

Robotic Drilling Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Component (Hardware and Software), By Installation Type (New Build and Retrofit), By Application (Onshore and Offshore), By End User (Oil & Gas, Construction, Mining, Others), By Region, By Competition, 2019-2029F

<https://marketpublishers.com/r/R6475498639AEN.html>

Date: May 2024

Pages: 180

Price: US\$ 4,500.00 (Single User License)

ID: R6475498639AEN

Abstracts

Global Robotic Drilling Market was valued at USD 650 million in 2023 and is anticipated to project robust growth in the forecast period with a CAGR of 7.19% through 2029. The Robotic Drilling market encompasses the global industry dedicated to the development, manufacturing, and utilization of robotic technologies for automated drilling operations in sectors such as oil and gas exploration, geothermal energy extraction, and mineral exploration. This market revolves around cutting-edge technologies that integrate robotics, artificial intelligence, and automation to enhance the efficiency, precision, and safety of drilling processes. Robotic drilling systems replace or augment traditional human-operated drilling equipment, offering solutions for both onshore and offshore applications. These advanced systems are equipped with sophisticated sensors, control mechanisms, and software algorithms that enable autonomous decision-making, adaptability to varying drilling conditions, and real-time data analysis. The market is driven by a continuous quest for operational excellence, cost-effectiveness, and the need to navigate challenging and remote drilling environments. With a focus on increasing efficiency, reducing human intervention, and adhering to safety and environmental standards, the Robotic Drilling market represents a transformative force in shaping the future of the global drilling industry.

Key Market Drivers

Technological Advancements and Innovations in Robotic Drilling

In recent years, the global robotic drilling market has been significantly driven by rapid technological advancements and innovative solutions in the field of drilling automation. The integration of advanced technologies such as artificial intelligence (AI), machine learning, and sensor technologies has revolutionized the drilling industry. These innovations have led to the development of highly sophisticated robotic drilling systems capable of enhancing efficiency, precision, and safety in drilling operations.

One key technological advancement is the use of autonomous drilling systems that can perform complex drilling tasks without human intervention. These systems leverage real-time data analysis and decision-making capabilities, optimizing drilling processes and minimizing the risk of errors. Additionally, the incorporation of advanced sensors enables robotic drilling systems to adapt to changing environmental conditions, ensuring optimal performance in various drilling scenarios.

The deployment of robotic drilling solutions equipped with advanced sensors allows for continuous monitoring of drilling parameters. This not only enhances the overall accuracy of drilling operations but also contributes to predictive maintenance, reducing downtime and improving the lifespan of drilling equipment. As the industry continues to invest in research and development, the technological landscape of robotic drilling is expected to evolve further, driving market growth.

Increasing Focus on Operational Efficiency and Cost Reduction

In an era marked by heightened competition and economic uncertainties, the global drilling industry is increasingly prioritizing operational efficiency and cost reduction. Robotic drilling systems play a pivotal role in achieving these objectives by streamlining drilling processes and minimizing human intervention. The automation of repetitive tasks not only enhances efficiency but also reduces the likelihood of errors, leading to improved overall operational performance.

The utilization of robotic drilling systems also results in reduced labor costs, as fewer human operators are required for drilling operations. This cost-saving aspect becomes particularly significant in offshore drilling environments, where the logistics of maintaining a large workforce can be challenging and costly. The continuous development of robotic drilling technologies that prioritize cost-effectiveness is expected to further drive market adoption, especially among oil and gas companies seeking

to optimize their operational expenditures.

Growing Exploration and Production Activities in Challenging Environments

The global energy industry is witnessing an increased focus on exploring and extracting resources from challenging and remote environments, such as deep-sea reserves and unconventional oil and gas fields. Robotic drilling systems are well-suited for such environments, where traditional drilling methods may be impractical or risky. The ability of robotic drilling systems to operate in harsh conditions, including extreme temperatures and high-pressure environments, makes them an ideal choice for challenging exploration and production activities.

As energy companies expand their operations into these difficult-to-reach areas, the demand for robotic drilling solutions is expected to surge. The reliability and efficiency of these systems in handling complex drilling scenarios contribute significantly to the growth of the global robotic drilling market.

Safety and Environmental Concerns Driving Automation Adoption

Safety and environmental considerations are paramount in the drilling industry, prompting a shift toward automation and robotics. Robotic drilling systems offer a safer alternative to traditional drilling methods by minimizing the exposure of human workers to hazardous conditions. The use of autonomous drilling systems reduces the risk of accidents, injuries, and fatalities associated with manual drilling operations.

