

# **Automotive Transmission Systems Market by Type (Dual-clutch Transmission (DST), Direct Shift Gearbox (DSG) Automated Manual Transmission, Tiptronic Transmission, CVT, Automatic, Manual); Fuel (Gasoline, Diesel, Hybrid); and Vehicle Class (Passenger Car, LCV, HCV, Off-road), and Region (North America, Europe, Asia Pacific, and South and Central America) -Global and Regional Share, Trends, and Growth Opportunity Analysis 2020 - 2030**

<https://marketpublishers.com/r/A4CC45DEF786EN.html>

Date: March 2024

Pages: 85

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

ID: A4CC45DEF786EN

## **Abstracts**

### **Report Overview:**

The 'Global Automotive Transmission Market Analysis and Forecast' report provides a comprehensive analysis of the automotive transmission market from 2020 to 2030, with a focus on key trends, drivers, challenges, and opportunities shaping the industry. The report offers insights into market dynamics, competitive landscape, regulatory framework, and regional analysis to assist stakeholders in making informed decisions. It aims to provide a detailed understanding of the market landscape, enabling companies to devise effective strategies for market penetration and growth during the forecast period.

### **Market Definition:**

The automotive transmission market refers to the industry involved in the manufacturing, distribution, and sales of transmission systems used in vehicles. These transmission systems play a crucial role in transferring power from the engine to the

wheels, enabling smooth acceleration and efficient operation of vehicles. The market encompasses various types of transmissions, including manual, automatic, continuously variable transmission (CVT), and dual-clutch transmission (DCT), catering to the diverse needs of automotive manufacturers and consumers.

#### Market Dynamics:

The automotive transmission market is driven by factors such as increasing vehicle production, growing demand for fuel-efficient vehicles, and technological advancements in transmission systems. However, challenges such as fluctuating raw material prices, stringent emission regulations, and the emergence of electric vehicles pose significant challenges to market growth. Additionally, evolving consumer preferences and the shift towards electric and hybrid vehicles are reshaping the competitive landscape of the automotive transmission market.

#### Market Trends:

Key trends shaping the automotive transmission market include the adoption of advanced transmission technologies, such as dual-clutch and continuously variable transmissions, to improve fuel efficiency and performance. Moreover, the integration of electronic control units (ECUs) and sensors in transmission systems for enhanced control and efficiency is gaining traction. Additionally, the rising demand for electric and hybrid vehicles is driving the development of electric and hybrid transmission systems, presenting new growth opportunities for market players.

#### Market Driver: Technological Advancements in Transmission Systems

Technological advancements in transmission systems are a significant driver of growth in the automotive transmission market. With continuous innovation and development, transmission systems have evolved to offer improved performance, fuel efficiency, and overall vehicle drivability. Several key technological advancements contribute to driving the market forward:

Modern transmission systems incorporate advanced engineering techniques and materials to enhance efficiency. For instance, the adoption of lightweight materials, such as aluminum and composites, reduces the overall weight of the transmission, leading to improved fuel economy and reduced emissions. Moreover, advancements in gear design, such as optimized gear ratios and friction reduction coatings, contribute to further efficiency gains.

Automated manual transmissions offer the benefits of both manual and automatic transmissions, providing drivers with the convenience of automatic shifting while retaining the efficiency and performance of manual transmission systems. AMTs utilize sophisticated control algorithms and actuators to automate clutch engagement and gear shifting, resulting in smoother and more precise gear changes compared to traditional manual transmissions.

CVTs represent a breakthrough in transmission technology, offering an infinite number of gear ratios to optimize engine performance across a wide range of driving conditions. Unlike traditional automatic transmissions with fixed gear ratios, CVTs use a belt or chain drive system to continuously vary the transmission ratio, allowing the engine to operate at its most efficient speed for improved fuel economy and smoother acceleration.

The rapid adoption of hybrid and electric vehicles (EVs) has spurred innovation in transmission systems tailored to the unique characteristics of electrified powertrains. Transmissions for hybrid vehicles often feature integrated electric motors and power-split devices to seamlessly transition between electric and combustion engine propulsion modes. Similarly, EVs utilize single-speed transmissions or direct-drive systems to transmit power from the electric motor to the wheels efficiently.

Technological advancements in transmission systems drive market growth by addressing key consumer demands for improved fuel efficiency, performance, and driving experience. As automakers continue to invest in research and development, the automotive transmission market is expected to witness further innovation and expansion in the coming years.

#### Market Restraint: Regulatory Constraints and Emission Standards

Regulatory constraints and emission standards pose significant challenges to the automotive transmission market, particularly in terms of compliance costs and engineering requirements. Government regulations aimed at reducing greenhouse gas emissions and improving fuel efficiency have a direct impact on the design and development of transmission systems.

