

Air Brake System Market - Global Industry Size, Share, Trends Opportunity, and Forecast, Segmented By Technology (T.C.S. (Traction Control System), E.S.C. (Electronic Stability Control), EBD (Electronic Brake-Force Distribution), A.B.S. (Anti-Lock Braking System)), By Vehicle Type (Heavy-Duty, Rigid Body, Semi-Trailer, Bus), By Application (Passenger Cars, Commercial Vehicles), By Region, Competition, 2018-2028

Market Report | 2023-11-07 | 175 pages | TechSci Research

AVAILABLE LICENSES:

- Single User License \$4900.00
- Multi-User License \$5900.00
- Custom Research License \$8900.00

Report description:

The Global Air Brake System Market size reached USD 5.81 Billion in 2022 and is expected to grow with a CAGR of 5.94% in the forecast period.

The Global Air Brake System Market is a vital component of the automotive industry, providing crucial safety and control mechanisms for various vehicles, particularly heavy-duty commercial ones. This system primarily relies on compressed air to actuate brakes, offering robust and reliable braking performance. The market is driven by the increasing demand for heavy-duty vehicles globally, with the rising transportation of goods and the expansion of logistics networks.

One of the key drivers of the market is the stringent safety regulations imposed by governments and regulatory bodies worldwide. Air brake systems are essential for ensuring the safe operation of heavy vehicles, especially in challenging conditions. The market is witnessing continuous innovation, with advancements in technology aimed at enhancing the efficiency, reliability, and responsiveness of air brake systems. Manufacturers are focusing on developing intelligent braking solutions, incorporating features such as electronic controls and advanced sensors to optimize braking performance.

The aftermarket segment also plays a significant role in the air brake system market, driven by the need for regular maintenance, repair, and replacement of components to ensure vehicle safety and compliance with regulations. Additionally, the adoption of air

brake systems in emerging economies is on the rise as these regions witness increased industrialization, infrastructure development, and the expansion of commercial transportation.

However, challenges exist, including the complexity of integrating electronic components into traditional air brake systems and the need for skilled technicians for maintenance. Market players are addressing these challenges through research and development initiatives, aiming to deliver more sophisticated and user-friendly air brake solutions.

In summary, the Global Air Brake System Market is integral to the safe and efficient operation of heavy-duty vehicles, with a strong focus on regulatory compliance and technological advancements driving its evolution. As the demand for transportation and logistics continues to grow globally, the market is expected to witness sustained development, with an emphasis on safety and innovation in braking technology.

Key Market Drivers

Increasing Demand for Heavy-Duty Vehicles

The Global Air Brake System Market is significantly driven by the escalating demand for heavy-duty vehicles, including trucks and buses, fueled by the expansion of logistics, construction, and infrastructure sectors. As economies grow, the need for robust and reliable braking systems in large commercial vehicles continues to rise.

Stringent Safety Regulations

Stringent safety regulations and standards imposed by governments and regulatory bodies globally play a pivotal role in propelling the air brake system market. These regulations mandate the installation of advanced braking systems to enhance vehicle safety, particularly in heavy-duty applications, contributing to the market's sustained growth.

Continuous Technological Advancements

The market is characterized by continuous technological advancements aimed at improving the efficiency and performance of air brake systems. Manufacturers are investing in research and development to introduce innovations such as electronic controls, smart braking features, and advanced sensors, contributing to enhanced safety and responsiveness in braking operations. Growth of Aftermarket Segment

The aftermarket segment is a significant driver, as the need for regular maintenance, repair, and replacement of air brake system components remains crucial for ensuring vehicle safety and compliance. The aftermarket segment is driven by the expanding fleet of heavy-duty vehicles globally and the necessity for timely servicing to meet regulatory requirements. Expansion in Emerging Economies

The air brake system market benefits from the expanding industrialization and infrastructure development in emerging economies. As these regions witness a surge in commercial transportation needs, the adoption of air brake systems in heavy-duty vehicles is on the rise, contributing to the overall market growth.

Focus on Fuel Efficiency

Manufacturers are increasingly incorporating features in air brake systems that contribute to fuel efficiency. Advanced braking technologies aim to optimize the energy usage within the braking system, enhancing overall vehicle efficiency and aligning with the industry's emphasis on sustainability and reduced fuel consumption.

