

Global Oil-Free Screw Compressor Market Size study & Forecast, by Stage (Single stage, Multi stage), by Industry (Food & Beverage, Automotive, Semiconductor, Pharmaceutical & Chemical, Metal & Mining, Oil & Gas, Others) and Regional Analysis, 2023-2030

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Abstracts

Global Oil-Free Screw Compressor Market is valued at approximately USD 2.43 billion in 2022 and is anticipated to grow with a healthy growth rate of more than 5.0 % during the forecast period 2023-2030. An oil-free screw compressor functions by compressing air solely through the screw mechanism, without the assistance of oil seals. It is manufactured using materials such as aluminium and steel, screw compressors incorporate components such as bearings, crankshafts, switches, gauges, rotors, and housings. Functioning as positive displacement compressors, their intermeshing rotors remain separated without contact. The maintenance of their relative positioning is ensured by lubricated timing gears located outside the compression chamber. The rise in energy consumption demands for energy-efficient compressors which serves as a primary driver for the Oil-Free Screw Compressor Market, as oil-free screw compressors have enhanced energy efficiency compared to traditional compressor systems. The operation cost and energy consumption of the oil-free screw compressor is minimized due to the various technological upgrade over the years which also drives the growth of this market.

The increasing energy consumption has necessitated the utilization of oil-free screw compressors in industries, owing to their efficient properties. According to Statista, in 2022, global primary energy consumption reached approximately 604 exajoules, marking a 1.1% increase from the previous year. The year 2020 saw a decline in



primary energy consumption to levels akin to 2016 because of the coronavirus pandemic on transportation fuel demand and overall economic activity. Following the normalization of the pandemic, there is a projected surge in demand, particularly driven by industrialization in growing economies. This demand necessitates efficient and sustainable manufacturing processes, where oil-free screw compressors provide cleaner air solutions and enhanced energy consumption efficiency. This trend presents a long-term opportunity for the market. However, Advancements in technology present opportunities for superior solutions to enter the market, offering low maintenance and energy consumption compared to oil-free screw compressors. However, industries' adherence to evolving quality standards in response to changing environmental factors may necessitate constant dynamic upgrades to meet requirements, posing a significant challenge in the market.

The key regions considered for the Global Oil-Free Screw Compressor Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. Asia Pacific dominated the market in 2022 owing to the presence of the emerging economies which serve as the base for industrialization and urbanization creating a huge consumption and demand for energy along with the ongoing investments in the power and energy sector is also a major reason for the increased share of this region. North America is expected to grow significantly over the forecast period, owing to factors such as, the rise in consumer awareness regarding eco-friendly energy solutions, coupled with supportive government policies, serves as a driving force for enhanced market performance in the region during the forecast period.

Major market player included in this report are:

Elgi Equipments Limited

Atlas Copco AB

Sulliar, LLC

Ingersoll Rand

Kobe Steel Ltd

Howden Group

Aerzener Maschinenfabrik GmbH



Kaeser Kompressoren SE

FS-Curtis

Airpack

Recent Developments in the Market:

In February 2024, Elgi unveiled the groundbreaking PG 550-215 trolley-mounted portable screw air compressor at the 12th edition of India Stonemart 2024, This ELGi PG550-215 is meticulously crafted to elevate operational efficiency, reduce drilling expenses, and enhance fuel economy within the construction and mining industries.

In September 2022, Howden, in partnership with Azku Global Services of the Khudairi Group, secured a contract for supplying screw compressor packages to the Majnoon oilfield located near Basrah, Iraq. Howden is thrilled to help Azku Global Services decrease its carbon footprint and deliver greater sustainability.

In November 2021, ELGi broadens its range of innovative AB Series Oil-Free Screw Air Compressors. The newly introduced AB11-22 range fulfils the requirement for contaminant-free air in small to medium-sized operations within the Food & Beverage, Pharmaceutical, and sensitive industrial sectors.

