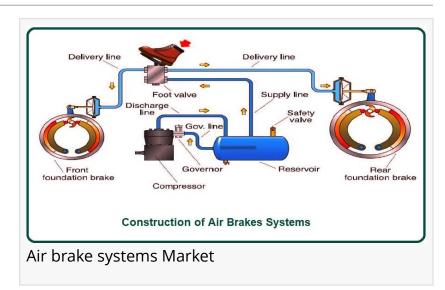


# Air Brake System Market Growth Driven by Safety Demand | DataM Intelligence

Air Brake System market growth is fueled by rising commercial vehicle production, safety regulations, & demand for reliable braking in heavy-duty transport.

KANSAS, KS, UNITED STATES, August 28, 2025 /EINPresswire.com/ -- Air brake systems are mechanical devices that use compressed air to actuate vehicle brakes, ensuring reliable stopping power in trucks, buses, trailers, and other heavy-duty vehicles. With rising road safety concerns and



stricter regulatory requirements on manufacturers, air braking systems have become an automotive industry standard offering fail-safe functionality, greater stopping power, and high reliability compared to hydraulic alternatives, especially in heavy vehicles.

#### Latest News - USA

- Knorr-Bremse announced expanded investments in digital braking solutions, including predictive maintenance platforms (July 2025).
- Wabtec Corporation unveiled its next-gen electronic braking system for freight locomotives, signaling crossover innovation between automotive and rail sectors (August 2025).
- U.S. OEMs are ramping up deployment of electro-pneumatic braking systems in Class 8 trucks to comply with new FMVSS standards.

Get a Report Sample of Air Brake System Market @ https://www.datamintelligence.com/download-sample/air-brake-system-market

#### Latest News - Japan

- Japanese OEMs are piloting hybrid electro-pneumatic brake systems designed for electric buses in urban transit networks (July 2025).
- Hitachi Rail and Knorr-Bremse expanded collaboration to deploy advanced braking solutions

across metro and bullet train networks.

• Government-backed R&D programs in Japan are funding next-gen braking technologies integrated with autonomous driving systems, boosting domestic adoption.

## M&A and Strategic Alliances

While large-scale M&A activity has been limited in recent months, partnerships and joint ventures remain pivotal. Knorr-Bremse and Hitachi Rail deepened collaboration in advanced braking for rail and metro systems in Japan, while WABCO (a ZF company) expanded partnerships with North American OEMs for integrating automated braking systems in Class 8 trucks.

## Policy Support Driving Growth

#### **United States**

- Federal Motor Vehicle Safety Standards (FMVSS) mandate air brake systems for heavy-duty trucks and buses, reinforcing market demand.
- Infrastructure funding under the Bipartisan Infrastructure Law also prioritizes modernization of freight and transit fleets, boosting adoption of advanced braking systems.

## Japan

- Strict safety and emissions regulations encourage adoption of advanced air brake technologies in commercial and public transportation vehicles.
- Japan's focus on electrification and autonomous mobility is driving R&D and integration of electro-pneumatic braking systems in new fleets.

The global air brake system market is expanding alongside rising demand for heavy commercial vehicles, robust vehicle safety regulations, and ongoing innovations in modern braking technologies. Asia-Pacific leads the sector, driven by its vast automotive production capabilities and evolving safety standards.

#### Market Players

Notable companies in the air brake system market include:

- Knorr Bremse AG
- Meritor Inc
- TSE Brakes Inc
- Tenneco Inc
- Akebono Brake Industry Co. Ltd
- Aisin Seiki Co. Ltd
- ZF Friedrichshafen AG
- Hitachi Astemo Ltd
- Handlex AB

Mando Corporation

These players compete on the strength of proprietary technology, supply agreements, and the ability to address diverse OEM and aftermarket needs.