Rising Global Trade and Logistics Activities

The growth of global trade and logistics activities drives the demand for heavy-duty vehicles equipped with efficient braking systems. Air brake systems play a crucial role in ensuring the safe and reliable operation of commercial vehicles involved in transporting goods across borders, influencing the market positively.

Increasing Adoption in Passenger Vehicles

The adoption of air brake systems is expanding beyond traditional heavy-duty applications, with an increasing presence in certain passenger vehicles and SUVs. This diversification of applications contributes to the market's growth, broadening its scope beyond commercial and industrial sectors.

Key Market Challenges

Cost Constraints

One of the primary challenges faced by the Global Air Brake System Market is the cost constraints associated with the development and implementation of advanced braking technologies. Manufacturers often encounter difficulties in striking a balance between incorporating innovative features to meet stringent safety standards and ensuring affordability for both vehicle

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

manufacturers and end-users.

Integration of Electronic Components

The integration of electronic components into traditional air brake systems poses a significant challenge. While advancements such as electronic controls and smart braking features enhance overall system efficiency, the compatibility and seamless integration of these electronic elements with existing systems demand meticulous engineering and can lead to complexities in design and maintenance.

Skilled Technician Availability

The complexity of air brake systems, particularly with the integration of electronic components, necessitates skilled technicians for installation, maintenance, and repair. The shortage of qualified professionals poses a challenge for manufacturers and service providers, impacting the efficient deployment and upkeep of air brake systems in the market.

Regulatory Compliance Variability

The variability in regulatory compliance standards across different regions poses challenges for manufacturers operating in the Global Air Brake System Market. Adhering to diverse and evolving regulatory frameworks requires flexibility in design and production processes, adding complexity and potential delays to market entry and product development. Environmental Impact Concerns

As the automotive industry increasingly focuses on environmental sustainability, concerns about the environmental impact of certain braking system components, such as brake dust containing harmful particulates, emerge as challenges. Manufacturers must address these concerns through innovations that reduce environmental footprints without compromising braking performance.

Adoption of Alternative Propulsion Technologies

The growing adoption of alternative propulsion technologies, including electric and hydrogen-powered vehicles, presents a challenge to the air brake system market. As the automotive landscape shifts towards cleaner energy sources, the demand for traditional air brake systems in vehicles with alternative powertrains may see alterations, requiring adaptation strategies. Complexity in Global Supply Chains

The complexity of global supply chains, influenced by factors like geopolitical tensions and disruptions such as the COVID-19 pandemic, poses challenges for manufacturers in sourcing raw materials and components. Supply chain disruptions can lead to delays in production and affect the overall market dynamics.

Rapid Technological Obsolescence

The rapid pace of technological advancements in the automotive industry contributes to the challenge of potential technological obsolescence. Manufacturers must continually invest in research and development to stay ahead of evolving technologies and market preferences, ensuring their air brake systems remain competitive and aligned with industry trends.

Addressing these challenges requires a strategic and adaptive approach from market participants, encompassing technological innovation, regulatory compliance strategies, and efforts to enhance the overall sustainability and efficiency of air brake systems. Key Market Trends

Integration of Advanced Safety Features

A prominent trend in the Global Air Brake System Market is the integration of advanced safety features. Manufacturers are incorporating technologies such as electronic stability control, collision avoidance systems, and autonomous braking capabilities into air brake systems. This trend aligns with the industry's focus on enhancing overall vehicle safety, reducing accidents, and mitigating the severity of collisions.

Shift Towards Electronically Controlled Braking Systems

The market is experiencing a notable shift towards electronically controlled braking systems. Electronic control units (ECUs) are increasingly being used to manage and optimize braking functions, offering precise control and responsiveness. This trend enhances the efficiency of braking systems, contributing to improved vehicle performance and safety.

Emergence of Smart Braking Systems

Smart braking systems are gaining traction, leveraging connectivity and sensor technologies. These systems enable real-time monitoring of brake performance, allowing for predictive maintenance and enhancing overall system reliability. The integration of smart braking features aligns with the broader trend of connected vehicles and the implementation of Internet of Things (IoT)

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com www.scotts-international.com

technologies in the automotive sector.

