

Global and India Type 4 Cylinders Market

Author:- Ajay Kumar Gupta

Format: pdf

Code: ENI5481

Pages: 953

Price: Rs.2000000US\$ 3000

Publisher: NIIR PROJECT CONSULTANCY SERVICES

Usually ships within 5 days

Global and India Type 4 Cylinders Market, Growth Rate, Covid-19 Impact, Economic Impact, Size, Share, Trend, Drivers, Competitive Landscape, Opportunity, Limitations, Technological Landscape, Regulatory Framework, PESTEL Analysis, PORTERs Analysis, Forecast upto 2030

The global and India type 4-cylinder market is expected to grow significantly owing to the mounting urbanization and accelerating disposable income

The global type 4-cylinder market size was valued at USD 279.31 Million in 2021 and is expected to grow at a CAGR of 7.46% during the forecast period. However, India's type 4-cylinder market is projected to reach USD 23.11 Million by 2030 at a growth rate of 7.73%. The growth in demand for lightweight cylinders with higher pressure requirements, more gas carrying capacity per cylinder and the rising number of natural gas vehicles (NGVs) are the main factors driving the type 4-cylinder market. Additionally, the market for type 4 cylinders is anticipated to grow significantly due to increased technological innovation and investments from the major players. Further, the surge in demand for lightweight, explosion proof and non-corrosive LPG & CNG cylinders and government push towards the usage of composite cylinders are propelling the growth of the type 4-cylinder market in the future periods.

Preference of end users for type 4- cylinders due to their ease of handling and partial visibility is driving the demand in the type 4-cylinder cylinder market. The Internet of Things (IoT)-powered smart composite cylinder communicates to customer devices and the LPG distributors' IT infrastructure. The system allows distributors to adjust their supply logistics and stocks in real-time and notifies users of the amount of gas still in their cylinders. The growing adoption of type 4- cylinders across various end-use sectors, including automotive, marine & defense, household, fleet owners, oil industry and others, owing to numerous benefits of these cylinders over traditional metal cylinders such as improved safety, lighter weight, and superior corrosion resistance are estimated to influence the growth of type 4- cylinders market over the forecast periods.

Cylinder Type Overview in the Global Type 4-cylinder Market

Based on cylinder type, the global type 4-cylinder market is classified into CNG, biogas, hydrogen, and LPG. The CNG segment generated USD 131.50 million in revenue in 2021 and

is expected to reach USD 240.24 million by 2030 with a CAGR of 7.11% during the forecast period, 2022-2030. The segment's growth is attributed to Type 4 CNG Cylinders, typically around 70% weight reduced over Type 1 and 2 Steel cylinders and 5% to 35% weight reduced over Type 3 Aluminum liner-based cylinders because of the presence of lightweight HDPE liner. The Type 4 cylinders have higher Class pressure withstanding capacity when compared with Type 3 cylinders.

Fiber Type Overview in the Global Type 4-cylinder Market

Based on fiber type, the global type 4-cylinder market is segregated into glass fiber composites and carbon fiber composites. The carbon fiber composites segment captured the highest market of 55.96% in 2021 and is projected to reach USD 288.21 million by 2030. It is due to this carbon fiber coating ensures higher heat resistance, helically wound on the liner in combination with resin to impart high tensile strength.

Glass fiber is estimated to hold a considerable share in the global type 4-cylinder market over the forecasted period of 2022-2030. Glass fiber composites are a particular kind of fiber-reinforced polymer composite with qualities like low density, high strength, and simplicity in production. As a result, the aerospace, automotive, and construction industries all utilize it substantially. Glass fibers are the most typical reinforcing fiber used in polymeric matrix composites.

Application Overview in the Global Type 4-cylinder Market

Based on the application, the global type 4-cylinder market is segmented into industrial, household, marine & defense, fleet owners and others. The industrial segment is further sub-segmented into the automotive industry, oil & gas industry, chemical industry and others. The industrial segment generated USD 127.70 million in revenue in 2021 and is expected to reach USD 232.38 million by 2030 with a CAGR of 7.07% from 2022-2030. The segmented growth is attributed to the growing demand for CNG, biogas and hydrogen gas in commercial and private vehicles. Natural gas is a proven alternative fuel that has long been used to power natural gas vehicles. These cylinders are 30% of the weight of steel, improving vehicle range, payload, handling and reducing fuel consumption.

