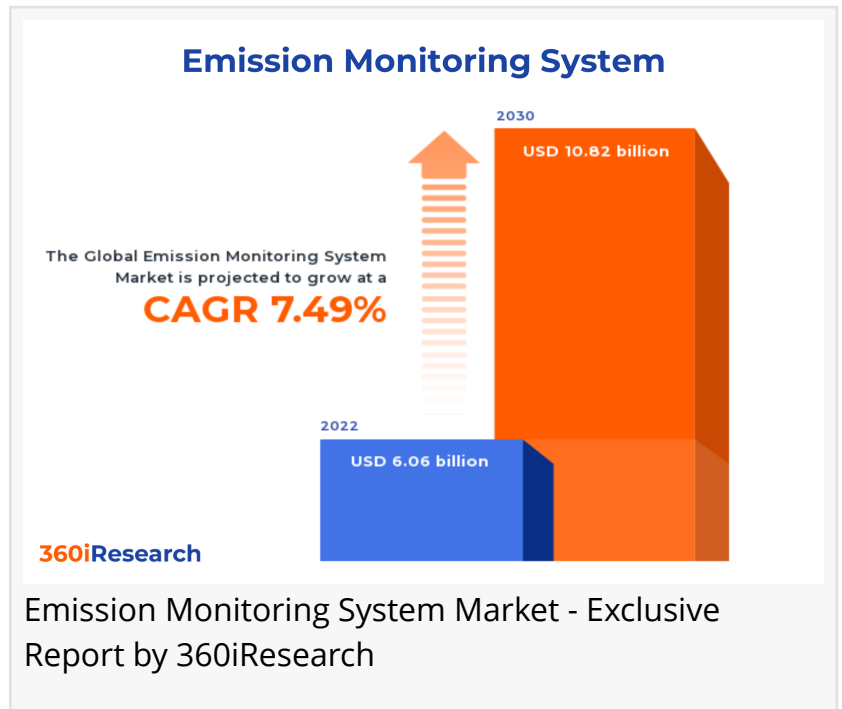


Emission Monitoring System Market worth \$10.82 billion by 2030 - Exclusive Report by 360iResearch

The Global Emission Monitoring System Market to grow from USD 6.06 billion in 2022 to USD 10.82 billion by 2030, at a CAGR of 7.49%.

PUNE, MAHARASHTRA, INDIA,
November 10, 2023 /
EINPresswire.com/ -- The "[Emission Monitoring System Market](#) by System Type (Continuous Emission Monitoring System, Predictive Emission Monitoring System), Component (Hardware, Services, Software), End-User - Global Forecast 2023-2030" report has been added to 360iResearch.com's offering.



The Global Emission Monitoring System Market to grow from USD 6.06 billion in 2022 to USD 10.82 billion by 2030, at a CAGR of 7.49%.

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

The emission monitoring system (EMS) is used to monitor and measure the release of pollutants into the environment. This system monitors the levels of oxygen, carbon monoxide, and carbon dioxide in flue gas, which occurs due to combustion in industrial processes, and ensures that companies and industries comply with environmental regulations and standards. The monitoring process involves using sensors and instruments that measure the concentration of pollutants in the emissions. The data collected from this monitoring system can be used to identify areas where pollution control measures need to be improved and to track the effectiveness of existing pollution control technologies. Environmental awareness and concerns about climate change are driving demand for the EMS system. The awareness of the environmental consequences of industrial activities is increasing, highlighting the importance of

reducing emissions to address the adverse impacts of climate change. The increase in power generation & chemical industries boosts the deployment of the emission monitoring system across the industries. Furthermore, it is difficult for small industries and businesses to invest in EMS due to the high cost of the emission monitoring system. Ongoing technological advancements in continuous and predictive emissions monitoring and a rising number of industries create lucrative opportunities for the emission monitoring system market growth.

