

Automotive Brake Pad - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2026 - 2031)

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Report description:

Automotive Brake Pad Market Analysis

The automotive brake pad market is expected to grow from USD 4.35 billion in 2025 to USD 4.57 billion in 2026 and is forecast to reach USD 5.85 billion by 2031 at 5.12% CAGR over 2026-2031. This steady expansion is anchored in stricter global emission rules, growing electrified-vehicle volumes, and advances in friction-material science that lower particulate output without sacrificing braking safety. Asia-Pacific's manufacturing depth, the shift to e-commerce in the replacement parts channel, and customer demand for low-noise ceramic compounds add further momentum. At the same time, supply-chain volatility in steel and phenolic resins squeezes margins, prompting makers to invest in process automation and AI-driven formulation tools. Competitive pressure rises as premium brands embed wear sensors and software into pads, underpinning predictive-maintenance services that create new revenue streams.

Global Automotive Brake Pad Market Trends and Insights

Surging Safety-Regulation Stringency (Euro 7, China 7)

Euro 7 rules cap brake particulate emissions at 7 mg/km from 2025 and force copper content below 0.5% by weight, making legacy phenolic-copper blends obsolete. China is drafting parallel limits that mirror the EU threshold, creating a unified compliance bar across the two largest vehicle markets. Makers that completed copper-free validation early now enjoy a clear sales edge, whereas late movers face costly reformulation and line downtime. The rule set accelerates ceramic and NAO adoption,

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pushing OEMs to standardize friction packs across global platforms. U.S. precedents such as California's "Better Brake Rule," in force since 2025, underscore how state-level action can quickly spread to nationwide supply chains.

Rapid Copper-Free and Low-Emission Pad Material Adoption

OEMs and tier-one suppliers now treat copper-free compounds as performance upgrades, not compliance tools. Brembo's cement-matrix "Project Cobra" won ECE-R90 approval while eliminating formaldehyde and cutting fine particulates by 20% . Ceramic fibers paired with modified phenolic alternatives enable quieter stops and cleaner wheels, which are prized by EV owners whose cabins lack engine masking noise. Production transitions have strained sourcing of specialized aramid and glass fibers, leading to selective spot pricing and tighter supplier audits. Tooling changes-higher-temperature presses and finer mixing tolerances-require multi-million-dollar capex, but the payback arrives quickly in premium models that command higher pad prices.

Regenerative Braking Reducing Replacement Frequency

Drivers of battery electric sedans enjoy a notable advantage: they replace their brake pads far less frequently than those in conventional vehicles. Thanks to regenerative braking systems, electric sedan drivers can typically go over twice the distance before their first brake pad change, underscoring the system's efficiency and reduced wear. Fewer service intervals shrink aftermarket revenue per vehicle, although each pad set sells at a higher unit price due to specialized corrosion coatings. Fleet operators extend service contracts longer, deferring large-lot pad purchases, which softens order visibility for suppliers. Volume declines hit regional distributors first, forcing consolidation or shifts into other wear parts such as tires and wiper blades.

Other drivers and restraints analyzed in the detailed report include:

Electrified-Vehicle NVH and Corrosion Design Requirements
Aftermarket E-Commerce Penetration in Brake Parts
Product-Recall Risk from Thermal-Cracking Failures

For complete list of drivers and restraints, kindly check the Table Of Contents.

Segment Analysis

Semi-metallic pads generated the most significant slice with 46.34% of the automotive brake pad market size in 2025. They remain popular because iron and copper shavings dissipate heat efficiently during repeated high-speed stops. Ceramic compounds, however, are advancing at a 5.68% CAGR through 2031 thanks to copper bans and consumer demand for low-dust wheels. This growth is most visible in premium SUVs and performance sedans with higher price elasticity.

Ceramic uptake faces hurdles: higher raw-material costs, different curing ovens, and the need for fine-grained alumina powders that only a few suppliers provide. Nonetheless, makers like Brembo demonstrated that copper-free ceramics can retain fade resistance, expanding potential beyond niche sports cars. Non-asbestos organic pads continue to serve budget cars in Latin America and Africa, where upfront price trumps longevity. Across all groups, semi-metallic will remain vital for heavy-duty trucks because no ceramic blend yet matches its thermal capacity without significant rotor upgrades.