The implementation of robotic drilling technologies contributes to environmental sustainability by minimizing the ecological impact of drilling activities. Automated systems can operate with greater precision, reducing the likelihood of spills or other environmental incidents. As regulatory bodies worldwide tighten environmental standards, the adoption of robotic drilling systems becomes not only a matter of safety but also a strategic response to evolving industry regulations.

Increasing Demand for Energy Resources

The ever-growing global demand for energy resources, driven by population growth, industrialization, and technological advancements, remains a fundamental driver of the robotic drilling market. As conventional reserves deplete, the industry is compelled to explore new and unconventional sources of energy. Robotic drilling systems enable efficient exploration and extraction from these diverse and often challenging

sources, ensuring a reliable supply of energy to meet escalating demand.

The deployment of robotic drilling technologies in unconventional resources, such as shale gas and oil sands, has become increasingly common. These systems enhance the feasibility and cost-effectiveness of extracting energy from unconventional reservoirs, contributing to the overall energy security of nations around the world. The rising demand for energy, coupled with the need for innovative drilling solutions, is expected to propel the growth of the robotic drilling market in the foreseeable future.

Global Trend Towards Industry 4.0 and Digital Transformation

The ongoing global trend towards Industry 4.0 and digital transformation is reshaping the landscape of various industries, including drilling. Robotic drilling systems are a key component of this transformation, offering advanced connectivity, data analytics, and real-time monitoring capabilities. The integration of these technologies into drilling operations enables better decision-making, increased efficiency, and proactive maintenance strategies.

Industry 4.0 principles emphasize the interconnectedness of devices and systems, fostering a seamless flow of information throughout the drilling process. Robotic drilling systems, equipped with smart sensors and communication technologies, contribute to the creation of intelligent drilling ecosystems. This interconnectedness allows operators to remotely monitor and control drilling operations, optimizing performance and reducing downtime.

The data generated by robotic drilling systems can be leveraged for predictive analytics, enabling proactive maintenance and minimizing equipment failures. As the global drilling industry embraces the digital era, the demand for robotic drilling solutions that align with Industry 4.0 principles is expected to rise, driving the market forward.

The global robotic drilling market is experiencing robust growth driven by a combination of technological advancements, a focus on operational efficiency and cost reduction, exploration in challenging environments, safety and environmental concerns, the increasing demand for energy resources, and the global trend towards Industry 4.0 and digital transformation. These drivers collectively contribute to the ongoing evolution and expansion of the robotic drilling market, positioning it as a crucial component of the future of the drilling industry.

Government Policies are Likely to Propel the Market

Incentives for Research and Development in Robotic Drilling Technologies

Governments across the globe are recognizing the strategic importance of fostering innovation and technological advancements in the field of robotic drilling. To propel the industry forward, various countries have implemented policies offering incentives for research and development (R&D) initiatives focused on advancing robotic drilling technologies.

These incentives may include tax credits, grants, and subsidies for companies engaged in R&D activities related to robotic drilling. By encouraging private sector investment in research, governments aim to stimulate the development of cutting-edge technologies that can enhance the efficiency, safety, and sustainability of drilling operations. These policies not only support the growth of domestic industries but also contribute to maintaining a competitive edge in the global market.

Through financial incentives, governments may collaborate with research institutions and industry stakeholders to establish research programs, promoting knowledge exchange and collaboration. The overarching goal is to create an ecosystem that fosters innovation in robotic drilling, positioning the nation at the forefront of technological advancements in the energy sector.

Regulatory Framework for Safety and Environmental Standards in Robotic Drilling

As the importance of safety and environmental sustainability gains prominence, governments worldwide are implementing stringent regulatory frameworks to govern robotic drilling operations. These policies aim to ensure the responsible and safe deployment of robotic drilling technologies while minimizing their impact on the environment.

Regulations often encompass safety standards for autonomous systems, requiring manufacturers and operators to adhere to specific guidelines to mitigate risks associated with robotic drilling. Environmental standards may address issues such as waste disposal, emissions control, and the prevention of environmental accidents during drilling operations.

Governments may encourage the adoption of best practices by providing certification processes that verify compliance with safety and environmental regulations. By establishing a robust regulatory framework, governments seek to instill confidence in

stakeholders, promote responsible industry practices, and safeguard the interests of both the public and the environment.

Investment Incentives for Adoption of Robotic Drilling Technologies

Recognizing the potential economic and operational benefits of robotic drilling technologies, governments are implementing policies that provide financial incentives for companies adopting these advanced systems. Such incentives may include tax breaks, subsidies, and grants to encourage the widespread adoption of robotic drilling solutions across various industries.