Global Oil-Free Screw Compressor Market Report Scope:

Historical Data - 2020 - 2021

Base Year for Estimation - 2022

Forecast period - 2023-2030

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered - Stage, Industry, Region



Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope - Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Stage:
Single stage
Multi stage
By Industry:
Food & Beverage
Automotive
Semiconductor
Pharmaceutical & Chemical
Metal & Mining

Oil & Gas



Others	
By Region:	
North America	
U.S.	
Canada	
Europe	
UK	
Germany	
France	
Spain	
Italy	
ROE	
Asia Pacific	
China	
India	
Japan	
Australia	
South Korea	
RoAPAC	

Global Oil-Free Screw Compressor Market Size study & Forecast, by Stage (Single stage, Multi stage), by Indust...

Latin America



Brazil	
Mexico	
Middle East & Africa	
Saudi Arabia	
South Africa	
Rest of Middle	



Contents

CHAPTER 1. EXECUTIVE SUMMARY

- 1.1. Market Snapshot
- 1.2. Global & Segmental Market Estimates & Forecasts, 2020-2030 (USD Billion)
- 1.2.1. Oil-Free Screw Compressor Market, by Region, 2020-2030 (USD Billion)
- 1.2.2. Oil-Free Screw Compressor Market, by Stage, 2020-2030 (USD Billion)
- 1.2.3. Oil-Free Screw Compressor Market, by Industry, 2020-2030 (USD Billion)
- 1.3. Key Trends
- 1.4. Estimation Methodology
- 1.5. Research Assumption

CHAPTER 2. GLOBAL OIL-FREE SCREW COMPRESSOR MARKET DEFINITION AND SCOPE

- 2.1. Objective of the Study
- 2.2. Market Definition & Scope
 - 2.2.1. Industry Evolution
 - 2.2.2. Scope of the Study
- 2.3. Years Considered for the Study
- 2.4. Currency Conversion Rates

CHAPTER 3. GLOBAL OIL-FREE SCREW COMPRESSOR MARKET DYNAMICS

- 3.1. Oil-Free Screw Compressor Market Impact Analysis (2020-2030)
 - 3.1.1. Market Drivers
- 3.1.1.1. Increasing energy consumption demands for more efficient compressor systems
 - 3.1.1.2. Less operation costs
 - 3.1.2. Market Challenges
 - 3.1.2.1. Technological advancements have led to the emergence of competitors
- 3.1.2.2. The dynamic nature of the standards and regulations poses challenges to survival.
 - 3.1.3. Market Opportunities
 - 3.1.3.1. Ongoing industrialization demands for more energy sources
 - 3.1.3.2. Rise in the level of Global pollution calls for clean energy sources.

CHAPTER 4. GLOBAL OIL-FREE SCREW COMPRESSOR MARKET INDUSTRY



ANALYSIS

- 4.1. Porter's 5 Force Model
 - 4.1.1. Bargaining Power of Suppliers
 - 4.1.2. Bargaining Power of Buyers
 - 4.1.3. Threat of New Entrants
 - 4.1.4. Threat of Substitutes
 - 4.1.5. Competitive Rivalry
- 4.2. Porter's 5 Force Impact Analysis
- 4.3. PEST Analysis
 - 4.3.1. Political
 - 4.3.2. Economical
 - 4.3.3. Social
 - 4.3.4. Technological
 - 4.3.5. Environmental
 - 4.3.6. Legal
- 4.4. Top investment opportunity
- 4.5. Top winning strategies
- 4.6. COVID-19 Impact Analysis
- 4.7. Disruptive Trends
- 4.8. Industry Expert Perspective
- 4.9. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL OIL-FREE SCREW COMPRESSOR MARKET, BY STAGE

- 5.1. Market Snapshot
- 5.2. Global Oil-Free Screw Compressor Market by Stage, Performance Potential Analysis
- 5.3. Global Oil-Free Screw Compressor Market Estimates & Forecasts by Stage 2020-2030 (USD Billion)
- 5.4. Oil-Free Screw Compressor Market, Sub Segment Analysis
 - 5.4.1. Single stage
 - 5.4.2. Multi stage

CHAPTER 6. GLOBAL OIL-FREE SCREW COMPRESSOR MARKET, BY INDUSTRY

- 6.1. Market Snapshot
- 6.2. Global Oil-Free Screw Compressor Market by Industry, Performance Potential Analysis



