Asia-Pacific Cryogenic Pump - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 110 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00
- Team License (1-7 Users) $5250.00
- Site License $6500.00
- Corporate License $8750.00

Report description:

The Asia-Pacific Cryogenic Pump Market is expected to register a CAGR of greater than 5.01% during the forecast period.

The market was negatively impacted by COVID-19 in 2020. It has now reached pre-pandemic levels.

Key Highlights
- Over the long term, the major driving factors of the market are expected to be the increase in gas-based power generation, increasing investments in the energy and power sector, and rising demand for LNG fuel in domestic applications.
- On the flip side, cost constraints and a lack of expertise in handling these devices across major countries are anticipated to restrain the growth of the market.
- Growing focus on solar power generation and the development of solar PV manufacturing infrastructure can create immense opportunities over the coming years because cryogenic pumps are majorly used in the manufacturing of solar panels.
- India is likely to witness significant growth in the Asia-Pacific cryogenic pump market during the forecast period.

APAC Cryogenic Pump Market Trends

Positive Displacement Pump Type to Witness Significant Growth

- Positive displacement pumps (PDP) or reciprocating cryogenic pumps are designed to convert mechanical motor energy into pumped fluid mechanical energy. The basic operation of this pump consists of restoring and displacing a fixed liquid volume

cylindrically. Typically, a positive displacement cryogenic pump consists of a power pump and a direct-acting pump. For instance, a power pump utilizes a crankshaft with a motor or engine, while a direct-acting pump uses a drive fluid like gas or liquid.
- These pumps are typically used over centrifugal cryogenic pumps because of a two-phase fluid. For instance, these pumps are designed to transport a mixture of liquid and solid particles. Because of the solid particles in the mixture, the centrifugal pump's impeller could be damaged, leading to the breakdown of these pumps, hence giving an edge to the PDP type over the dynamic one. On the flip side, a major disadvantage of Cryogenic PDP is the efficiency loss due to friction in gears, belts, bearings, packaging, and valves. Moreover, it has a higher initial cost as compared to centrifugal pumps.
- PDPs are mainly used for cryogenic cylinder filling and industrial and medical bottle filling with gaseous products. Moreover, these pumps are also used in several other industrial LNG and CO2 applications. As of 2021, the region imported 371.8 bcm of LNG, i.e., an increase of about 7.7% compared to the previous year's value (346.3 bcm). China is the leading LNG importer in the region, with 109.5 bcm, followed by Japan and South Korea.
- Though the LNG fuel station industry witnessed a shrink in its business during 2020 on account of restrictions and lockdowns imposed due to COVID-19, the industry is expected to witness increased investments going forward. For instance, countries like India and China are expected to invest nearly USD 1.2 billion and USD 5 billion to develop LNG fuel station infrastructure. Such a situation would generate demand for cryogenic PDPs in the LNG fuel station industry during the study period.
- Therefore, based on the above-mentioned factors, positive displacement cryogenic pumps are expected to witness significant growth in the Asia-Pacific cryogenic pump market during the forecast period.

India Expected to Witness Significant Growth

- India has one of the largest chemical and pharmaceutical industries in the world. The agricultural and transportation sectors are some of the major consumers of these industries in the country.
- India is planning to ensure a 24x7 electricity supply. However, the country has to double its electricity generation capacity to achieve this target. As of March 31, 2022, the share of natural gas in the power generation mix stood at 24,899.51 MW. The government is emphasizing natural gas-fired power plants. Therefore, the demand for cryogenic pumps is expected to increase in the LNG liquefaction plants during the forecast period.
- The Indian government is emphasizing clean energy, owing to the government's aim to reduce carbon emissions by 2030. Natural gas has been one of the most popular and fastest-growing sources of power in the recent past.
- Under its 'Make in India' program, the government expects to place India on the world map as a manufacturing hub. According to the Indian Brand Equity Foundation (IBEF), the country's manufacturing sector has the potential to reach USD 1 trillion by 2025. It is expected to rank among the top three growth economies and manufacturing destinations by mid-2022.
- However, India is a net importer of natural gas. The country imports natural gas from its import facilities at ports (regasification plant). The LNG imports of the country have been increasing significantly over the recent past. The trend is expected to continue over the forecast period, boosting demand for cryogenic pumps in LNG terminals.
- Therefore, based on the above-mentioned factors, India is expected to witness significant growth in the Asia-Pacific cryogenic pump market during the forecast period.

APAC Cryogenic Pump Industry Overview

The Asia-Pacific cryogenic pump market is moderately fragmented in nature. Some of the major players in the market (in no particular order) include Nikkiso Co. Ltd, SHI Cryogenics Group, Ebara Corporation, Fives Group, and KSB SE & Co. KGaA.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

Asia-Pacific Cryogenic Pump - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 110 pages | Mordor Intelligence

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-03-02
		Signature