Front assemblies held 65.10% of the automotive brake pad market size in 2025, reflecting physics-driven front-axle loading. Electronic brake-force distribution and advanced stability programs now redirect more stopping energy to the rear axle, elevating rear-pad wear rates and pushing that subsegment's 5.98% CAGR through 2031. Automakers equip rear brakes with more sophisticated calipers to support software-controlled torque vectoring in curves.

In hybrid and EV models, engineers often mount regenerative motors on rear wheels, selectively using rear hydraulic brakes when

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batteries are near complete. This switch changes heat profiles, requiring corrosion-resistant coatings on rear pads, which now sit idle longer between stops. Aftermarket workshops adjust stocking ratios accordingly, ordering higher rear-pad volumes than in the past decade to avoid service delays.

The Automotive Brake Pad Market Report is Segmented by Material Type (Semi-Metallic, Non-Asbestos Organic, Low-Metallic NAO, and Ceramic), Position (Front and Rear), Sales Channel (OEM and Aftermarket), Vehicle Type (Passenger Cars, and More), Propulsion Type (ICE, Hybrid, and Battery Electric), and Geography. The Market Forecasts are Provided in Terms of Value (USD).

Geography Analysis

Asia-Pacific led the automotive brake pad market with a 47.80% share in 2025, growing at a CAGR of 5.75% through 2031, as China, India, and ASEAN nations scaled vehicle output and nurtured dense supplier clusters. China's transition from Euro 6 to Euro 7 standards compels rapid copper-free conversions, creating challenges and opportunities for domestic pad makers. India's two-wheeler boom channels growth to local champions integrating foundries and compound kitchens under one roof, reducing import reliance. Japanese and Korean firms push the frontier of ceramic and aramid fiber technology, exporting recipes to regional affiliates.

North America shows a mature replacement landscape where high vehicle age supports stable aftermarket revenue. State-level copper bans in California and Washington forced early supplier investments that now pay dividends nationwide. Mexico's expanding vehicle assembly lines source a significant volume of parts locally, thanks to USMCA tariff rules that favor regional content. Severe winters in Canada and northern states nurture demand for corrosion-proof back-plates and special low-temperature binders that resist salt-induced delamination.

Europe acts as a regulatory pacesetter, with Euro 7 setting the global template for particulate limits. Premium German marques pull ceramic adoption upward, while Italian and Spanish suppliers excel in motorcycle and performance sectors. Currency swings and energy-price shocks elevate production costs, yet EU cohesion offsets cross-border rule complexity, letting parts flow freely from Poland to Portugal. Eastern European plants increasingly win new pad contracts due to lower labor costs and EU-compliant quality regimes.

List of Companies Covered in this Report:

Brembo N.V. Robert Bosch GmbH Tenneco Inc. (Ferodo) ZF Friedrichshafen AG (TRW) Akebono Brake Industry Co. Continental AG ITT Inc. (ITT Motion Technologies) Nisshinbo Holdings Inc. Fras-le SA ADVICS Co., Ltd. Federal-Mogul Holdings LLC EBC Brakes Sangsin Brake Carlisle Brake & Friction Gold Phoenix Brake Tech. Mando Corporation Garrett Motion Inc. Belmont Rubber Pvt. Ltd.

Additional Benefits:

 The market estimate (ME) sheet in Excel format
3 months of analyst support

Table of Contents:

- 1 Introduction
 - 1.1 Study Assumptions & Market Definition
 - 1.2 Scope of the Study
- 2 Research Methodology