- 6.3. Global Oil-Free Screw Compressor Market Estimates & Forecasts by Industry 2020-2030 (USD Billion)
- 6.4. Oil-Free Screw Compressor Market, Sub Segment Analysis
 - 6.4.1. Food & Beverage
 - 6.4.2. Automotive
 - 6.4.3. Semiconductor
 - 6.4.4. Pharmaceutical & Chemical
 - 6.4.5. Metal & Mining
 - 6.4.6. Oil & Gas
 - 6.4.7. Others

CHAPTER 7. GLOBAL OIL-FREE SCREW COMPRESSOR MARKET, REGIONAL ANALYSIS

- 7.1. Top Leading Countries
- 7.2. Top Emerging Countries
- 7.3. Oil-Free Screw Compressor Market, Regional Market Snapshot
- 7.4. North America Oil-Free Screw Compressor Market
 - 7.4.1. U.S. Oil-Free Screw Compressor Market
 - 7.4.1.1. Stage breakdown estimates & forecasts, 2020-2030
 - 7.4.1.2. Industry breakdown estimates & forecasts, 2020-2030
 - 7.4.2. Canada Oil-Free Screw Compressor Market
- 7.5. Europe Oil-Free Screw Compressor Market Snapshot
 - 7.5.1. U.K. Oil-Free Screw Compressor Market
 - 7.5.2. Germany Oil-Free Screw Compressor Market
 - 7.5.3. France Oil-Free Screw Compressor Market
 - 7.5.4. Spain Oil-Free Screw Compressor Market
 - 7.5.5. Italy Oil-Free Screw Compressor Market
 - 7.5.6. Rest of Europe Oil-Free Screw Compressor Market
- 7.6. Asia-Pacific Oil-Free Screw Compressor Market Snapshot
 - 7.6.1. China Oil-Free Screw Compressor Market
 - 7.6.2. India Oil-Free Screw Compressor Market
 - 7.6.3. Japan Oil-Free Screw Compressor Market
 - 7.6.4. Australia Oil-Free Screw Compressor Market
 - 7.6.5. South Korea Oil-Free Screw Compressor Market
 - 7.6.6. Rest of Asia Pacific Oil-Free Screw Compressor Market
- 7.7. Latin America Oil-Free Screw Compressor Market Snapshot
 - 7.7.1. Brazil Oil-Free Screw Compressor Market
- 7.7.2. Mexico Oil-Free Screw Compressor Market



- 7.8. Middle East & Africa Oil-Free Screw Compressor Market
 - 7.8.1. Saudi Arabia Oil-Free Screw Compressor Market
 - 7.8.2. South Africa Oil-Free Screw Compressor Market
 - 7.8.3. Rest of Middle East & Africa Oil-Free Screw Compressor Market

CHAPTER 8. COMPETITIVE INTELLIGENCE

- 8.1. Key Company SWOT Analysis
 - 8.1.1. Company
 - 8.1.2. Company
 - 8.1.3. Company
- 8.2. Top Market Strategies
- 8.3. Company Profiles
 - 8.3.1.1. Elgi Equipments Limited
 - 8.3.1.2. Key Information
 - 8.3.1.3. Overview
 - 8.3.1.4. Financial (Subject to Data Availability)
 - 8.3.1.5. Product Summary
 - 8.3.1.6. Recent Developments
 - 8.3.2. Atlas Copco AB
 - 8.3.3. Sulliar, LLC
 - 8.3.4. Ingersoll Rand
 - 8.3.5. Kobe Steel Ltd
 - 8.3.6. Howden Group
 - 8.3.7. Aerzener Maschinenfabrik GmbH
 - 8.3.8. Kaeser Kompressoren SE
 - 8.3.9. FS-Curtis
 - 8.3.10. Airpack

CHAPTER 9. RESEARCH PROCESS

- 9.1. Research Process
 - 9.1.1. Data Mining
 - 9.1.2. Analysis
 - 9.1.3. Market Estimation
 - 9.1.4. Validation
 - 9.1.5. Publishing
- 9.2. Research Attributes
- 9.3. Research Assumption