Stringent emission standards set by regulatory bodies around the world require automakers to reduce vehicle emissions significantly. Transmission systems play a crucial role in achieving these targets by optimizing engine performance and minimizing

energy losses during power transmission. However, meeting emission standards often necessitates costly technologies, such as advanced fuel injection systems, exhaust gas recirculation (EGR), and selective catalytic reduction (SCR) systems, which add complexity and cost to transmission design.

In addition to emission standards, fuel efficiency regulations mandate automakers to improve the overall fuel economy of their vehicle fleets. This places pressure on transmission manufacturers to develop lightweight, efficient transmission systems that minimize energy losses and maximize powertrain efficiency. However, achieving higher fuel efficiency often requires trade-offs in terms of performance, drivability, and cost, posing engineering challenges for transmission designers.

The growing trend towards vehicle electrification, including hybrid and electric powertrains, presents additional challenges for traditional transmission manufacturers. Electric vehicles (EVs) typically feature single-speed transmissions or direct-drive systems, eliminating the need for conventional multi-speed transmissions. This shift towards electrification disrupts the traditional transmission market and requires manufacturers to adapt their product portfolios and business strategies to remain competitive in a rapidly evolving automotive landscape.

#### Market Size Estimation:

The global automotive transmission market is estimated to reach USD 88 billion by 2030, growing at a CAGR of 6% from 2024 to 2030. The market size is influenced by factors such as increasing vehicle production, rising demand for automatic transmissions, and technological advancements in transmission systems. The Asia Pacific region is expected to dominate the market, owing to the high demand for passenger vehicles and commercial vehicles in countries such as China, India, and Japan.

#### Market Segmentation:

The automotive transmission market is segmented based on type, vehicle type, and region. By type, the market is segmented into manual transmission, automatic transmission, continuously variable transmission (CVT), and dual-clutch transmission (DCT). By vehicle type, the market is categorized into passenger vehicles, commercial vehicles, and electric vehicles. Geographically, the market is segmented into North America, Europe, Asia Pacific, Latin America, and the Middle East and Africa.

By Type:

Dual-clutch Transmission (DST)

Direct Shift Gearbox (DSG)

Automated Manual Transmission

Tiptronic Transmission

Continuously Variable Transmission (CVT)

Automatic Transmission

Manual Transmission

By Fuel:

Gasoline

Diesel

Hybrid

By Vehicle Class:

Passenger Car

Light Commercial Vehicle (LCV)

Heavy Commercial Vehicle (HCV)

Off-road Vehicle

By Region:

North America

? United States

? Canada

? Mexico

Europe

? Germany

? United Kingdom

? France

? Italy

? Spain

? Rest of Europe

Asia Pacific

? China

? Japan

? India

? South Korea

? Australia

? Rest of Asia Pacific

South and Central America

? Brazil

? Argentina

? Rest of South and Central America

#### Competitive Landscape:

The automotive transmission market is highly competitive, with key players focusing on product innovation, strategic partnerships, and mergers and acquisitions to gain a competitive edge. Major companies operating in the market include Aisin Seiki Co., Ltd., BorgWarner Inc., Eaton Corporation, ZF Friedrichshafen AG, and Magna International Inc. These companies are investing in R&D activities to develop advanced transmission systems that offer improved fuel efficiency, performance, and durability.

#### Market Forecast:

The automotive transmission market is expected to witness significant growth during the forecast period, driven by increasing vehicle production, rising demand for automatic transmissions, and technological advancements in transmission systems. The market is projected to witness strong growth in the Asia Pacific region, owing to the expansion of the automotive industry and increasing consumer disposable income. However, challenges such as regulatory constraints and the shift towards electric vehicles are expected to impact market growth.

#### Regulatory Framework:

The automotive transmission market is subject to various regulatory frameworks aimed at improving vehicle safety, emissions standards, and fuel efficiency. Regulatory bodies such as the Environmental Protection Agency (EPA) in the United States and the European Commission in Europe enforce regulations related to vehicle emissions and fuel efficiency standards. Additionally, government initiatives promoting electric and hybrid vehicles are influencing the development and adoption of transmission systems.

#### Customer Landscape:

The automotive transmission market caters to a diverse customer base, including automotive manufacturers, aftermarket suppliers, and end consumers. Automotive manufacturers rely on transmission suppliers to provide reliable and efficient

transmission systems that meet their performance and durability requirements. End consumers, on the other hand, seek vehicles equipped with advanced transmission technologies that offer smooth driving experience, improved fuel efficiency, and reduced emissions.