## Market Dynamics

#### **Drivers**

- Rising global production and sales of commercial vehicles, especially in emerging markets, are primary market growth drivers.
- Increasing demands for improved vehicle safety are prompting adoption of advanced brake features, including EBD, ESC, and integrated ABS systems.
- Long service life and robust performance of modern air brake designs continue to solidify their dominance in heavy-duty vehicle applications.

#### Restraints

- Modern air brake systems' high durability and low failure rates mean that replacement cycles are long, potentially slowing aftermarket segment growth.
- High initial costs and complexity compared to hydraulic systems limit adoption in some lighter or budget-conscious vehicle segments.

## Opportunities

- Continued growth in OEM and aftermarket segments as global logistics, shipping, and public transport expand.
- Introduction of new regional safety mandates (e.g., India's requirements for ESC and ABS in all commercial vehicles) is expected to further fuel market growth.

# Challenges

- Pandemic-related global supply chain disruptions have increased lead times and component shortages, affecting production rates and market expansion.
- Ensuring compatibility with cutting-edge electronic safety systems will require ongoing R&D investment from market players.

Looking for in-depth insights? Grab the full report: <a href="https://www.datamintelligence.com/buy-now-page?report=air-brake-system-market">https://www.datamintelligence.com/buy-now-page?report=air-brake-system-market</a>

Market Segments: Largest and Fastest Growing

The air brake system market is segmented by component (compressor, governor, storage tank, air dryer, foot valve, brake chamber, brake cylinder, brake pipe), brake type (disc, drum), sales channel (OEM, aftermarket), and vehicle type (rigid body, semi-trailer, heavy-duty trucks, bus). Heavy-duty trucks remain the largest end-users, with mandatory air brake installation in almost all new vehicles in this category.

## Regional Analysis

Asia-Pacific dominates global air brake system demand, benefiting from immense automotive manufacturing bases in China, India, Japan, South Korea, and other Southeast Asian markets. Progressive regulatory requirements are accelerating adoption—especially with government mandates for advanced safety technologies. North America and Europe also remain essential, courtesy of their established commercial vehicle markets and strong focus on road safety.

#### Unmet Needs and Conclusion

Unmet needs revolve around further reducing system weight, cost, and complexity while enhancing compatibility with next-generation electronic and smart vehicle platforms.

In summary, air brake systems remain the gold standard for heavy vehicle braking due to their reliability, safety, and compliance features. As OEMs and policymakers alike push towards safer, more efficient transport solutions, the air brake market is set for durable—even if incremental—long-term growth, especially throughout Asia-Pacific.

Unlock 360° Market Intelligence with DataM Subscription Services: <a href="https://www.datamintelligence.com/reports-subscription">https://www.datamintelligence.com/reports-subscription</a>

Power your decisions with real-time competitor tracking, strategic forecasts, and global investment insights-all in one place.

Competitive Landscape
Sustainability Impact Analysis
KOL / Stakeholder Insights
Unmet Needs & Positioning, Pricing & Market Access Snapshots
Market Volatility & Emerging Risks Analysis
Quarterly Industry Report Updated
Live Market & Pricing Trends
Consumer Behavior & Demand Analysis

Have a look at our Subscription Dashboard: <a href="https://www.youtube.com/watch?v=x5oEiqEqTWg">https://www.youtube.com/watch?v=x5oEiqEqTWg</a>

# **Related Reports:**

<u>Lubricant Filtration Market</u> reached US\$ 33.5 Billion in 2023 and is expected to reach US\$ 54.5 Billion by 2031, growing with a CAGR of 6.4% during the forecast period 2024-2031.

<u>Hydraulic Filtration Market</u> reached US\$ 2.1 Billion in 2022 and is expected to reach US\$ 2.9 Billion by 2031, growing with a CAGR of 4.4% during the forecast period 2024-2031.

Sai Kumar
DataM Intelligence 4market Research LLP
+1 877-441-4866
sai.k@datamintelligence.com
Visit us on social media:
LinkedIn
X

This press release can be viewed online at: https://www.einpresswire.com/article/843893165

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.

© 1995-2025 Newsmatics Inc. All Right Reserved.