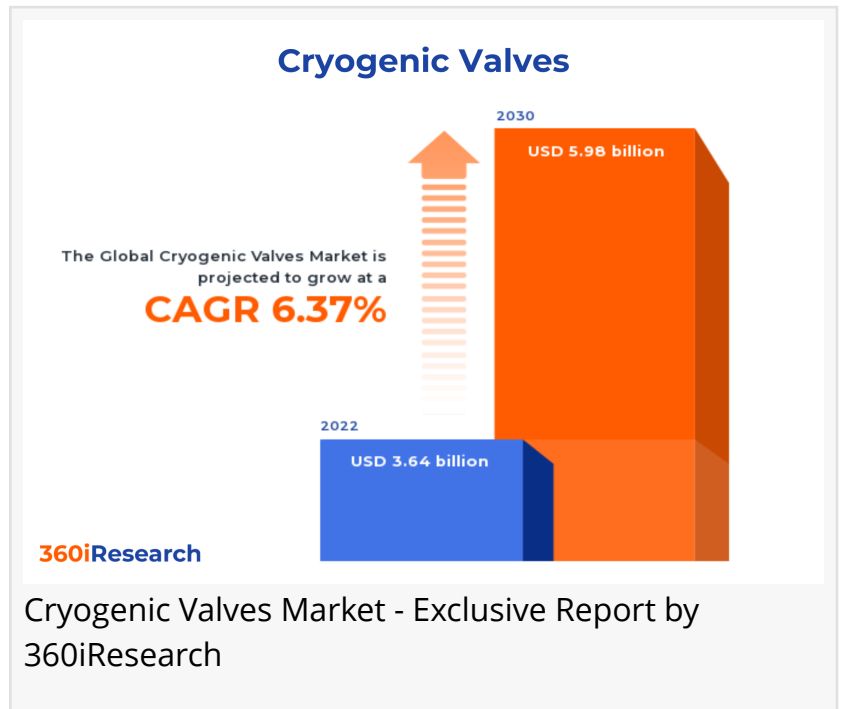


Cryogenic Valves Market worth \$5.98 billion by 2030, growing at a CAGR of 6.37% - Exclusive Report by 360iResearch

The Global Cryogenic Valves Market to grow from USD 3.64 billion in 2022 to USD 5.98 billion by 2030, at a CAGR of 6.37%.

PUNE, MAHARASHTRA, INDIA ,
November 15, 2023 /
EINPresswire.com/ -- The "[Cryogenic Valves Market](#) by Type (Ball Valve, Check Valve, Gate Valve), Gas (Ethylene, Hydrogen, Liquid Petroleum), Application, End-User - Global Forecast 2023-2030" report has been added to 360iResearch.com's offering.

The Global Cryogenic Valves Market to grow from USD 3.64 billion in 2022 to USD 5.98 billion by 2030, at a CAGR of 6.37%.



Request a Free Sample Report @ https://www.360iresearch.com/library/intelligence/cryogenic-valves?utm_source=einpresswire&utm_medium=referral&utm_campaign=sample

A cryogenic valve is a specialized system component that handles extremely low-temperature fluids, typically below -150°C. These valves are designed to operate efficiently and reliably in demanding environments where maintaining a high level of temperature control is essential for the system's safety and performance. The growing demand for LNG in industries such as power generation directly influences the need for reliable cryogenic valves. However, high costs associated with raw materials, manufacturing processes, and stringent safety regulations may pose barriers to entry for smaller businesses within this market space. Nevertheless, advancements in material science offer potential improvements in durability against erosion/corrosion caused by cryogenic substances, resulting in higher efficiency and longer service life for the equipment. Moreover, as governments focus on reducing their carbon footprint, companies in the energy sector have begun to invest more heavily in research around

renewable and clean energy sources, creating lucrative opportunities for the cryogenic valve market.

Application: Proliferating application of cryogenic valves in liquefiers due to their high thermal properties and extended service life

Cryogenic valves play a crucial role in liquefiers, which convert gases such as nitrogen or helium into liquid forms at extremely low temperatures. These applications require precise temperature control and high-performance sealing materials to ensure safety and efficiency. Cryogenic valves from stainless steel or brass with specialized seals, such as PTFE or metal-seated ones, are preferred due to their thermal properties and long service life. Manifolds and gas trains are essential components of cryogenic gas distribution systems that enable controlled gas flow and pressure management across multiple points. Cryogenic valves in these applications can handle rapid temperature fluctuations while providing accurate pressure control. Cryogenic tanks and cold boxes store and preserve ultra-low temperature liquids such as liquid nitrogen or oxygen before they're transported or utilized in various industrial processes. Cryogenic valves in these storage systems maintain proper pressure levels inside the container and facilitate safe transfer operations. Transfer lines are critical components of cryogenic systems responsible for channeling ultra-low temperature fluids safely from storage units to end-use applications, and the cryogenic valves utilized in transfer lines provide leak-tight shut-off performance while maintaining minimal heat gain or loss.