List Of Tables

LIST OF TABLES

- TABLE 1. Global Oil-Free Screw Compressor Market, report scope
- TABLE 2. Global Oil-Free Screw Compressor Market estimates & forecasts by Region 2020-2030 (USD Billion)
- TABLE 3. Global Oil-Free Screw Compressor Market estimates & forecasts by Stage 2020-2030 (USD Billion)
- TABLE 4. Global Oil-Free Screw Compressor Market estimates & forecasts by Industry 2020-2030 (USD Billion)
- TABLE 5. Global Oil-Free Screw Compressor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 6. Global Oil-Free Screw Compressor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 7. Global Oil-Free Screw Compressor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 8. Global Oil-Free Screw Compressor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 9. Global Oil-Free Screw Compressor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 10. Global Oil-Free Screw Compressor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 11. Global Oil-Free Screw Compressor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 12. Global Oil-Free Screw Compressor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 13. Global Oil-Free Screw Compressor Market by segment, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 14. Global Oil-Free Screw Compressor Market by region, estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 15. U.S. Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 16. U.S. Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 17. U.S. Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 18. Canada Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)



- TABLE 19. Canada Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 20. Canada Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 21. UK Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 22. UK Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 23. UK Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 24. Germany Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 25. Germany Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 26. Germany Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 27. France Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 28. France Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 29. France Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 30. Italy Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 31. Italy Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 32. Italy Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 33. Spain Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 34. Spain Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 35. Spain Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 36. RoE Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)
- TABLE 37. RoE Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)
- TABLE 38. RoE Oil-Free Screw Compressor Market estimates & forecasts by segment



2020-2030 (USD Billion)

TABLE 39. China Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 40. China Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 41. China Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 42. India Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 43. India Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 44. India Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 45. Japan Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 46. Japan Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 47. Japan Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 48. South Korea Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 49. South Korea Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 50. South Korea Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 51. Australia Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 52. Australia Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 53. Australia Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 54. RoAPAC Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 55. RoAPAC Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 56. RoAPAC Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 57. Brazil Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)



TABLE 58. Brazil Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 59. Brazil Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 60. Mexico Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 61. Mexico Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 62. Mexico Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 63. RoLA Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 64. RoLA Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 65. RoLA Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 66. Saudi Arabia Oil-Free Screw Compressor Market estimates & forecasts, 2020-2030 (USD Billion)

TABLE 67. South Africa Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 68. RoMEA Oil-Free Screw Compressor Market estimates & forecasts by segment 2020-2030 (USD Billion)

TABLE 69. List of secondary sources, used in the study of global Oil-Free Screw Compressor Market

TABLE 70. List of primary sources, used in the study of global Oil-Free Screw Compressor Market

TABLE 71. Years considered for the study

TABLE 72. Exchange rates considered

List of tables and figures are dummy in nature, final lists may vary in the final deliverable



List Of Figures

LIST OF FIGURES

- FIG 1. Global Oil-Free Screw Compressor Market, research methodology
- FIG 2. Global Oil-Free Screw Compressor Market, Market estimation techniques
- FIG 3. Global Market size estimates & forecast methods
- FIG 4. Global Oil-Free Screw Compressor Market, key trends 2022
- FIG 5. Global Oil-Free Screw Compressor Market, growth prospects 2023-2030
- FIG 6. Global Oil-Free Screw Compressor Market, porters 5 force model
- FIG 7. Global Oil-Free Screw Compressor Market, pest analysis
- FIG 8. Global Oil-Free Screw Compressor Market, value chain analysis
- FIG 9. Global Oil-Free Screw Compressor Market by segment, 2020 & 2030 (USD Billion)
- FIG 10. Global Oil-Free Screw Compressor Market by segment, 2020 & 2030 (USD Billion)
- FIG 11. Global Oil-Free Screw Compressor Market by segment, 2020 & 2030 (USD Billion)
- FIG 12. Global Oil-Free Screw Compressor Market by segment, 2020 & 2030 (USD Billion)
- FIG 13. Global Oil-Free Screw Compressor Market by segment, 2020 & 2030 (USD Billion)
- FIG 14. Global Oil-Free Screw Compressor Market, regional snapshot 2020 & 2030
- FIG 15. North America Oil-Free Screw Compressor Market 2020 & 2030 (USD Billion)
- FIG 16. Europe Oil-Free Screw Compressor Market 2020 & 2030 (USD Billion)
- FIG 17. Asia pacific Oil-Free Screw Compressor Market 2020 & 2030 (USD Billion)
- FIG 18. Latin America Oil-Free Screw Compressor Market 2020 & 2030 (USD Billion)
- FIG 19. Middle East & Africa Oil-Free Screw Compressor Market 2020 & 2030 (USD Billion)

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