These policies aim to alleviate the initial financial burden associated with investing in robotic drilling technologies, making them more accessible to a broader range of businesses. By promoting the adoption of automation in drilling operations, governments aim to enhance overall productivity, reduce operational costs, and position their countries as leaders in technological innovation.

In addition to direct financial incentives, governments may also collaborate with industry stakeholders to develop training programs that facilitate the transition of the workforce toward operating and maintaining robotic drilling systems. This dual approach not only supports the industry's technological evolution but also ensures the development of a skilled workforce capable of managing advanced drilling technologies.

International Collaboration and Standardization for Robotic Drilling

Given the global nature of the drilling industry, governments are increasingly recognizing the importance of international collaboration and standardization in the development and deployment of robotic drilling technologies. Policymakers are actively engaging in partnerships with other nations, industry organizations, and international bodies to establish common standards that facilitate interoperability and ensure the seamless integration of robotic drilling systems on a global scale.

These collaborative efforts may involve the development of international guidelines, technical standards, and protocols for the design, operation, and maintenance of robotic drilling technologies. By aligning regulatory frameworks and industry standards, governments aim to create a level playing field for manufacturers and operators while promoting the global acceptance of robotic drilling solutions.

International collaboration can lead to shared research initiatives, knowledge

exchange, and joint projects that accelerate the development of innovative technologies. This policy approach not only fosters a spirit of cooperation but also positions nations at the forefront of the global robotic drilling market by contributing to the establishment of a cohesive and standardized industry.

Skill Development and Training Initiatives for Robotic Drilling Workforce

To ensure the successful integration of robotic drilling technologies, governments are implementing policies focused on skill development and training initiatives for the workforce. Recognizing the evolving nature of jobs in the drilling industry, policymakers are investing in educational programs and training courses that equip workers with the skills needed to operate, maintain, and troubleshoot robotic drilling systems.

These policies may involve collaborations between government agencies, educational institutions, and industry stakeholders to design comprehensive training programs. Training initiatives could cover a range of topics, including robotics, automation, data analytics, and cybersecurity to address the multifaceted skill set required in the era of robotic drilling.

By prioritizing workforce development, governments aim to mitigate concerns related to job displacement while ensuring that the workforce remains competitive and adaptable to technological changes. Additionally, these policies contribute to the overall economic resilience of nations by fostering a skilled workforce capable of driving innovation in the robotic drilling sector.

Export Promotion and Market Access Support for Robotic Drilling Companies

Governments are increasingly recognizing the export potential of domestic companies specializing in robotic drilling technologies. To support these companies in accessing global markets, policymakers are implementing export promotion and market access support policies.

Export promotion policies may include financial incentives, trade missions, and diplomatic efforts to showcase domestic robotic drilling technologies on the international stage. Governments may also negotiate trade agreements and partnerships that facilitate the smooth export of these technologies, removing barriers to entry in foreign markets.

To provide direct support, governments may collaborate with industry associations and trade

bodies provide market intelligence, guidance on regulatory compliance, and assistance in navigating the complexities of international trade. These policies aim to strengthen the global competitiveness of domestic robotic drilling companies, drive economic growth, and position the nation as a key player in the expanding global market for advanced drilling technologies.

Government policies play a pivotal role in shaping the global robotic drilling market. From incentivizing research and development to ensuring safety and environmental compliance, fostering international collaboration, promoting workforce development, and supporting market access for domestic companies, these policies collectively contribute to the growth, innovation, and competitiveness of the robotic drilling sector on a global scale.

Key Market Challenges

Initial Capital Investment and Implementation Costs

One of the significant challenges facing the global robotic drilling market is the substantial initial capital investment required for the adoption and implementation of robotic drilling technologies. The integration of advanced robotics, automation, and artificial intelligence into drilling operations demands a considerable upfront investment from companies in the energy sector.

The cost of acquiring, deploying, and maintaining robotic drilling systems, which includes specialized hardware, software, and training, can be a deterrent for many companies, particularly smaller and medium-sized enterprises. The financial commitment required for the transition to robotic drilling may pose challenges for companies operating on tight budgets or facing economic uncertainties.

The initial investment is not limited to the purchase of robotic equipment but extends to infrastructure modifications and the development of supporting technologies to enable seamless integration with existing drilling systems. Companies must invest in upgrading their communication networks, data storage capabilities, and cybersecurity infrastructure to accommodate the demands of robotic drilling, further increasing the overall implementation costs.