Component: Increasing deployment of emission monitoring software due to enhanced flexibility of integrating with enterprise infrastructures

Hardware components are vital for the proper functioning of an EMS as they include sensors, analyzers, and data acquisition systems that detect and measure pollutants. Need-based preferences for hardware depend on the type of industry, regulatory compliance requirements, and specific pollutant emissions being monitored. Services are essential for the successful implementation and maintenance of an EMS. These include consultation services for system design and installation, training services for staff to operate the system effectively, maintenance services to ensure optimal performance, and support services for troubleshooting issues related to hardware or software. The service preference depends on factors such as organizational resources available for system management, in-house expertise levels on emissions monitoring technology, and budget constraints. Software plays a crucial role in EMS by providing data analysis, reporting, and compliance management tools. The need-based preference for software is determined by factors such as ease of use, compatibility with existing hardware components, flexibility in integrating with other enterprise systems, and scalability to accommodate future growth or changes in regulatory requirements. Hardware selection prioritizes accuracy and reliability; services enhance system implementation and maintenance, while software emphasizes user-friendly interfaces and seamless integration within existing infrastructure.

End-User: Rising applications of emission monitoring systems in chemical & fertilizer industries
The need for emission monitoring systems in the building materials industry is crucial, as it helps ensure compliance with environmental regulations and minimize harmful pollutants from cement, brick, and glass manufacturing processes. Emission monitoring systems are vital in controlling and reducing air pollutants from chemical and fertilizer production processes. The international regulations on sulfur emissions are becoming more stringent, increasing demand for effective emission monitoring systems for marine vessels to reduce their environmental impact. The metals and mining sector requires reliable emission monitoring to ensure compliance with air quality standards due to significant pollutant emissions during extraction and processing activities. Emission monitoring systems are essential for the oil & gas industry, as they assist in reducing greenhouse gas emissions and ensuring compliance with environmental regulations. Emission monitoring is crucial for pharmaceutical facilities to control volatile organic compounds (VOCs) emitted during drug production. The power generation industry requires stringent emission monitoring due to the significant amounts of pollutants released during electricity generation. Emission monitoring is crucial in the pulp and paper industry due to the release of harmful chemicals during wood processing stages. Emission monitoring systems are essential for waste incineration facilities to ensure the reduction of pollutants and compliance

with environmental regulations.

System Type: Significant penetration of Continuous Emission Monitoring System (CEMS) across the industrial sector

A continuous emission monitoring system (CEMS) is used for real-time collection, measurement, and analysis of gaseous emissions released from industrial processes. This system is essential in meeting regulatory compliance standards and ensuring that industries maintain emission limits set by environmental agencies. CEMS is preferred for applications with strict emission limits or where constant monitoring of pollutants is required. Key components of CEMS include gas analyzers, sample conditioning systems, data acquisition systems, and calibration equipment. These systems monitor parameters such as sulfur dioxide (SO₂), nitrogen oxide (NO_x), carbon monoxide (CO), carbon dioxide (CO₂), oxygen (O₂), and volatile organic compounds (VOCs). A predictive emission monitoring system (PEMS) is an alternative to traditional CEMS that uses advanced software algorithms to estimate pollutant concentrations in real time. PEMS are preferred in applications where direct measurement of pollutant emissions is not practical or cost-effective, such as smaller-scale operations or industries with lower emission limits. PEMS utilizes historical process data and correlations with measured emissions to create a mathematical model that predicts emission levels based on operating conditions. CEMS offers real-time measurement and analysis of gaseous emissions released from industrial processes, making them ideal for applications requiring strict compliance with regulatory standards. In contrast, PEMS estimates pollutant concentrations using mathematical models based on historical process data and correlations.