End-User: Burgeoning utilization of cryogenic valves in energy & power industry

Cryogenic valves are used in the chemical industry for handling extremely low-temperature processes involving liquefied gases such as nitrogen, oxygen, argon, and carbon dioxide. These valves ensure safety during transporting and storing these chemicals by maintaining high-quality sealing to prevent leakage. The energy & power industry is gradually adopting liquefied natural gas (LNG) as cleaner alternative to traditional fossil fuels. Cryogenic valves are essential in LNG terminals' storage and regasification processes by ensuring tight shut-off capabilities and minimal fugitive emissions loss. Cryogenic valves are indispensable in the food & beverage industry because they preserve perishable goods through cryogenic freezing techniques. These valves regulate the flow of liquid nitrogen or carbon dioxide in food processing plants to ensure accurate temperature control and enhanced product quality. In healthcare applications, cryogenic valves are essential for storing and transporting biological samples such as blood, tissues, and vaccines at ultra-low temperatures. These valves provide precise temperature control inside cryo-storage tanks and dewars while ensuring sample integrity during long-term storage.

Gas: Growing preference of cryogenic valves for Liquid Petroleum Gas (LPG)

Ethylene is a crucial feedstock gas used in the petrochemical industry for producing polyethylene and other plastics. Cryogenic valves help control pressure and flow during ethylene production and transportation at low temperatures such as -103°C . With the increasing focus on clean energy generation, hydrogen's usage as an alternative fuel has propelled the demand for efficient storage and transportation infrastructure, necessitating cryogenic valves to ensure the

safe handling of hydrogen at -253°C . Liquid petroleum gas (LPG) is used for heating purposes in residential and commercial establishments. Transporting LPG under extreme cold conditions requires robust cryogenic valve systems capable of withstanding up to 40 bar pressures. Liquefied natural gas (LNG) is an essential energy source for powering industries and generating electricity. Cryogenic valves are employed extensively across LNG facilities for handling temperature variations as low as -162°C . Nitrogen is an inert gas with various applications, such as food preservation and electronics manufacturing. Cryogenic valves are indispensable for regulating nitrogen flow during storage and transportation at -196°C . Oxygen's widespread demand in healthcare, steelmaking, and water treatment industries necessitates efficient cryogenic valve systems for handling storage temperatures down to -183°C .

Type: Increasing preference for the ball valves due to their tight shutoff capabilities for applications requiring quick and precise flow control

A ball valve is a cryogenic valve that utilizes a spherical disc to control the flow of liquids or gases at extremely low temperatures. It is widely used in natural gas processing, liquefied gas transportation, and storage facilities. A check valve prevents backflow by allowing fluids to flow in one direction only. They are commonly used in cryogenic systems such as LNG plants, air separation plants, and rocket propulsion technologies. A gate valve features a sliding plate that can be lifted or lowered to control fluid flow between two chambers or pipes in cryogenic applications such as petrochemical plants or industrial gas handling systems. These valves are preferred for their ability to provide full flow with minimal resistance, making them optimal for applications requiring uninterrupted flow and low-pressure loss. Globe valves regulate fluid flow by using a movable disc or plug that seats against a stationary ring seat. They are often used in cryogenic systems for throttling and regulating precise flow control, such as in natural gas processing plants or chemical facilities. These valves can handle high-pressure drops while maintaining accurate control over fluid flow rates.

Regional Insights:

In the Americas region, increasing demand for natural gas and investment in industrial gas facilities, considering the United States & Canada, has major contributed to increasing demand related to cryogenic valves. The US maintains a significant share in global LNG exports fueled by production capacity from shale reserves, while Canada's oil sands projects and investments in LNG terminals further drive demand for cryogenic valves. In Europe, many developed economies are investing heavily in developing their LNG infrastructures to meet stringent environmental regulations that promote the adoption of eco-friendly alternatives, including LNG fuel for public transport systems. Innovations, including cryogenic floating ball valves, enhance efficiency while adhering to strict safety standards set by European directives. Vast natural gas reserves in Middle Eastern countries necessitate efficient transportation systems equipped with advanced cryogenic valves that withstand extreme temperatures and harsh working conditions. The Asia Pacific region showcases an opportunistic landscape as major economies are experiencing an increase in demand for industrial gases due to tremendous growth in their respective manufacturing sectors fueled by urbanization and industrialization trends.

FPNV Positioning Matrix:

The FPNV Positioning Matrix is essential for assessing the Cryogenic Valves Market. It provides a comprehensive evaluation of vendors by examining key metrics within Business Strategy and Product Satisfaction, allowing users to make informed decisions based on their specific needs. This advanced analysis then organizes these vendors into four distinct quadrants, which represent varying levels of success: Forefront (F), Pathfinder (P), Niche (N), or Vital(V).

