liquid N₂ as a refrigerant during the pre-cooling cycle, increases controllability while reducing equipment and energy consumption.

Strategic Engineering Alliances

Strategic alliances with world-class suppliers for turboexpanders and brazed aluminum heat exchangers results in best-in-class performance and cost.

Strong Project Execution

Plug's team delivers comprehensive project support from concept to commissioning with proven agility, and the ability to consistently deliver projects on time and within budget.

System Specifications	LX-15T	LX-30T
Performance		
Liquefaction Capacity	15,000 kg/day	30,000 kg/day
Specific Energy Consumption	< 11.0 kWh/kg*	
Turndown	Up to 50%	
Liquefaction Cycle	Pre-Cooling: Gaseous Nitrogen Brayton Liquefaction: Gaseous Hydrogen	
LH2 Product		
Purity	> 99.999%	
Pressure	10 to 30 psig	
Temperature	Saturation (-420 °F to -415 °F)	
Parahydrogen Composition	≥ 95%	
Utilities		
Electric Power Supply	6,900 Volt / 3 Phase / 60 Hertz 480 Volt / 3 Phase / 60 Hertz 120 Volt / 1 Phase / 60 Hertz	
Cooling Water (Pre-treated)		
Nitrogen	up to 500 SCFM @ 150 psig (includes makeup N ₂)	up to 600 SCFM @ 150 psig (includes makeup N ₂)
Instrument Air	up to 450 SCFM @ 125 psig	up to 500 SCFM @ 125 psig
Environment		
Ambient Temperature	10°F to 100°F (wider temperature range optimal)	
Dry Cooling Option	YES	
Other		
Control System	Fully integrated control systems	
Codes/Standards	ASME, NFPA 2, API, ALPEMA	