

# **Passenger Car Gear Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Position (Skew Shaft Gears, Intersecting Shaft Gears, Parallel Shaft Gears), By Material (Ferrous Metals, Non-ferrous Metals, Others), By Application (Steering Systems, Transmission Systems, Differential Systems), By Region & Competition, 2021-2031F**

<https://marketpublishers.com/r/P03C3AD5E609EN.html>

Date: January 2026

Pages: 180

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

ID: P03C3AD5E609EN

## **Abstracts**

The Global Passenger Car Gear Market is projected to expand from USD 5.83 billion in 2025 to USD 8.11 billion by 2031, reflecting a compound annual growth rate of 5.66%. This sector consists of mechanical components critical for speed regulation and torque transmission within vehicle drivetrains. Growth is primarily supported by the resuscitation of global automotive manufacturing rates and an increased demand for sophisticated transmission systems designed to improve fuel efficiency. Data from the International Organization of Motor Vehicle Manufacturers indicates that global motor vehicle output hit 92.5 million units in 2024, establishing a solid foundation of demand for transmission assemblies and their essential gear components.

However, the industry faces substantial hurdles due to the ongoing electrification of powertrains. Unlike internal combustion engines that rely on multi-speed transmissions, electric vehicles predominantly utilize simpler single-speed reduction gearboxes, a design choice that inherently lowers the volume of gears needed per vehicle. This structural transformation compels manufacturers to overhaul their production strategies, prioritizing fewer, high-precision components essential for noise reduction in electric drive units, which presents considerable financial and operational obstacles to sustained market growth.

## Market Driver

Increasing global passenger vehicle manufacturing and sales volumes serve as the main propellant for the gear market. As automotive companies accelerate production to satisfy post-pandemic recovery and demand in emerging markets, the total number of transmission assemblies and their internal gears grows concurrently. This expansion is especially notable in Asian markets, where elevated production levels maintain strong order books for component suppliers. For instance, the China Association of Automobile Manufacturers (CAAM) reported in January 2025 that the nation achieved a cumulative automobile production of 31.28 million units in 2024, a benchmark that correlates directly with a rise in gear procurement.

Furthermore, the rapid uptake of electric and hybrid vehicle powertrains is fundamentally altering gear value chains and specifications. Although pure electric vehicles often require fewer gears, the boom in hybrid vehicles maintains the need for complex multi-speed transmissions, while electric drive units necessitate high-precision gears to mitigate noise, vibration, and harshness at high speeds. This evolution pushes suppliers toward higher-value components, with the International Energy Agency (IEA) projecting in May 2025 that global electric car sales would surpass 20 million units for the year. Reflecting this trend, Assembly Magazine noted in November 2025 that Toyota committed a \$912 million investment to enhance hybrid-electric vehicle assembly and advanced powertrain manufacturing at its United States facilities.

## Market Challenge

The shift toward powertrain electrification acts as a structural barrier to the expansion of the Global Passenger Car Gear Market. In contrast to internal combustion engine vehicles, which employ multi-speed transmissions with multiple gear sets to regulate speed and torque, electric vehicles typically utilize single-speed reduction gearboxes. This technological difference significantly decreases the number of gears needed per unit, thereby lowering the total volume of components requested by original equipment manufacturers. Consequently, even as overall vehicle production numbers rebound, the revenue potential for gear suppliers is limited by this reduction in content per vehicle.

This decline in component volume is intensifying within major manufacturing hubs, resulting in a distinct drop in demand for complex gear assemblies. As battery-powered vehicles gain market share, the total addressable market for conventional transmission gears shrinks considerably. According to data from the China Association of Automobile Manufacturers, sales of new energy vehicles surpassed 12 million units in 2024. This

widespread adoption of simplified electric drivetrains within the world's largest automotive market highlights how the transition away from internal combustion engines directly restricts growth opportunities for traditional gear manufacturers.

## **Market Trends**

The rise of Integrated Electric Axle (e-Axle) Gear Systems marks a foundational change in drivetrain architecture, combining the transmission, power electronics, and electric motor into one compact unit to optimize efficiency and power density. This integration necessitates high-precision helical gears that can manage higher input speeds while reducing overall package size, compelling suppliers to adjust their manufacturing lines for these intricate 3-in-1 systems. This structural shift is driving substantial investment in advanced manufacturing; for example, Linamar Corporation announced in a January 2025 press release a capital investment plan of roughly \$1.1 billion to boost production capacity for next-generation mobility technologies, including specialized eAxle and hybrid propulsion systems.