Lightweight Materials for Enhanced Efficiency

Another significant trend is the use of lightweight materials in air brake systems. Manufacturers are exploring materials that offer high strength while reducing overall system weight. This trend aligns with the automotive industry's efforts to enhance fuel efficiency, reduce emissions, and improve the overall sustainability of vehicles.

Energy Recovery Systems

Energy recovery systems within air brake systems are gaining prominence. These systems capture and store energy during braking events, which can then be utilized to power other vehicle functions. This trend aligns with the industry's push towards energy efficiency and the development of sustainable technologies within automotive systems.

Electrification in Commercial Vehicles

The electrification of commercial vehicles is influencing the design and functionality of air brake systems. As electric and hybrid commercial vehicles become more prevalent, air brake systems are being adapted to suit the specific requirements of these alternative powertrains. This trend reflects the broader shift towards cleaner and more sustainable transportation solutions. Advanced Materials for Brake Components

The use of advanced materials in brake components is a key trend, focusing on improving the durability and performance of air brake systems. Materials with enhanced heat resistance and wear characteristics contribute to longer service life and reduced maintenance requirements, addressing the evolving needs of vehicle manufacturers and operators.

Focus on Automated Driving Technologies

The increasing emphasis on automated driving technologies is influencing air brake system trends. As vehicles incorporate features such as adaptive cruise control and lane-keeping assist, air brake systems are evolving to support these functionalities. The integration of air brake systems with automated driving technologies enhances overall vehicle safety and control in various driving conditions.

These trends collectively shape the trajectory of the Global Air Brake System Market, reflecting a dynamic landscape influenced by advancements in safety, technology, sustainability, and the evolving preferences of both manufacturers and end-users. Segmental Insights

By Technology

The Traction Control System (T.C.S.) is a technology that has become integral to modern air brake systems. T.C.S. prevents wheel spin during acceleration by regulating the amount of power delivered to each wheel. This technology utilizes sensors to detect wheel slip and adjusts brake force or engine power accordingly, enhancing traction and stability. T.C.S. is particularly beneficial in challenging road conditions, such as wet or icy surfaces, contributing to improved vehicle control and reduced instances of wheel spin.

Electronic Stability Control (E.S.C.) is a sophisticated technology designed to enhance vehicle stability and prevent skidding or loss of control. E.S.C. employs sensors to monitor various factors, including steering input, individual wheel speeds, and lateral acceleration. When the system detects instability, it selectively applies brakes to specific wheels to bring the vehicle back on its intended path. This technology is crucial for heavy-duty vehicles, providing an extra layer of safety and control, especially in emergency maneuvers or adverse road conditions.

Electronic Brake-force Distribution (EBD) is a technology that optimizes brake force distribution between the front and rear wheels based on factors such as load and weight distribution. By adjusting the braking force to individual wheels, EBD ensures that each wheel receives the appropriate amount of braking force, improving overall braking efficiency. This technology contributes to better vehicle stability, shorter braking distances, and more consistent brake performance, particularly in situations with varying load conditions.

The Anti-Lock Braking System (A.B.S.) is a fundamental component of air brake systems, designed to prevent wheel lock-up during braking. A.B.S. achieves this by modulating brake pressure on individual wheels, allowing them to maintain traction with the road surface. This technology is particularly beneficial in emergency braking situations, reducing the risk of skidding, and maintaining steering control. A.B.S. enhances overall vehicle safety by ensuring effective braking under diverse conditions, contributing to accident prevention, and mitigating the severity of collisions.

In conclusion, the segmentation of air brake systems by technology underscores the diverse and sophisticated features integrated

into modern braking systems. T.C.S., E.S.C., EBD, and A.B.S. collectively represent a comprehensive suite of technologies that enhance vehicle safety, stability, and performance. As these technologies continue to evolve, air brake systems equipped with such features contribute significantly to the advancement of safety standards and the overall efficiency of heavy-duty vehicles on the road.