The challenge of high upfront expenses is exacerbated by the potential need for retrofitting existing drilling infrastructure to accommodate the new technologies. Companies may face complexities in aligning legacy systems with modern robotic

drilling solutions, leading to additional costs and potential disruptions in ongoing operations.

To address this challenge, industry stakeholders and governments need to collaborate on developing financial models, subsidies, or tax incentives that can help mitigate the initial capital burden. Governments can play a crucial role in promoting financial mechanisms that facilitate the transition to robotic drilling, fostering innovation and competitiveness within the industry.

Technological Integration and Interoperability Issues

Another critical challenge confronting the global robotic drilling market is the complexity associated with technological integration and interoperability. As the industry witnesses rapid advancements in robotic drilling technologies, ensuring seamless integration with existing systems and achieving interoperability between various components becomes a significant hurdle.

Robotic drilling systems rely on a diverse array of technologies, including sensors, communication networks, control systems, and data analytics platforms. Integrating these components in a way that ensures smooth communication and coordination poses technical challenges for companies seeking to adopt robotic drilling solutions. Incompatibility issues between different manufacturers' systems or between legacy infrastructure and new robotic technologies can result in operational inefficiencies and increased downtime.

The lack of standardized protocols and communication interfaces across the industry further exacerbates integration challenges. Without common standards, companies may face difficulties in achieving interoperability between different robotic drilling systems, hindering the development of a cohesive and interconnected ecosystem.

To address these challenges, industry stakeholders, standards organizations, and governments must collaborate to establish and promote industry-wide standards for robotic drilling technologies. Standardization efforts should encompass communication protocols, data formats, and interfaces, ensuring compatibility between diverse systems and facilitating the seamless exchange of information.

Companies investing in robotic drilling solutions need to conduct thorough assessments of their existing infrastructure and develop comprehensive integration plans. This includes evaluating the compatibility of new technologies with legacy

systems, implementing necessary upgrades, and establishing protocols for data exchange and communication.

By addressing the technological integration and interoperability challenges, the global robotic drilling market can unlock the full potential of these advanced technologies, fostering a more efficient, connected, and collaborative future for the drilling industry. The establishment of standards and best practices will play a pivotal role in overcoming these hurdles, enabling a smoother transition to robotic drilling and ensuring long-term success for companies embracing this transformative trend.

Key Market Trends

Increased Adoption of Autonomous Drilling Systems

One prominent trend shaping the Global Robotic Drilling Market is the accelerated adoption of autonomous drilling systems. Autonomous drilling systems utilize advanced robotics and artificial intelligence (AI) algorithms to execute drilling operations with minimal human intervention. These systems offer several advantages over traditional drilling methods, including improved safety, enhanced operational efficiency, and greater precision.

One key factor driving the adoption of autonomous drilling systems is the growing emphasis on safety in the oil and gas industry. By reducing the need for human workers to be present on the rig floor, autonomous drilling systems help mitigate the risk of accidents and injuries associated with manual drilling operations. Additionally, autonomous systems can operate continuously without fatigue, further enhancing safety and reducing the likelihood of errors.

Autonomous drilling systems are capable of optimizing drilling parameters in real-time based on downhole conditions and geologic data. This dynamic adjustment enables operators to achieve higher drilling speeds and more accurate wellbore placement, ultimately leading to increased productivity and reduced drilling costs. Furthermore, by leveraging AI and machine learning algorithms, autonomous systems can analyze vast amounts of data to identify patterns and trends, enabling operators to make data-driven decisions and optimize drilling performance.

Another driving force behind the adoption of autonomous drilling systems is the increasing focus on cost reduction and operational efficiency in the oil and gas industry. With autonomous systems, operators can minimize downtime, reduce non-productive

time, and optimize the use of drilling equipment and resources. Additionally, by streamlining drilling operations and improving drilling performance, autonomous systems help operators maximize the economic value of their assets and enhance overall profitability.

Looking ahead, the adoption of autonomous drilling systems is expected to continue to rise as operators seek to improve safety, reduce costs, and increase productivity in their drilling operations. As technology continues to advance and autonomous systems become more sophisticated, they have the potential to revolutionize the way drilling is conducted in the oil and gas industry, driving further growth and innovation in the Global Robotic Drilling Market.

Segmental Insights

Component Insights

The Hardware segment held the largest Market share in 2023. Robotic drilling involves the use of physical machines and devices, such as robotic arms, sensors, and other mechanical components, to perform drilling tasks autonomously. Hardware components are essential for the physical implementation of automation in drilling operations, providing the necessary tools for the robotic system to interact with the environment and execute tasks. Continuous advancements in hardware technologies have led to the development of more sophisticated and capable robotic drilling systems.