Simultaneously, the transition toward lightweight composite and hybrid gear materials is accelerating as manufacturers aim to address noise, vibration, and harshness (NVH) issues in quiet electric vehicle interiors. The substitution of traditional metal gears with high-performance engineering thermoplastics, such as PEEK (polyetheretherketone), markedly lowers component weight and operational noise, thereby enhancing passenger comfort and extending vehicle range. This material evolution is evident in the financial results of major polymer suppliers; in its 'Annual Report 2024' released in January 2025, Victrex plc reported a 5% volume increase in its automotive division, a growth trend directly linked to the rising uptake of their lightweight polymer solutions in electric mobility platforms.

## **Key Market Players**

American Axle & Manufacturing Inc.

BorgWarner Inc.

Bharat Gears Ltd

The Timken Company

Dynamatic Technologies Limited

Franz Morat Holding GmbH & Co. KG

GKN Automotive Limited

Gleason Corporation

IMS Gear SE & Co. KGaA

ZF Friedrichshafen AG

## **Report Scope**

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

### Passenger Car Gear Market, By Position

Skew Shaft Gears

Intersecting Shaft Gears

Parallel Shaft Gears

### Passenger Car Gear Market, By Material

Ferrous Metals

Non-ferrous Metals

Others

### Passenger Car Gear Market, By Application

Steering Systems

Transmission Systems

## Differential Systems

### Passenger Car Gear 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

### **Competitive Landscape**

Company Profiles: Detailed analysis of the major companies present in the Global Passenger Car Gear Market.

### **Available Customizations:**

Global Passenger Car Gear Market report with the given market data, TechSci 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
  - 1.2.3. Key Market Segmentations

### **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. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, Trends

### **4. VOICE OF CUSTOMER**

### **5. GLOBAL PASSENGER CAR GEAR MARKET OUTLOOK**

- 5.1. Market Size & Forecast
  - 5.1.1. By Value
- 5.2. Market Share & Forecast
  - 5.2.1. By Position (Skew Shaft Gears, Intersecting Shaft Gears, Parallel Shaft Gears)
  - 5.2.2. By Material (Ferrous Metals, Non-ferrous Metals, Others)
  - 5.2.3. By Application (Steering Systems, Transmission Systems, Differential Systems)
  - 5.2.4. By Region

- 5.2.5. By Company (2025)
- 5.3. Market Map

## **6. NORTH AMERICA PASSENGER CAR GEAR MARKET OUTLOOK**

- 6.1. Market Size & Forecast
  - 6.1.1. By Value
- 6.2. Market Share & Forecast
  - 6.2.1. By Position
  - 6.2.2. By Material
  - 6.2.3. By Application
  - 6.2.4. By Country
- 6.3. North America: Country Analysis
  - 6.3.1. United States Passenger Car Gear 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 Position
      - 6.3.1.2.2. By Material
      - 6.3.1.2.3. By Application
  - 6.3.2. Canada Passenger Car Gear 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 Position
      - 6.3.2.2.2. By Material
      - 6.3.2.2.3. By Application
  - 6.3.3. Mexico Passenger Car Gear 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 Position
      - 6.3.3.2.2. By Material
      - 6.3.3.2.3. By Application