By Vehicle Type

Air brake systems play a pivotal role in heavy-duty vehicles, which encompass a range of applications, including trucks designed for transporting goods, construction vehicles, and specialized heavy-duty equipment. In heavy-duty vehicles, the air brake system is engineered to handle substantial loads and deliver robust braking performance. These systems are designed for durability and efficiency, catering to the unique demands of heavy-duty applications where safety and reliability are paramount. Rigid body vehicles, often used for urban deliveries, represent another segment where air brake systems find extensive application. These vehicles, with a fixed and integral chassis, require precise braking control to navigate through varying traffic conditions and frequent stops. Air brake systems in rigid body vehicles are tailored to provide responsive braking, contributing to maneuverability and safety, especially in congested urban environments where precise control is essential. Semi-trailers, commonly attached to heavy-duty trucks, rely on air brake systems to ensure effective braking for both the truck and the trailer. The coordination between the truck's braking system and the air brakes on the semi-trailer is critical for maintaining stability during braking maneuvers. The design of air brake systems for semi-trailers considers the unique dynamics of these articulated vehicles, emphasizing synchronized and controlled braking to enhance overall safety and stability. Air brake systems are integral to the braking performance of buses, catering to both urban transit and long-distance coach applications. In urban transit buses, air brake systems provide the necessary stopping power for frequent stops, while in long-distance coaches, they contribute to stable and controlled braking during extended journeys. The design of air brake systems for buses prioritizes passenger safety and comfort, addressing the specific operational requirements of different bus types. In summary, the segmentation of air brake systems by vehicle type reflects the diverse applications and operational characteristics within the automotive industry. Whether in heavy-duty trucks, rigid body vehicles, semi-trailers, or buses, air brake systems are tailored to meet the specific demands of each vehicle category, emphasizing safety, reliability, and optimal braking performance across various transportation scenarios.

Regional Insights

North America stands as a significant hub for the Global Air Brake System Market, driven by a robust transportation and logistics sector. The United States and Canada have a large fleet of heavy-duty vehicles, including trucks and buses, contributing to the demand for advanced air brake systems. Stringent safety regulations and a strong focus on road safety further fuel the adoption of innovative braking technologies. The region also experiences a growing emphasis on sustainability, influencing the integration of eco-friendly features within air brake systems.

Europe exhibits a mature market for air brake systems, characterized by a strong automotive industry and well-established transportation networks. The European Union's stringent safety and emission standards drive continuous innovation in braking technologies. Additionally, the prevalence of rigid body vehicles for urban deliveries and the extensive use of heavy-duty trucks for cross-border transportation contribute to the sustained demand for efficient air brake systems. The European market is also witnessing a shift towards electric and hybrid commercial vehicles, influencing the design of braking systems.

The Asia-Pacific region is a dynamic and rapidly growing market for air brake systems, propelled by the booming economies of countries such as China and India. The expansion of infrastructure, increased industrialization, and the rising demand for goods transportation contribute to the proliferation of heavy-duty vehicles equipped with advanced braking technologies. In addition, the adoption of air brake systems in buses, both for urban transit and long-distance travel, is on the rise. The Asia-Pacific market reflects a blend of traditional heavy-duty applications and emerging trends in electric and alternative fuel vehicles. Latin America, including key markets like Brazil and Mexico, presents a diverse landscape for air brake systems. Economic conditions and variations in transportation needs influence the demand for heavy-duty vehicles, impacting the adoption of advanced braking technologies. While regulatory standards are evolving, market dynamics are often shaped by economic prosperity and the specific requirements of industries such as agriculture and mining. The region showcases potential for growth as transportation networks continue to expand.

The Middle East, particularly the United Arab Emirates, demonstrates a growing interest in air brake systems as economic

development drives increased commercial activity. The demand for heavy-duty vehicles, including trucks and buses, is influenced by infrastructure projects and the expansion of logistics operations. In Africa, where road transportation is crucial for various sectors, the market dynamics are shaped by economic conditions and the need for reliable and robust braking systems in diverse operational environments.

These regional insights underscore the varied factors influencing the Global Air Brake System Market across different parts of the world. While mature markets in North America and Europe prioritize safety and sustainability, the Asia-Pacific region reflects rapid growth and a blend of traditional and emerging trends. Latin America and the Middle East and Africa present unique challenges and opportunities, reflecting the diverse global landscape of the air brake systems industry.