Market Share Analysis:

The Market Share Analysis offers an insightful look at the current state of vendors in the Cryogenic Valves Market. By comparing vendor contributions to overall revenue, customer base, and other key metrics, we can give companies a greater understanding of their performance and what they are up against when competing for market share. The analysis also sheds light on just how competitive any given sector is about accumulation, fragmentation dominance, and amalgamation traits over the base year period studied.

Key Company Profiles:

The report delves into recent significant developments in the Cryogenic Valves Market, highlighting leading vendors and their innovative profiles. These include BAC Valves SA, Bray International, Cryofab, Inc., Dembla Valves Ltd., DeZURIK, Inc., DFL ITALIA SRL, DomBor Valves, ECI LLC, Emerson Electric Co., Enggpro Business Solutions Private Limited, Flowserve Corporation, General Electric Company, Generant Inc., H.P. Valves Pvt. Ltd., Habonim Industrial Valves & Actuators Ltd., Herose GmbH, L&T Valves Limited, Meca-Inox, MOGAS Industries, Inc., Novel Valves India Pvt. Ltd., Oswal Industries Limited, Parker Hannifin Corporation, Powell Valves, Rotarex S.A., Samson AG, Schlumberger NV, Valco Group, Valcor Engineering Corporation, Weir Group PLC, and XINTAI Valve Group Co., Ltd..

Inquire Before Buying @ https://www.360iresearch.com/library/intelligence/cryogenic-valves?utm_source=einpresswire&utm_medium=referral&utm_campaign=inquire

Market Segmentation & Coverage:

This research report categorizes the Cryogenic Valves Market in order to forecast the revenues and analyze trends in each of following sub-markets:

Based on Type, market is studied across Ball Valve, Check Valve, Gate Valve, and Globe Valve. The Ball Valve is projected to witness significant market share during forecast period.

Based on Gas, market is studied across Ethylene, Hydrogen, Liquid Petroleum, LNG, Nitrogen, and Oxygen. The LNG is projected to witness significant market share during forecast period.

Based on Application, market is studied across Liquefiers, Manifolds & Gas Trains, Tanks & Cold Boxes, and Transfer Lines. The Tanks & Cold Boxes is projected to witness significant market share during forecast period.

Based on End-User, market is studied across Chemicals, Energy & Power, Food & Beverage, and Healthcare. The Chemicals is projected to witness significant market share during forecast period.

Based on Region, market is studied across Americas, Asia-Pacific, and Europe, Middle East & Africa. The Americas is further studied across Argentina, Brazil, Canada, Mexico, and United States. The United States is further studied across California, Florida, Illinois, New York, Ohio, Pennsylvania, and Texas. The Asia-Pacific is further studied across Australia, China, India, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam. The Europe, Middle East & Africa is further studied across Denmark, Egypt, Finland, France, Germany, Israel, Italy, Netherlands, Nigeria, Norway, Poland, Qatar, Russia, Saudi Arabia, South Africa, Spain, Sweden, Switzerland, Turkey, United Arab Emirates, and United Kingdom. The Europe, Middle East & Africa commanded largest market share of 36.29% in 2022, followed by Asia-Pacific.

Key Topics Covered:

1. Preface
2. Research Methodology
3. Executive Summary
4. Market Overview
5. Market Insights
6. Cryogenic Valves Market, by Type
7. Cryogenic Valves Market, by Gas
8. Cryogenic Valves Market, by Application
9. Cryogenic Valves Market, by End-User
10. Americas Cryogenic Valves Market
11. Asia-Pacific Cryogenic Valves Market
12. Europe, Middle East & Africa Cryogenic Valves Market
13. Competitive Landscape
14. Competitive Portfolio
15. Appendix

The report provides insights on the following pointers:

1. Market Penetration: Provides comprehensive information on the market offered by the key players
2. Market Development: Provides in-depth information about lucrative emerging markets and analyzes penetration across mature segments of the markets
3. Market Diversification: Provides detailed information about new product launches, untapped

geographies, recent developments, and investments

4. Competitive Assessment & Intelligence: Provides an exhaustive assessment of market shares, strategies, products, certification, regulatory approvals, patent landscape, and manufacturing capabilities of the leading players

5. Product Development & Innovation: Provides intelligent insights on future technologies, R&D activities, and breakthrough product developments

The report answers questions such as:

1. What is the market size and forecast of the Cryogenic Valves Market?
2. Which are the products/segments/applications/areas to invest in over the forecast period in the Cryogenic Valves Market?
3. What is the competitive strategic window for opportunities in the Cryogenic Valves Market?
4. What are the technology trends and regulatory frameworks in the Cryogenic Valves Market?
5. What is the market share of the leading vendors in the Cryogenic Valves Market?
6. What modes and strategic moves are considered suitable for entering the Cryogenic Valves Market?

Read More @ https://www.360iresearch.com/library/intelligence/cryogenic-valves?utm_source=einpresswire&utm_medium=referral&utm_campaign=analyst

Mr. Ketan Rohom
360iResearch
+1 530-264-8485
ketan@360iresearch.com

This press release can be viewed online at: <https://www.einpresswire.com/article/668653447>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.