#### Regional Analysis:

The automotive transmission market exhibits varying dynamics across different regions, with Asia Pacific emerging as the largest market due to the high demand for passenger vehicles and commercial vehicles. North America and Europe also represent significant markets, driven by technological advancements and stringent emissions regulations. Latin America and the Middle East and Africa are witnessing steady growth in the automotive transmission market, fuelled by increasing vehicle sales and infrastructure development.

#### Industry Outlook:

The automotive transmission market is poised for robust growth, driven by factors such as increasing vehicle production, rising consumer demand for fuel-efficient vehicles, and technological advancements in transmission systems. However, challenges such as regulatory constraints, the shift towards electric vehicles, and supply chain disruptions pose significant challenges to market players. To stay competitive, companies need to focus on innovation, collaboration, and strategic partnerships to capitalize on emerging opportunities and address evolving customer needs.



## Contents

### **1. EXECUTIVE SUMMARY**

### **2. MARKET INTRODUCTION**

- 2.1. Market Definition
- 2.2. Market Segmentation
- 2.3. Research Methodology

### **3. MARKET DYNAMICS**

- 3.1. Market Drivers
- 3.2. Market Restraints
- 3.3. Market Opportunities
- 3.4. Market Trends

### **4. GLOBAL AUTOMOTIVE TRANSMISSION SYSTEMS MARKET, BY TYPE**

- 4.1. Dual-clutch Transmission (DST)
- 4.2. Direct Shift Gearbox (DSG)
- 4.3. Automated Manual Transmission
- 4.4. Tiptronic Transmission
- 4.5. Continuously Variable Transmission (CVT)
- 4.6. Automatic Transmission
- 4.7. Manual Transmission

### **5. GLOBAL AUTOMOTIVE TRANSMISSION SYSTEMS MARKET, BY FUEL**

- 5.1. Gasoline
- 5.2. Diesel
- 5.3. Hybrid

### **6. GLOBAL AUTOMOTIVE TRANSMISSION SYSTEMS MARKET, BY VEHICLE CLASS**

- 6.1. Passenger Car
- 6.2. Light Commercial Vehicle (LCV)
- 6.3. Heavy Commercial Vehicle (HCV)

#### 6.4. Off-road Vehicle

### 7. GLOBAL AUTOMOTIVE TRANSMISSION SYSTEMS MARKET, BY REGION

#### 7.1. North America

##### 7.1.1. United States

##### 7.1.2. Canada

##### 7.1.3. Mexico

#### 7.2. Europe

##### 7.2.1. Germany

##### 7.2.2. United Kingdom

##### 7.2.3. France

##### 7.2.4. Italy

##### 7.2.5. Spain

##### 7.2.6. Rest of Europe

#### 7.3. Asia Pacific

##### 7.3.1. China

##### 7.3.2. Japan

##### 7.3.3. India

##### 7.3.4. South Korea

##### 7.3.5. Australia

##### 7.3.6. Rest of Asia Pacific

#### 7.4. South and Central America

##### 7.4.1. Brazil

##### 7.4.2. Argentina

##### 7.4.3. Rest of South and Central America

### 8. COMPETITIVE LANDSCAPE

#### 8.1. Market Share Analysis

#### 8.2. Company Profiles

##### 8.2.1. ZF Friedrichshafen AG

##### 8.2.2. Aisin Seiki Co., Ltd.

##### 8.2.3. BorgWarner Inc.

##### 8.2.4. Eaton Corporation plc

##### 8.2.5. Magna International Inc.

##### 8.2.6. Schaeffler AG

##### 8.2.7. Continental AG

##### 8.2.8. Allison Transmission Holdings, Inc.

- 8.2.9. JATCO Ltd.
- 8.2.10. Getrag (owned by Magna International)
- 8.2.11. GKN plc
- 8.2.12. Voith Group
- 8.2.13. AVL List GmbH
- 8.2.14. Tremec Corporation
- 8.2.15. Dana Incorporated

## **9. CONCLUSION AND FUTURE OUTLOOK**

## **10. APPENDIX "LIST OF TABLES"**

## I would like to order

Product name: Automotive Transmission Systems Market by Type (Dual-clutch Transmission (DST), Direct Shift Gearbox (DSG) Automated Manual Transmission, Tiptronic Transmission, CVT, Automatic, Manual); Fuel (Gasoline, Diesel, Hybrid); and Vehicle Class (Passenger Car, LCV, HCV, Off-road), and Region (North America, Europe, Asia Pacific, and South and Central America) -Global and Regional Share, Trends, and Growth Opportunity Analysis 2020 - 2030

Product link: <https://marketpublishers.com/r/A4CC45DEF786EN.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/A4CC45DEF786EN.html>