Key Market Players Wabco Meritor SORL Auto Parts, Inc Aisin Seiki Co. Ltd Akebono Brake Industry Co. Ltd Haldex Continental Nissin Kogyo Co. Ltd Brembo Mando Corporation Knorr-Bremse Report Scope: In this report, the Global Air Brake System Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below: ? Air Brake System Market, By Technology: o[]T.C.S. (Traction Control system) o
E.S.C. (Electronic Stability Control) o

EBD (Electronic Brake-force Distribution) o
A.B.S. (Anti-Lock Braking System) ?[Air Brake System Market, By Vehicle Type: o_lHeavy-Duty o∏Rigid Body o∏Semi-Trailer o⊓Bus ?∏Air Brake System Market, By Application: o
Passenger Cars o
Commercial Vehicles ?[Air Brake System Market, By Region: o<sub>
North America</sub> ?[United States ?∏Canada ?∏Mexico o[Europe & CIS ?∏Germany ?∏Spain ?[[France ?[Russia ?[]Italy

?[United Kingdom ?[Belgium o₋Asia-Pacific ?[China ?[]India ?[]apan ?[Indonesia ?[]Thailand ?[Australia ?
South Korea o∏South America ?∏Brazil ?[Argentina ?[Colombia o[Middle East & Africa ?[]Turkey ?[]Iran ?[]Saudi Arabia ?[]UAE Competitive Landscape Company Profiles: Detailed analysis of the major companies presents in the Global Air Brake System Market. Available Customizations: Global Air Brake System 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).

Table of Contents:

- 1. [Introduction
 1.1. [Product Overview
 1.2. [Key Highlights of the Report
 1.3. [Market Coverage
 1.4. [Market Segments Covered
 1.5. [Research Tenure Considered
 2. [Research Methodology
 2.1. [Objective of the Study
 2.2. [Baseline Methodology
 2.3. [Key Industry Partners
 2.4. [Major Association and Secondary Sources
 2.5. [Forecasting Methodology
 2.6. [Data Triangulation & Validation
 2.7. [Assumptions and Limitations
- 3. Executive Summary
- 3.1. Market Overview
- 3.2. Market Forecast
- 3.3. Key Regions
- 3.4. Key Segments