Innovations in materials, sensors, actuators, and other hardware components have enhanced the durability, precision, and adaptability of robotic drilling systems, making them more effective in various drilling environments. Drilling operations often take place in challenging and harsh environments, such as deep-sea exploration or unconventional reserves. Hardware components are designed to withstand these conditions, ensuring the reliability and longevity of robotic drilling systems. Many robotic drilling systems are designed to integrate with existing drilling infrastructure. Hardware components are crucial for retrofitting and adapting these systems to work seamlessly with conventional drilling equipment.

Hardware plays a pivotal role in ensuring the safety of robotic drilling operations. Physical components are designed to meet safety standards and regulations, reducing the risk of accidents and ensuring the well-being of workers and equipment. Hardware components provide tangible outputs and directly contribute to the

performance metrics of robotic drilling systems. The efficiency, speed, and precision of drilling operations are often evaluated based on the capabilities of the hardware used.

Regional Insights

North America held the largest market share in the Global Robotic Drilling Market in 2023.

North America, particularly the United States, is a global hub for technological innovation, including in the field of robotics. Companies in the region have been at the forefront of developing advanced robotic drilling systems and automation technologies for the oil and gas industry. These technologies aim to improve drilling efficiency, accuracy, and safety while reducing costs and environmental impact.

The shale revolution in North America, particularly in regions such as the Permian Basin, Eagle Ford Shale, and Bakken Formation, has driven significant advancements in drilling techniques and technologies. Robotic drilling systems play a crucial role in unlocking the vast reserves of oil and gas trapped in unconventional reservoirs by enabling precise and controlled drilling operations in challenging geological formations.

The oil and gas industry in North America faces pressures to reduce drilling costs and improve operational efficiency, especially during periods of fluctuating oil prices. Robotic drilling systems offer cost-effective solutions by automating repetitive tasks, optimizing drilling parameters, and minimizing downtime. As a result, there is a growing adoption of robotic drilling technologies among operators and drilling contractors in North America.

North America has a well-established regulatory framework governing oil and gas operations, including drilling activities. Regulatory agencies such as the Bureau of Safety and Environmental Enforcement (BSEE) in the United States set standards and requirements to ensure the safety, environmental protection, and integrity of drilling operations. Compliance with regulatory mandates drives the adoption of advanced drilling technologies, including robotic systems, to meet stringent safety and environmental standards.

North America has a highly skilled workforce and a robust ecosystem of oilfield service companies, technology providers, research institutions, and universities specializing in drilling and completion technologies. This industry expertise and collaboration facilitate the development, testing, and commercialization of robotic drilling systems tailored

the unique challenges and requirements of North American oil and gas fields.

The growing demand for oil and gas, coupled with the development of unconventional resources, drives investment in drilling technologies and equipment in North America. Companies operating in the region invest in robotic drilling systems to enhance drilling efficiency, increase production rates, and maximize recovery from oil and gas reservoirs. The strong market demand for robotic drilling solutions further strengthens North America's dominance in the global market.

Key Market Players

Baker Hughes Company

Halliburton Energy Services Inc.

Schlumberger Limited

NOV Inc.

Caterpillar Inc.

Atlas Copco AB

Sandvik AB

ABB Ltd.

Mitsubishi Heavy Industries, Ltd.

Herrenknecht AG

Report Scope:

In this report, the Global Robotic Drilling Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Robotic Drilling Market, By Component:

Hardware

Software

Robotic Drilling Market, By Installation Type:

New Build

Retrofit

Robotic Drilling Market, By Application:

Onshore

Offshore

Robotic Drilling Market, By End User:

Oil & Gas

Construction

Mining

Others

Robotic Drilling Market, By Region:

North America

United States

Canada

Mexico

Europe

France

United Kingdom

Italy

Germany

Spain

Asia-Pacific

China

India

Japan

Australia

South Korea

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Kuwait

Turkey

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Robotic Drilling Market.

Available Customizations:

Global Robotic Drilling Market report with the given Market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional Market players (up to five).

