#### **Report Information**

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# Automotive Torque Actuator Motor Market Research Report – Forecast to 2030

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#### Description:

## **Automotive Torque Actuator Motor Market overview**

According to the latest research report, between 2022 and 2030, the worldwide automotive torque actuator motor market size is anticipated to grow at a CAGR of 7%.

Automobile torque actuator motors (TAM) are made up of direct current (DC) motors with electronic throttle control (ETC), turbochargers, and exhaust gas recirculation (EGR). DC motors are utilized in various applications to improve fuel efficiency and lower pollutants. The automotive actuator torque motor is used in cars for direct drive mechanisms, and geared electric motors are utilized as a substitute in some situations. It is generally utilized to upgrade the machine production process from manual to semi-automated or complete automation.

The market's key driving factors are the advancement of manufacturing technologies and the growth in engine downsizing. Growing demand for fuel economy, reduced carbon footprint, and low engine load will provide chances for new entrants to provide a superior solution and capture the lion's share of income. Furthermore, increased investment in R&D for more efficient engine output would create prospects for manufacturers. System upgrades will be the most difficult hurdle for manufacturers. However, higher fuel economy requirements and tight regulation over poor fuel emissions may stymie industry expansion in many regions. In automobiles, the automotive actuator torque motor is utilized for direct drive mechanisms, and in certain cases, a geared electric motor is employed as a substitute. It is mostly utilized to transform the machine production process from manual to semi-automatic or completely automated.

This report contains all the information on the global automotive torque actuator motor market growth and its strengths. The report also contains the culmination of dynamics, segmentation, key players, regional analysis, and other important factors. And a detailed analysis of the global automotive torque actuator motor market outlook and forecast for 2027 is also included in the report.

#### Competitive landscape

Mergers and acquisitions are being pursued by key businesses in order to improve their market position. Because of increased rivalry, market innovations occur on a regular basis.

#### **Major Key Players**

- CTS (U.S.)
- Johnson Electric (Hong Kong)
- Mitsuba (India)
- Rheinmetall (Germany)
- Bray (U.S.)
- NSK (Japan)
- Electrocraft (U.S.)
- Siko-Global (Germany)
- · Valmatic (U.S.)
- HIWIN (U.S.)

#### Covid 19 Analysis

The Automotive Torque Actuator Motors market is rapidly approaching pre-COVID levels, and a robust growth rate is projected during the projection period, fueled by economic recovery in the majority of emerging countries. The frequent suspension of public transportation systems, along with the virus's highly infectious nature, increased the need for passenger vehicles, resulting in an increase in demand for Automotive Torque Actuator Motors goods. However, the anticipated third and subsequent waves of the pandemic are generating a bleak picture.

#### **Market Dynamic**

Drivers

The major drivers of the market are the advancement of manufacturing technologies and the increasing downsizing of engines. Increasing demand for fuel economy decreased carbon efficiency and low engine load will enable new entrants to provide a superior solution while retaining a full share of income.

Furthermore, advancements in automobile motor development will be a critical element in market growth. Alternative motor technologies, including BLDC motors and nanotechnology, are being adopted by market manufacturers as viable replacements for brushed DC motors. BLDC motors are gaining popularity in a variety of sectors and applications due to their numerous benefits.

# Opportunities

Increased investment in R&D for more efficient engine output will also provide opportunities for manufacturers.

# Restraints

The most major barrier for manufacturers will be system upgrades. Nonetheless, increasing fuel economy standards and tight controls on dirty fuel emissions may stymie industry development in some areas.

# Challenges

The high production cost of the efficient actuator is a key problem that may create challenges in the market expansion.

#### **Cumulative Growth Analysis**

More than 120 motors are installed in modern passenger vehicles to handle numerous applications such as headlamp placement, seat adjustment, grill shutter, HVAC systems, and coolant and refrigerant valves, among others. Actuators are critical in activating these applications because they translate an electric signal into the necessary linear and rotational motion to create the requisite physical movement.

With technological developments, autonomous cars are likely to include a variety of actuators to improve safety and comfort. The automotive actuators market is constantly expanding because of the global increase in automobile production and sales (passenger cars, LCVs, HCVs, and off-highway vehicles). Sensors, software programs, controller hardware, and actuators are thought to form the foundation of today's and tomorrow's automotive systems.

BorgWarner announced its latest generation of cam torque actuators, intelligent cam torque actuation (iCTA), in March 2019, offering greater fuel efficiency and lower emissions through revolutionary technology. iCTA combines the benefits of cam torque actuation and torsional assist. A range of vehicles from two major vehicle manufacturers in China and North America will launch with this technology in 2019 and 2020.