- 4. Impact of COVID-19 on Global Air Brake System Market
- 5. Global Air Brake System Market Outlook
- 5.1. Market Size & Forecast
- 5.1.1. By Value
- 5.2. Market Share & Forecast
- 5.2.1. By Technology Market Share Analysis (T.C.S. (Traction Control System), E.S.C. (Electronic Stability Control), EBD (Electronic Brake-Force Distribution), A.B.S. (Anti-Lock Braking System))
- 5.2.2. By Vehicle Type Market Share Analysis (Heavy-Duty, Rigid Body, Semi-Trailer, Bus)
- 5.2.3. By Application Market Share Analysis (Passenger Cars, Commercial Vehicles)
- 5.2.4. By Regional Market Share Analysis
- 5.2.4.1. Asia-Pacific Market Share Analysis
- 5.2.4.2. Europe & CIS Market Share Analysis
- 5.2.4.3. North America Market Share Analysis
- 5.2.4.4. South America Market Share Analysis
- 5.2.4.5. Middle East & Africa Market Share Analysis
- 5.2.5. By Company Market Share Analysis (Top 5 Companies, Others By Value, 2022)
- 5.3. Global Air Brake System Market Mapping & Opportunity Assessment
- 5.3.1. By Technology Market Mapping & Opportunity Assessment
- 5.3.2. By Vehicle Type Market Mapping & Opportunity Assessment
- 5.3.3. By Application Market Mapping & Opportunity Assessment
- 5.3.4. By Regional Market Mapping & Opportunity Assessment
- 6. Asia-Pacific Air Brake System Market Outlook
- 6.1. Market Size & Forecast
- 6.1.1. By Value
- 6.2. Market Share & Forecast
- 6.2.1. By Technology Market Share Analysis
- 6.2.2. By Vehicle Type Market Share Analysis
- 6.2.3. By Application Market Share Analysis
- 6.2.4. By Country Market Share Analysis
- 6.2.4.1. China Market Share Analysis
- 6.2.4.2. India Market Share Analysis
- 6.2.4.3. Japan Market Share Analysis
- 6.2.4.4. Indonesia Market Share Analysis
- 6.2.4.5. Thailand Market Share Analysis
- 6.2.4.6. South Korea Market Share Analysis
- 6.2.4.7. Australia Market Share Analysis
- 6.2.4.8. Rest of Asia-Pacific Market Share Analysis
- 6.3. Asia-Pacific: Country Analysis
- 6.3.1. China Air Brake System 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 Technology Market Share Analysis
- 6.3.1.2.2. By Vehicle Type Market Share Analysis
- 6.3.1.2.3. By Application Market Share Analysis
- 6.3.2. India Air Brake System 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 Technology Market Share Analysis 6.3.2.2.2. By Vehicle Type Market Share Analysis 6.3.2.2.3. By Application Market Share Analysis 6.3.3.]apan Air Brake System 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 Technology Market Share Analysis 6.3.3.2.2. □By Vehicle Type Market Share Analysis 6.3.3.2.3. □By Application Market Share Analysis 6.3.4. □Indonesia Air Brake System Market Outlook 6.3.4.1. Market Size & Forecast 6.3.4.1.1. By Value 6.3.4.2. Market Share & Forecast 6.3.4.2.1. By Technology Market Share Analysis 6.3.4.2.2. By Vehicle Type Market Share Analysis 6.3.4.2.3. By Application Market Share Analysis 6.3.5. Thailand Air Brake System Market Outlook 6.3.5.1. Market Size & Forecast 6.3.5.1.1. By Value 6.3.5.2. Market Share & Forecast 6.3.5.2.1. By Application Market Share Analysis 6.3.5.2.2. By Vehicle Type Market Share Analysis 6.3.5.2.3. By Application Market Share Analysis 6.3.6. South Korea Air Brake System Market Outlook 6.3.6.1. Market Size & Forecast 6.3.6.1.1. By Value 6.3.6.2. Market Share & Forecast 6.3.6.2.1. □By Technology Market Share Analysis 6.3.6.2.2. By Vehicle Type Market Share Analysis 6.3.6.2.3. □By Application Market Share Analysis 6.3.7. Australia Air Brake System Market Outlook 6.3.7.1. Market Size & Forecast 6.3.7.1.1. By Value 6.3.7.2. Market Share & Forecast 6.3.7.2.1. By Technology Market Share Analysis 6.3.7.2.2. By Vehicle Type Market Share Analysis 6.3.7.2.3. By Application Market Share Analysis 7. Europe & CIS Air Brake System Market Outlook 7.1. Market Size & Forecast 7.1.1. □By Value 7.2. Market Share & Forecast 7.2.1. By Technology Market Share Analysis 7.2.2. By Vehicle Type Market Share Analysis 7.2.3. By Application Market Share Analysis

7.2.4. By Country Market Share Analysis 7.2.4.1. Germany Market Share Analysis 7.2.4.2. Spain Market Share Analysis 7.2.4.3. France Market Share Analysis 7.2.4.4. Russia Market Share Analysis 7.2.4.5. Italy Market Share Analysis 7.2.4.6. United Kingdom Market Share Analysis 7.2.4.7. Belgium Market Share Analysis 7.2.4.8. Rest of Europe & CIS Market Share Analysis 7.3. □ Europe & CIS: Country Analysis 7.3.1. □Germany Air Brake System 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 Technology Market Share Analysis 7.3.1.2.2. By Vehicle Type Market Share Analysis 7.3.1.2.3. By Application Market Share Analysis 7.3.2. Spain Air Brake System 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 Technology Market Share Analysis 7.3.2.2.2. □By Vehicle Type Market Share Analysis 7.3.2.2.3. By Application Market Share Analysis 7.3.3. France Air Brake System 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 Technology Market Share Analysis 7.3.3.2.2. □By Vehicle Type Market Share Analysis 7.3.3.2.3. □By Application Market Share Analysis 7.3.4.
¬Russia Air Brake System 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 Technology Market Share Analysis 7.3.4.2.2. By Vehicle Type Market Share Analysis 7.3.4.2.3. By Application Market Share Analysis 7.3.5. Italy Air Brake System 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 Technology Market Share Analysis 7.3.5.2.2. □By Vehicle Type Market Share Analysis 7.3.5.2.3. By Application Market Share Analysis 7.3.6. United Kingdom Air Brake System Market Outlook 7.3.6.1. Market Size & Forecast