Regional Insights:

The Environmental Protection Agency of the Americas issues various guidelines and enforces rules and regulations to curb excessive pollution. The U.S. and Canada play a considerable role in environmental pollution owing to comprehensive industrial development, massive oil & gas exploration, and technological revolution. Government agencies are imposing hefty fines on emission violations against the emission secretions from power plants and chemical factories. Therefore, industries are adopting a continuous emission monitoring system to monitor and control gas emissions. Europe is acting sternly to mitigate the ever-increasing GHG and drafting harsh policies to reduce carbon emissions. The increasing adoption of the emission monitoring system across the automotive industry and the rising concern about environmental degradation are expected to propel market growth. The Asia-Pacific represents significant growth in the emission control system market owing to massive progress across the region. Additionally, a continuous initiative by the Government of India under the Make in India scheme expanded business opportunities. In China, the government is pushing for new projects, and private entities are investing owing to the high market potential, which is escalating the market growth of the emission monitoring system. The oil-rich nations' increasing demand for hydrocarbons has enlarged the production of oil and gas, which deteriorates the quality of the environment across EMEA. Moreover, industrial processes in the Middle East and Africa have put forward specific guidelines for establishing, applying, maintaining, and reviewing of the performance of the continuous emission monitoring system.

FPNV Positioning Matrix:

The FPNV Positioning Matrix is essential for assessing the Emission Monitoring System 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 Emission Monitoring System 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 Emission Monitoring System Market, highlighting leading vendors and their innovative profiles. These include ABB Ltd., ACOEM Group, AMETEK, Inc., Anodyne Water Engineering Company Pvt. Ltd., Applied Techno Engineers Private Limited, Baker Hughes Company, Chemtrols Industries Ltd., CODEL International Ltd., Cummins Inc., Custom Instrumentation Services Corporation, DURAG Holding AG, Eaton Corporation PLC, Emerson Electric Co., ENVEA Group, ESC Spectrum, Exploration Robotics Technologies Inc., Forbes Marshall Pvt. Ltd., Fuji Electric Co., Ltd., Gasmet Technologies Oy, General Electric Company, Honeywell International Inc., Horiba, Ltd., Intertek Group PLC, KCH Services Incorporated, Mechanical Systems, Inc., Mitsubishi Heavy Industries, Ltd., Oizom Instruments Pvt. Ltd., Parker-Hannifin Corporation, Protea Ltd., Rockwell Automation, Inc., SGS SA, Sick AG, Siemens AG, Teledyne Technologies, Inc., and Thermo Fisher Scientific, Inc..

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

Market Segmentation & Coverage:

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

Based on System Type, market is studied across Continuous Emission Monitoring System and Predictive Emission Monitoring System. The Continuous Emission Monitoring System commanded largest market share of 68.57% in 2022, followed by Predictive Emission Monitoring

System.

Based on Component, market is studied across Hardware, Services, and Software. The Services is further studied across Installation & Deployment, Support & Maintenance, and Training. The Hardware commanded largest market share of 48.65% in 2022, followed by Services.

Based on End-User, market is studied across Building Materials, Chemical & Fertilizer, Marine & Shipping, Metals & Mining, Oil & Gas, Pharmaceutical, Power Generation, Pulp & Paper, and Waste Incineration. The Chemical & Fertilizer commanded largest market share of 19.84% in 2022, followed by Oil & Gas.

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 Alabama, California, Florida, Illinois, Michigan, Minnesota, 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 Americas commanded largest market share of 40.78% in 2022, followed by Europe, Middle East & Africa.

Key Topics Covered:

1. Preface
2. Research Methodology
3. Executive Summary
4. Market Overview
5. Market Insights
6. Emission Monitoring System Market, by System Type
7. Emission Monitoring System Market, by Component
8. Emission Monitoring System Market, by End-User
9. Americas Emission Monitoring System Market
10. Asia-Pacific Emission Monitoring System Market
11. Europe, Middle East & Africa Emission Monitoring System Market
12. Competitive Landscape
13. Competitive Portfolio
14. 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 Emission Monitoring System Market?

2. Which are the products/segments/applications/areas to invest in over the forecast period in the Emission Monitoring System Market?

3. What is the competitive strategic window for opportunities in the Emission Monitoring System Market?

4. What are the technology trends and regulatory frameworks in the Emission Monitoring System Market?

5. What is the market share of the leading vendors in the Emission Monitoring System Market?

6. What modes and strategic moves are considered suitable for entering the Emission Monitoring System Market?

Read More @ https://www.360iresearch.com/library/intelligence/emission-monitoring-system?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/667662154>

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.