Contents

1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
 - 1.2.1. Markets Covered
 - 1.2.2. Years Considered for Study
- 1.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Formulation of the Scope
- 2.4. Assumptions and Limitations
- 2.5. Sources of Research
 - 2.5.1. Secondary Research
 - 2.5.2. Primary Research
- 2.6. Approach for the Market Study
 - 2.6.1. The Bottom-Up Approach
 - 2.6.2. The Top-Down Approach
- 2.7. Methodology Followed for Calculation of Market Size & Market Shares
- 2.8. Forecasting Methodology
 - 2.8.1. Data Triangulation & Validation

3. EXECUTIVE SUMMARY

4. VOICE OF CUSTOMER

5. GLOBAL ROBOTIC DRILLING MARKET OUTLOOK

- 5.1. Market Size & Forecast
 - 5.1.1. By Value
- 5.2. Market Share & Forecast
 - 5.2.1. By Component (Hardware and Software)
 - 5.2.2. By Installation Type (New Build and Retrofit)
 - 5.2.3. By End User (Oil & Gas, Construction, Mining, Others)
 - 5.2.4. By Application (Onshore and Offshore)

- 5.2.5. By Region
- 5.2.6. By Company (2023)
- 5.3. Market Map

6. NORTH AMERICA ROBOTIC DRILLING MARKET OUTLOOK

- 6.1. Market Size & Forecast
 - 6.1.1. By Value
- 6.2. Market Share & Forecast
 - 6.2.1. By Component
 - 6.2.2. By Installation Type
 - 6.2.3. By End User
 - 6.2.4. By Application
 - 6.2.5. By Country
- 6.3. North America: Country Analysis
 - 6.3.1. United States Robotic Drilling Market Outlook
 - 6.3.1.1. Market Size & Forecast
 - 6.3.1.1.1. By Value
 - 6.3.1.2. Market Share & Forecast
 - 6.3.1.2.1. By Component
 - 6.3.1.2.2. By Installation Type
 - 6.3.1.2.3. By End User
 - 6.3.1.2.4. By Application
 - 6.3.2. Canada Robotic Drilling Market Outlook
 - 6.3.2.1. Market Size & Forecast
 - 6.3.2.1.1. By Value
 - 6.3.2.2. Market Share & Forecast
 - 6.3.2.2.1. By Component
 - 6.3.2.2.2. By Installation Type
 - 6.3.2.2.3. By End User
 - 6.3.2.2.4. By Application
 - 6.3.3. Mexico Robotic Drilling Market Outlook
 - 6.3.3.1. Market Size & Forecast
 - 6.3.3.1.1. By Value
 - 6.3.3.2. Market Share & Forecast
 - 6.3.3.2.1. By Component
 - 6.3.3.2.2. By Installation Type
 - 6.3.3.2.3. By End User
 - 6.3.3.2.4. By Application