7.3.6.1.1. By Value 7.3.6.2. Market Share & Forecast 7.3.6.2.1. By Technology Market Share Analysis 7.3.6.2.2. By Vehicle Type Market Share Analysis 7.3.6.2.3. By Application Market Share Analysis 7.3.7. Belgium Air Brake System Market Outlook 7.3.7.1. Market Size & Forecast 7.3.7.1.1. By Value 7.3.7.2. Market Share & Forecast 7.3.7.2.1. □By Technology Market Share Analysis 7.3.7.2.2. □By Vehicle Type Market Share Analysis 7.3.7.2.3. □By Application Market Share Analysis 8. North America Air Brake System Market Outlook 8.1. Market Size & Forecast 8.1.1. By Value 8.2. Market Share & Forecast 8.2.1. By Technology Market Share Analysis 8.2.2. By Vehicle Type Market Share Analysis 8.2.3. By Application Market Share Analysis 8.2.4. By Country Market Share Analysis 8.2.4.1. United States Market Share Analysis 8.2.4.2. Mexico Market Share Analysis 8.2.4.3. Canada Market Share Analysis 8.3. North America: Country Analysis 8.3.1. United States Air Brake System 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 Technology Market Share Analysis 8.3.1.2.2. □By Vehicle Type Market Share Analysis 8.3.1.2.3. □By Application Market Share Analysis 8.3.2. Mexico Air Brake System 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 Technology Market Share Analysis 8.3.2.2.2. By Vehicle Type Market Share Analysis 8.3.2.2.3. By Application Market Share Analysis 8.3.3. Canada Air Brake System 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 Technology Market Share Analysis 8.3.3.2.2. By Vehicle Type Market Share Analysis 8.3.3.2.3. By Application Market Share Analysis 9. South America Air Brake System Market Outlook 9.1. Market Size & Forecast

- 9.1.1. By Value
- 9.2. Market Share & Forecast
- 9.2.1. By Technology Market Share Analysis
- 9.2.2. By Vehicle Type Market Share Analysis
- 9.2.3. By Application Market Share Analysis
- 9.2.4. By Country Market Share Analysis
- 9.2.4.1. Brazil Market Share Analysis
- 9.2.4.2. Argentina Market Share Analysis
- 9.2.4.3. Colombia Market Share Analysis
- 9.2.4.4. Rest of South America Market Share Analysis
- 9.3. South America: Country Analysis
- 9.3.1. Brazil Air Brake System 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 Technology Market Share Analysis
- 9.3.1.2.2. By Vehicle Type Market Share Analysis
- 9.3.1.2.3. By Application Market Share Analysis
- 9.3.2. Colombia Air Brake System 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 Technology Market Share Analysis
- 9.3.2.2.2. By Vehicle Type Market Share Analysis
- 9.3.2.2.3. By Application Market Share Analysis
- 9.3.3. Argentina Air Brake System 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 Technology Market Share Analysis
- 9.3.3.2.2. By Vehicle Type Market Share Analysis
- 9.3.3.2.3. By Application Market Share Analysis
- 10. Middle East & Africa Air Brake System Market Outlook
- 10.1. Market Size & Forecast
- 10.1.1. By Value
- 10.2. Market Share & Forecast
- 10.2.1.□By Technology Market Share Analysis
- 10.2.2. By Vehicle Type Market Share Analysis
- 10.2.3. By Application Market Share Analysis
- 10.2.4. By Country Market Share Analysis
- 10.2.4.1. Turkey Market Share Analysis
- 10.2.4.2. Iran Market Share Analysis
- 10.2.4.3. Saudi Arabia Market Share Analysis
- 10.2.4.4. UAE Market Share Analysis
- 10.2.4.5. Rest of Middle East & Africa Market Share Africa
- 10.3. Middle East & Africa: Country Analysis
- 10.3.1. Turkey Air Brake System 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 Technology Market Share Analysis 10.3.1.2.2. By Vehicle Type Market Share Analysis 10.3.1.2.3. By Application Market Share Analysis 10.3.2. Iran Air Brake System 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 Technology Market Share Analysis 10.3.2.2.2. □By Vehicle Type Market Share Analysis 10.3.2.2.3. □By Application Market Share Analysis 10.3.3. Saudi Arabia Air Brake System 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 Technology Market Share Analysis 10.3.3.2.2. By Vehicle Type Market Share Analysis 10.3.3.2.3. □By Application Market Share Analysis 10.3.4. UAE Air Brake System 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 Technology Market Share Analysis 10.3.4.2.2. By Vehicle Type Market Share Analysis 10.3.4.2.3. By Application Market Share Analysis 11. SWOT Analysis 11.1. Strength 11.2. ||Weakness 11.3. □ Opportunities 11.4.∏Threats 12. Market Dynamics 12.1. Market Drivers 12.2. Market Challenges 13. Market Trends and Developments 14. Competitive Landscape 14.1. Company Profiles (Up to 10 Major Companies) 14.1.1. [] Wabco 14.1.1.1. Company Details 14.1.1.2. Key Product Offered 14.1.1.3. [Financials (As Per Availability) 14.1.1.4.
¬Recent Developments 14.1.1.5. Key Management Personnel 14.1.2. Meritor 14.1.2.1. Company Details 14.1.2.2. Key Product Offered