## **7. EUROPE PASSENGER CAR GEAR MARKET OUTLOOK**

- 7.1. Market Size & Forecast
  - 7.1.1. By Value

## 7.2. Market Share & Forecast

7.2.1. By Position

7.2.2. By Material

7.2.3. By Application

7.2.4. By Country

## 7.3. Europe: Country Analysis

7.3.1. Germany Passenger Car Gear 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 Position

7.3.1.2.2. By Material

7.3.1.2.3. By Application

7.3.2. France Passenger Car Gear 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 Position

7.3.2.2.2. By Material

7.3.2.2.3. By Application

7.3.3. United Kingdom Passenger Car Gear 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 Position

7.3.3.2.2. By Material

7.3.3.2.3. By Application

7.3.4. Italy Passenger Car Gear 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 Position

7.3.4.2.2. By Material

7.3.4.2.3. By Application

7.3.5. Spain Passenger Car Gear 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 Position

7.3.5.2.2. By Material

7.3.5.2.3. By Application

## **8. ASIA PACIFIC PASSENGER CAR GEAR MARKET OUTLOOK**

### 8.1. Market Size & Forecast

8.1.1. By Value

### 8.2. Market Share & Forecast

8.2.1. By Position

8.2.2. By Material

8.2.3. By Application

8.2.4. By Country

### 8.3. Asia Pacific: Country Analysis

#### 8.3.1. China Passenger Car Gear 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 Position

8.3.1.2.2. By Material

8.3.1.2.3. By Application

#### 8.3.2. India Passenger Car Gear 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 Position

8.3.2.2.2. By Material

8.3.2.2.3. By Application

#### 8.3.3. Japan Passenger Car Gear 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 Position

8.3.3.2.2. By Material

8.3.3.2.3. By Application

#### 8.3.4. South Korea Passenger Car Gear 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 Position

- 8.3.4.2.2. By Material
- 8.3.4.2.3. By Application
- 8.3.5. Australia Passenger Car Gear 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 Position
    - 8.3.5.2.2. By Material
    - 8.3.5.2.3. By Application

## **9. MIDDLE EAST & AFRICA PASSENGER CAR GEAR MARKET OUTLOOK**

- 9.1. Market Size & Forecast
  - 9.1.1. By Value
- 9.2. Market Share & Forecast
  - 9.2.1. By Position
  - 9.2.2. By Material
  - 9.2.3. By Application
  - 9.2.4. By Country
- 9.3. Middle East & Africa: Country Analysis
  - 9.3.1. Saudi Arabia Passenger Car Gear 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 Position
      - 9.3.1.2.2. By Material
      - 9.3.1.2.3. By Application
  - 9.3.2. UAE Passenger Car Gear 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 Position
      - 9.3.2.2.2. By Material
      - 9.3.2.2.3. By Application
  - 9.3.3. South Africa Passenger Car Gear 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 Position

9.3.3.2.2. By Material

9.3.3.2.3. By Application

## **10. SOUTH AMERICA PASSENGER CAR GEAR MARKET OUTLOOK**

10.1. Market Size & Forecast

10.1.1. By Value

10.2. Market Share & Forecast

10.2.1. By Position

10.2.2. By Material

10.2.3. By Application

10.2.4. By Country

10.3. South America: Country Analysis

10.3.1. Brazil Passenger Car Gear 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 Position

10.3.1.2.2. By Material

10.3.1.2.3. By Application

10.3.2. Colombia Passenger Car Gear 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 Position

10.3.2.2.2. By Material

10.3.2.2.3. By Application

10.3.3. Argentina Passenger Car Gear 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 Position

10.3.3.2.2. By Material

10.3.3.2.3. By Application

## **11. MARKET DYNAMICS**

11.1. Drivers

11.2. Challenges

## **12. MARKET TRENDS & DEVELOPMENTS**

- 12.1. Merger & Acquisition (If Any)
- 12.2. Product Launches (If Any)
- 12.3. Recent Developments

## **13. GLOBAL PASSENGER CAR GEAR MARKET: SWOT ANALYSIS**

## **14. PORTER'S FIVE FORCES ANALYSIS**

- 14.1. Competition in the Industry
- 14.2. Potential of New Entrants
- 14.3. Power of Suppliers
- 14.4. Power of Customers
- 14.5. Threat of Substitute Products

## **15. COMPETITIVE LANDSCAPE**

- 15.1. American Axle & Manufacturing Inc.
  - 15.1.1. Business Overview
  - 15.1.2. Products & Services
  - 15.1.3. Recent Developments
  - 15.1.4. Key Personnel
  - 15.1.5. SWOT Analysis
- 15.2. BorgWarner Inc.
- 15.3. Bharat Gears Ltd
- 15.4. The Timken Company
- 15.5. Dynamatic Technologies Limited
- 15.6. Franz Morat Holding GmbH & Co. KG
- 15.7. GKN Automotive Limited
- 15.8. Gleason Corporation
- 15.9. IMS Gear SE & Co. KGaA
- 15.10. ZF Friedrichshafen AG

## **16. STRATEGIC RECOMMENDATIONS**

## **17. ABOUT US & DISCLAIMER**

## I would like to order

Product name: Passenger Car Gear Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Position (Skew Shaft Gears, Intersecting Shaft Gears, Parallel Shaft Gears), By Material (Ferrous Metals, Non-ferrous Metals, Others), By Application (Steering Systems, Transmission Systems, Differential Systems), By Region & Competition, 2021-2031F

Product link: <https://marketpublishers.com/r/P03C3AD5E609EN.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](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/P03C3AD5E609EN.html>