7. EUROPE ROBOTIC DRILLING MARKET OUTLOOK

7.1. Market Size & Forecast

7.1.1. By Value

7.2. Market Share & Forecast

7.2.1. By Component

7.2.2. By Installation Type

7.2.3. By End User

7.2.4. By Application

7.2.5. By Country

7.3. Europe: Country Analysis

7.3.1. Germany Robotic Drilling Market Outlook

7.3.1.1. Market Size & Forecast

7.3.1.1.1. By Value

7.3.1.2. Market Share & Forecast

7.3.1.2.1. By Component

7.3.1.2.2. By Installation Type

7.3.1.2.3. By End User

7.3.1.2.4. By Application

7.3.2. United Kingdom Robotic Drilling Market Outlook

7.3.2.1. Market Size & Forecast

7.3.2.1.1. By Value

7.3.2.2. Market Share & Forecast

7.3.2.2.1. By Component

7.3.2.2.2. By Installation Type

7.3.2.2.3. By End User

7.3.2.2.4. By Application

7.3.3. Italy Robotic Drilling Market Outlook

7.3.3.1. Market Size & Forecast

7.3.3.1.1. By Value

7.3.3.2. Market Share & Forecast

7.3.3.2.1. By Component

7.3.3.2.2. By Installation Type

7.3.3.2.3. By End User

7.3.3.2.4. By Application

7.3.4. France Robotic Drilling Market Outlook

7.3.4.1. Market Size & Forecast

7.3.4.1.1. By Value

7.3.4.2. Market Share & Forecast

7.3.4.2.1. By Component

7.3.4.2.2. By Installation Type

7.3.4.2.3. By End User

7.3.4.2.4. By Application

7.3.5. Spain Robotic Drilling Market Outlook

7.3.5.1. Market Size & Forecast

7.3.5.1.1. By Value

7.3.5.2. Market Share & Forecast

7.3.5.2.1. By Component

7.3.5.2.2. By Installation Type

7.3.5.2.3. By End User

7.3.5.2.4. By Application

8. ASIA-PACIFIC ROBOTIC DRILLING MARKET OUTLOOK

8.1. Market Size & Forecast

8.1.1. By Value

8.2. Market Share & Forecast

8.2.1. By Component

8.2.2. By Installation Type

8.2.3. By End User

8.2.4. By Application

8.2.5. By Country

8.3. Asia-Pacific: Country Analysis

8.3.1. China Robotic Drilling Market Outlook

8.3.1.1. Market Size & Forecast

8.3.1.1.1. By Value

8.3.1.2. Market Share & Forecast

8.3.1.2.1. By Component

8.3.1.2.2. By Installation Type

8.3.1.2.3. By End User

8.3.1.2.4. By Application

8.3.2. India Robotic Drilling Market Outlook

8.3.2.1. Market Size & Forecast

8.3.2.1.1. By Value

8.3.2.2. Market Share & Forecast

8.3.2.2.1. By Component

8.3.2.2.2. By Installation Type

- 8.3.2.2.3. By End User
- 8.3.2.2.4. By Application
- 8.3.3. Japan Robotic Drilling Market Outlook
 - 8.3.3.1. Market Size & Forecast
 - 8.3.3.1.1. By Value
 - 8.3.3.2. Market Share & Forecast
 - 8.3.3.2.1. By Component
 - 8.3.3.2.2. By Installation Type
 - 8.3.3.2.3. By End User
 - 8.3.3.2.4. By Application
- 8.3.4. South Korea Robotic Drilling Market Outlook
 - 8.3.4.1. Market Size & Forecast
 - 8.3.4.1.1. By Value
 - 8.3.4.2. Market Share & Forecast
 - 8.3.4.2.1. By Component
 - 8.3.4.2.2. By Installation Type
 - 8.3.4.2.3. By End User
 - 8.3.4.2.4. By Application
- 8.3.5. Australia Robotic Drilling Market Outlook
 - 8.3.5.1. Market Size & Forecast
 - 8.3.5.1.1. By Value
 - 8.3.5.2. Market Share & Forecast
 - 8.3.5.2.1. By Component
 - 8.3.5.2.2. By Installation Type
 - 8.3.5.2.3. By End User
 - 8.3.5.2.4. By Application

9. SOUTH AMERICA ROBOTIC DRILLING MARKET OUTLOOK

- 9.1. Market Size & Forecast
 - 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Component
 - 9.2.2. By Installation Type
 - 9.2.3. By End User
 - 9.2.4. By Application
 - 9.2.5. By Country
- 9.3. South America: Country Analysis
 - 9.3.1. Brazil Robotic Drilling Market Outlook

- 9.3.1.1. Market Size & Forecast
 - 9.3.1.1.1. By Value
- 9.3.1.2. Market Share & Forecast
 - 9.3.1.2.1. By Component
 - 9.3.1.2.2. By Installation Type
 - 9.3.1.2.3. By End User
 - 9.3.1.2.4. By Application
- 9.3.2. Argentina Robotic Drilling Market Outlook
 - 9.3.2.1. Market Size & Forecast
 - 9.3.2.1.1. By Value
 - 9.3.2.2. Market Share & Forecast
 - 9.3.2.2.1. By Component
 - 9.3.2.2.2. By Installation Type
 - 9.3.2.2.3. By End User
 - 9.3.2.2.4. By Application
- 9.3.3. Colombia Robotic Drilling Market Outlook
 - 9.3.3.1. Market Size & Forecast
 - 9.3.3.1.1. By Value
 - 9.3.3.2. Market Share & Forecast
 - 9.3.3.2.1. By Component
 - 9.3.3.2.2. By Installation Type
 - 9.3.3.2.3. By End User
 - 9.3.3.2.4. By Application

10. MIDDLE EAST AND AFRICA ROBOTIC DRILLING MARKET OUTLOOK

- 10.1. Market Size & Forecast
 - 10.1.1. By Value
- 10.2. Market Share & Forecast
 - 10.2.1. By Component
 - 10.2.2. By Installation Type
 - 10.2.3. By End User
 - 10.2.4. By Application
 - 10.2.5. By Country
- 10.3. Middle East and Africa: Country Analysis
 - 10.3.1. South Africa Robotic Drilling Market Outlook
 - 10.3.1.1. Market Size & Forecast
 - 10.3.1.1.1. By Value
 - 10.3.1.2. Market Share & Forecast