14.1.2.3. [Financials (As Per Availability) 14.1.2.4. Recent Developments 14.1.2.5. Key Management Personnel 14.1.3. SORL Auto Parts, Inc 14.1.3.1. Company Details 14.1.3.2. Key Product Offered 14.1.3.3. Financials (As Per Availability) 14.1.3.4. Recent Developments 14.1.3.5. Key Management Personnel 14.1.4. Aisin Seiki Co. Ltd 14.1.4.1. Company Details 14.1.4.3. Financials (As Per Availability) 14.1.4.4. Recent Developments 14.1.4.5. Key Management Personnel 14.1.5. Akebono Brake Industry Co. Ltd 14.1.5.1. Company Details 14.1.5.2. Key Product Offered 14.1.5.3. [Financials (As Per Availability) 14.1.5.4.
¬Recent Developments 14.1.5.5. Key Management Personnel 14.1.6. Haldex 14.1.6.1. Company Details 14.1.6.2. Key Product Offered 14.1.6.3. Financials (As Per Availability) 14.1.6.4. Recent Developments 14.1.6.5. Key Management Personnel 14.1.7. Continental 14.1.7.1. Company Details 14.1.7.3. Financials (As Per Availability) 14.1.7.4. Recent Developments 14.1.7.5. Key Management Personnel 14.1.8. Nissin Kogyo Co. Ltd 14.1.8.1. Company Details 14.1.8.2. Key Product Offered 14.1.8.3. Financials (As Per Availability) 14.1.8.4. Recent Developments 14.1.8.5. Key Management Personnel 14.1.9.
□Brembo 14.1.9.1. Company Details 14.1.9.2. Key Product Offered 14.1.9.3. Financials (As Per Availability) 14.1.9.4.
¬Recent Developments 14.1.9.5. Key Management Personnel 14.1.10. Mando Corporation 14.1.10.1. Company Details

- 14.1.10.2. Key Product Offered
- 14.1.10.3. [Financials (As Per Availability)
- 14.1.10.4. Recent Developments
- 14.1.10.5. Key Management Personnel
- 15. Strategic Recommendations
- 15.1. Key Focus Areas
- 15.1.1.[]Target Regions
- 15.1.2. Target Technology
- 15.1.3. Target Vehicle Type
- 16. About Us & Disclaimer



Air Brake System Market - Global Industry Size, Share, Trends Opportunity, and Forecast, Segmented By Technology (T.C.S. (Traction Control System), E.S.C. (Electronic Stability Control), EBD (Electronic Brake-Force Distribution), A.B.S. (Anti-Lock Braking System)), By Vehicle Type (Heavy-Duty, Rigid Body, Semi-Trailer, Bus), By Application (Passenger Cars, Commercial Vehicles), By Region, Competition, 2018-2028

Market Report | 2023-11-07 | 175 pages | TechSci Research

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4900.00
	Multi-User License	\$5900.00
	Custom Research License	\$8900.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346. []** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	Phone*	
First Name*	Last Name*	
Job title*		

Company Name*	EU Vat / Tax ID / NIP number*	
Address*	City*	
Zip Code*	Country*	
	Date	2025-05-06
	Signature	