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3 Executive Summary

4 Market Landscape

4.1 Market Overview

4.2 Market Drivers

4.2.1 Surging Safety-Regulation Stringency (E.G., Euro 7, China 7)

4.2.2 Rapid Copper-Free and Low-Emission Pad Material Adoption

4.2.3 Aftermarket E-Commerce Penetration In Brake Parts

4.2.4 Electrified-Vehicle NVH and Corrosion Design Requirements

4.2.5 AI-Driven Pad-Formulation Optimization and Test Virtualization

4.2.6 Growing Demand for Embedded Pad-Wear/Condition Sensors

4.3 Market Restraints

4.3.1 Product-Recall Risk from Thermal-Cracking Failures

4.3.2 Price Pressure from Raw Materials (Steel, Resin) Volatility

4.3.3 Regenerative Braking Reducing Replacement Frequency

4.3.4 Limited Copper-Free Raw-Material Supply Chain Capacity

4.4 Value / Supply-Chain Analysis

4.5 Regulatory Landscape

4.6 Technological Outlook

4.7 Porter's Five Forces

4.7.1 Threat of New Entrants

4.7.2 Bargaining Power of Buyers

4.7.3 Bargaining Power of Suppliers

4.7.4 Threat of Substitutes

4.7.5 Competitive Rivalry

5 Market Size and Growth Forecasts (Value (USD))

5.1 By Material Type

5.1.1 Semi-metallic

5.1.2 Non-asbestos Organic (NAO)

5.1.3 Low-metallic NAO

5.1.4 Ceramic

5.2 By Position

5.2.1 Front

5.2.2 Rear

5.3 By Sales Channel

5.3.1 Original Equipment Manufacturers (OEM)

5.3.2 Aftermarket

5.4 By Vehicle Type

5.4.1 Passenger Cars

5.4.2 Light Commercial Vehicles (LCV)

5.4.3 Heavy Commercial Vehicles (HCV)

5.4.4 Two-Wheelers

5.5 By Propulsion Type

5.5.1 Internal-Combustion Engine Vehicles

5.5.2 Hybrid Electric Vehicles

5.5.3 Battery-Electric Vehicles

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- 5.6 Geography
 - 5.6.1 North America
 - 5.6.1.1 United States
 - 5.6.1.2 Canada
 - 5.6.1.3 Rest of North America
 - 5.6.2 South America
 - 5.6.2.1 Brazil
 - 5.6.2.2 Argentina
 - 5.6.2.3 Rest of South America
 - 5.6.3 Europe
 - 5.6.3.1 Germany
 - 5.6.3.2 United Kingdom
 - 5.6.3.3 France
 - 5.6.3.4 Spain
 - 5.6.3.5 Italy
 - 5.6.3.6 Rest of Europe
 - 5.6.4 Asia-Pacific
 - 5.6.4.1 China
 - 5.6.4.2 Japan
 - 5.6.4.3 India
 - 5.6.4.4 South Korea
 - 5.6.4.5 Rest of Asia-Pacific
 - 5.6.5 Middle East and Africa
 - 5.6.5.1 Saudi Arabia
 - 5.6.5.2 United Arab Emirates
 - 5.6.5.3 Turkey
 - 5.6.5.4 Qatar
 - 5.6.5.5 South Africa
 - 5.6.5.6 Rest of Middle East and Africa

6 Competitive Landscape

6.1 Market Concentration

6.2 Strategic Moves

6.3 Market Share Analysis

6.4 Company Profiles (Includes Global-level Overview, Market-level overview, Core Segments, Financials as available, Strategic Information, Market Rank/Share, Products & Services, Recent Developments)

6.4.1 Brembo N.V.

6.4.2 Robert Bosch GmbH

6.4.3 Tenneco Inc. (Ferodo)

6.4.4 ZF Friedrichshafen AG (TRW)

6.4.5 Akebono Brake Industry Co.

6.4.6 Continental AG

6.4.7 ITT Inc. (ITT Motion Technologies)

6.4.8 Nisshinbo Holdings Inc.

6.4.9 Fras-le SA

6.4.10 ADVICS Co., Ltd.

6.4.11 Federal-Mogul Holdings LLC

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- 6.4.12 EBC Brakes
- 6.4.13 Sangsin Brake
- 6.4.14 Carlisle Brake & Friction
- 6.4.15 Gold Phoenix Brake Tech.
- 6.4.16 Mando Corporation
- 6.4.17 Garrett Motion Inc.
- 6.4.18 Belmont Rubber Pvt. Ltd.

7 Market Opportunities and Future Outlook

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