Distribution Channel Overview in the Global Type 4-cylinder Market

Based on the distribution channel, the global type 4-cylinder market is segmented into OEM and gas distribution companies. The OEM segment holds the highest market share of 65.47% in 2021 and is projected to generate USD 335.81 million by 2030. It is because major type 4-cylinder manufacturers have started their distribution channel and marketing & sell offices in developing nations worldwide. The high prices of these cylinders prohibit gas distribution companies from immediately adopting steel cylinders with the type-4 composite cylinder in under-developed and developing countries.

Regional Overview in the Global Type 4-cylinder Market

By region, the global type 4-cylinder market is segmented into North America, Europe, Asia Pacific, South America, and Middle East & Africa. The Europe region generated USD 101.63 million in revenue in 2021 and is likely to reach USD 165.14 million by 2030 with a CAGR of 6.98% during the forecast period, 2022-2030. There has been a substantial growth in the use of automobiles in Europe emerging nations, which has increased the demand for fossil fuels. The government announced several support policies to encourage the development of natural gas-powered automobiles for commercial use to decrease the imports of fossil fuels. Furthermore,

the benefits of using natural gas in the transportation sector will favor the environment, which is expected to drive the market.

Global and India Type 4-cylinder Market: Competitive Landscape

Hexagon Composites, Luxfer Gas Cylinder, Aburi Composites, Faber IndustrieSpA, Time Technoplast Limited, Indoruss Synergy, Everest Kanto Cylinder Limited, Worthington Industries, Inc., Supreme Industries Ltd., and others prominent Players are the key players in the global type 4-cylinder market.

About Us:

Niir Project Consultancy Services is a research, advisory, and analytics company. We have a specialized team of consultants catering to various verticals, including Consumer Goods & Retail, Healthcare, ICT, chemicals, BFSI, and many others. In a very short time, we have expanded beyond the basic services to advanced research services such as Financial Modelling, Supply & Demand Analysis, Pricing Analysis, Competitive Analysis, and various other services, which not only facilitates the senior executives across industries but giants who have established names in different industry verticals. Through our indispensable business insights, we can help our clients to achieve the mission-critical tasks which facilitate them to build the organizations of tomorrow.

Reasons for Buying this Report:

- This research report helps you get a detail picture of the industry by providing overview of the industry along with the market structure and classification
- The report provides market analysis covering major growth driving factors for the industry, latest market trends and insights on regulatory framework in the industry
- This report helps to understand the present status of the industry by elucidating a comprehensive SWOT analysis and scrutiny of the demand supply situation
- Report provides analysis and in-depth financial comparison of major competitors
- The report provides forecasts of key parameters which helps to anticipate the industry performance

Our Approach:

- Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years.
- The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players
- We use reliable sources of information and databases, information from which is processed by us and included in the report

Market Research Reports, India and Global Industry Analysis, Market Trends, Market Insight, Market structure, Market outlook Indian Industry Size, Share, Trends, Analysis and Forecasts report, sector Growth Driver, company profiles, key financials, ratios.

About NIIR

NIIR PROJECT CONSULTANCY SERVICES (NPCS) is a reliable name in the industrial world

for offering integrated technical consultancy services. NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our various services are: Detailed Project Report, Business Plan for Manufacturing Plant, Start-up Ideas, Business Ideas for Entrepreneurs, Start up Business Opportunities, entrepreneurship projects, Successful Business Plan, Industry Trends, Market Research, Manufacturing Process, Machinery, Raw Materials, project report, Cost and Revenue, Pre-feasibility study for Profitable Manufacturing Business, Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Business Opportunities, Investment Opportunities for Most Profitable Business in India, Manufacturing Business Ideas, Preparation of Project Profile, Pre-Investment and Pre-Feasibility Study, Market Research Study, Preparation of Techno-Economic Feasibility Report, Identification and Section of Plant, Process, Equipment, General Guidance, Startup Help, Technical and Commercial Counseling for setting up new industrial project and Most Profitable Small Scale Business.

NPCS also publishes various process technology, technical, reference, self employment and startup books, directory, business and industry database, bankable detailed project report, market research report on various industries, small scale industry and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by professionals including project engineers, information services bureau, consultants and project consultancy firms as one of the input in their research.

Our Detailed Project report aims at providing all the critical data required by any entrepreneur vying to venture into Project. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.

NIIR PROJECT CONSULTANCY SERVICES, 106-E, Kamla Nagar, New Delhi-110007, India.
Email: npcs.india@gmail.com **Website:** NIIR.org

Tue, 22 Sep 2026 10:59:48 +0000