- 10.3.1.2.1. By Component
- 10.3.1.2.2. By Installation Type
- 10.3.1.2.3. By End User
- 10.3.1.2.4. By Application
- 10.3.2. Saudi Arabia Robotic Drilling Market Outlook
 - 10.3.2.1. Market Size & Forecast
 - 10.3.2.1.1. By Value
 - 10.3.2.2. Market Share & Forecast
 - 10.3.2.2.1. By Component
 - 10.3.2.2.2. By Installation Type
 - 10.3.2.2.3. By End User
 - 10.3.2.2.4. By Application
- 10.3.3. UAE Robotic Drilling Market Outlook
 - 10.3.3.1. Market Size & Forecast
 - 10.3.3.1.1. By Value
 - 10.3.3.2. Market Share & Forecast
 - 10.3.3.2.1. By Component
 - 10.3.3.2.2. By Installation Type
 - 10.3.3.2.3. By End User
 - 10.3.3.2.4. By Application
- 10.3.4. Kuwait Robotic Drilling Market Outlook
 - 10.3.4.1. Market Size & Forecast
 - 10.3.4.1.1. By Value
 - 10.3.4.2. Market Share & Forecast
 - 10.3.4.2.1. By Component
 - 10.3.4.2.2. By Installation Type
 - 10.3.4.2.3. By End User
 - 10.3.4.2.4. By Application
- 10.3.5. Turkey Robotic Drilling Market Outlook
 - 10.3.5.1. Market Size & Forecast
 - 10.3.5.1.1. By Value
 - 10.3.5.2. Market Share & Forecast
 - 10.3.5.2.1. By Component
 - 10.3.5.2.2. By Installation Type
 - 10.3.5.2.3. By End User
 - 10.3.5.2.4. By Application

11. MARKET DYNAMICS

11.1. Drivers

11.2. Challenges

12. MARKET TRENDS & DEVELOPMENTS

13. COMPANY PROFILES

13.1. Baker Hughes Company

13.1.1. Business Overview

13.1.2. Key Revenue and Financials

13.1.3. Recent Developments

13.1.4. Key Personnel/Key Contact Person

13.1.5. Key Product/Services Offered

13.2. Halliburton Energy Services Inc.

13.2.1. Business Overview

13.2.2. Key Revenue and Financials

13.2.3. Recent Developments

13.2.4. Key Personnel/Key Contact Person

13.2.5. Key Product/Services Offered

13.3. Schlumberger Limited

13.3.1. Business Overview

13.3.2. Key Revenue and Financials

13.3.3. Recent Developments

13.3.4. Key Personnel/Key Contact Person

13.3.5. Key Product/Services Offered

13.4. NOV Inc.

13.4.1. Business Overview

13.4.2. Key Revenue and Financials

13.4.3. Recent Developments

13.4.4. Key Personnel/Key Contact Person

13.4.5. Key Product/Services Offered

13.5. Caterpillar Inc.

13.5.1. Business Overview

13.5.2. Key Revenue and Financials

13.5.3. Recent Developments

13.5.4. Key Personnel/Key Contact Person

13.5.5. Key Product/Services Offered

13.6. Atlas Copco AB

13.6.1. Business Overview

- 13.6.2. Key Revenue and Financials
- 13.6.3. Recent Developments
- 13.6.4. Key Personnel/Key Contact Person
- 13.6.5. Key Product/Services Offered

13.7. Sandvik AB

- 13.7.1. Business Overview
- 13.7.2. Key Revenue and Financials
- 13.7.3. Recent Developments
- 13.7.4. Key Personnel/Key Contact Person
- 13.7.5. Key Product/Services Offered

13.8. ABB Ltd.

- 13.8.1. Business Overview
- 13.8.2. Key Revenue and Financials
- 13.8.3. Recent Developments
- 13.8.4. Key Personnel/Key Contact Person
- 13.8.5. Key Product/Services Offered

13.9. Mitsubishi Heavy Industries, Ltd.

- 13.9.1. Business Overview
- 13.9.2. Key Revenue and Financials
- 13.9.3. Recent Developments
- 13.9.4. Key Personnel/Key Contact Person
- 13.9.5. Key Product/Services Offered

13.10. Herrenknecht AG

- 13.10.1. Business Overview
- 13.10.2. Key Revenue and Financials
- 13.10.3. Recent Developments
- 13.10.4. Key Personnel/Key Contact Person
- 13.10.5. Key Product/Services Offered

14. STRATEGIC RECOMMENDATIONS

15. ABOUT US & DISCLAIMER

I would like to order

Product name: Robotic Drilling Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Component (Hardware and Software), By Installation Type (New Build and Retrofit), By Application (Onshore and Offshore), By End User (Oil & Gas, Construction, Mining, Others), By Region, By Competition, 2019-2029F

Product link: <https://marketpublishers.com/r/R6475498639AEN.html>

Price: US\$ 4,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/R6475498639AEN.html>