#### Value Chain Analysis

According to the reports, The worldwide automotive torque actuator motor market is divided into four categories: type (pneumatic, electric, and mechanical), motion output (linear, rotary, and electric), application (electronic throttle control (ETC), turbocharger, exhaust gas circulation (EGC), and

others), and region. The linear segment is projected to account for the majority of the market share. Because they may be utilized in machinery, valves, and other areas where linear motion is necessary, linear actuators are the future of the Automotive torque Actuators industry. The use of linear actuators is increasing as automation and factory automation are coupled with the internet of things.

#### **Segmentation Overview**

The market is segmented on the basis of type, motion output, application, and region. The global automotive torque actuator motor market trend is expected to witness decent growth during the forecast period.

#### By Application

Based on the application, the market is segmented into electronic throttle control (ETC), turbocharger, exhaust gas circulation (EGC), and others.

#### By end-users

Based on the propulsion types, the market is segmented into linear, rotary, and electric.

#### **Regional Analysis**

According to the reports, the worldwide automotive torque actuator motor market has been divided into four key regions: North America, Europe, Asia Pacific, and the Rest of the World. Due to reduced labor costs and improved ease of doing business, Asia Pacific is anticipated to keep the majority of the automotive torque actuator market share over the projection period. The availability of infrastructure facilities, as well as the rising demand for car components, are propelling the industry forward. During the forecast period, China is expected to dominate the Asia Pacific automotive actuator market with the highest revenue share. China is the world's largest car producer, which is projected to be a driving force in the country's expansion of this industry. Furthermore, China has the ability to create automotive components in huge quantities at a reduced cost, giving it a competitive advantage over other countries.

#### **Report Overview**

The following report comprises of -

- · Market overview
- · Covid 19 Analysis
- Market Dynamic
- · Drivers
- Opportunities
- Restraints
- Challenges
- · Cumulative Growth Analysis
- · Value Chain Analysis
- · Segmentation Overview
- · By Application
- By End-Users
- · Regional Analysis
- · Competitive landscape

## **Recent Developments**

 Hella increased its electronics expertise in the field of specific applications in August 2019. The firm broadened its product portfolio, which now includes actuators, sensors, and energy management, as well as body electronics and driver assistance systems. The agriculture sector's Universal Rotary Actuator (URA) is projected to play a key role in this progress.

- Continental announced the groundbreaking of its greenfield factory in Talegaon, Pune, devoted to its powertrain division in January 2019. Until 2020, EUR 30 million will be invested on infrastructure and construction. The building phase has already begun. Production of different drivetrain items, including as engine management systems, sensors, and actuators, as well as fuel and exhaust management components for passenger cars, 2-wheelers, and commercial vehicles, is set to begin in early 2020.
- DENSO Corporation and Smiths Manufacturing (Pty)
   Limited, which is controlled by Metair Investments Limited, announced the formation of DENSO Sales South Africa (Pty) Limited in July 2019, a joint venture devoted to selling aftermarket goods and services in Southern Africa. South Africa has one of the most developed economies in the continent, and automobile ownership is the highest in the area. DENSO Sales South Africa was created to sell repair parts and accessories as well as provide services such as repairs for passenger cars and commercial vehicles in South Africa and surrounding countries.

#### Based on product type:

- · Brake Actuator
- · Cooling Valve Actuator
- · EGR Actuator
- · Grille Shutter Actuator
- · Headlamp Actuator
- Hood Lift Actuator
- HVAC Actuator
- · Piezoelectric Actuator
- · Power Seat Actuator
- Power Window
- · Quick Attach
- · Steering Column Adjustment Actuator
- Sunroof Actuator
- · Tailgate Actuator
- · Telescopic Actuator
- Throttle Actuator
- Turbo Actuator

## Based on vehicle type:

- · On-Highway
- Off-Highway

## Based on on-highway vehicle:

- · Passenger Car
- Light Commercial Vehicle
- · Heavy Commercial Vehicle

#### Based on motion:

Linear

Rotatory

## Based on application:

- Engine
- Body & Exterior
- Interior

## Based on the region:

- Asia Pacific
  - China
  - India
  - Japan
  - · South Korea
  - Thailand
  - · Rest of Asia Pacific
- · North America
  - US
  - Canada
  - Mexico
- Europe
  - France
  - Germany
  - Italy
  - Russia
  - Spain
  - United Kingdom
  - Rest of Europe
- Rest of the World (Rest of the World)
  - Brazil
  - Iran
  - RoW

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Rest of the World Automotive Torque Actuator Motor Market BY Country, 2020-2027 (USD MILLION)

FIGURE 22

FIGURE 23