

# Variable Valve Timing (VVT) - Global Market Outlook (2017-2023)

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## Abstracts

According to Statistics MRC, the Global Variable Valve Timing (VVT) Market is accounted for \$34.11 billion in 2016 and expected to grow at a CAGR of 6.4% to reach \$52.99 billion by 2023. Factors like increasing demand for fuel economy, advancements in the VVT technology, stringent emission norms leading to higher VVT standards, hybridization of vehicles are fuelling the market growth. However, increasing share of alternative fuels and high cost of VVT are hampering the market growth. Growing demand of cam-less actuation and increased preference for diesel cars is providing remunerative opportunity for the market. Moreover, difficulty in procuring complex internal parts of VVT and limited aftermarket supplies of VVT are the challenges faced by the market.

Based on Technology, Variable Valve Actuation (VVA) is used to add flexibility to the engine's valve train by enabling variable valve event timing, duration and/or lift. The main types of VVA technologies include valve timing control (VTC), variable valve lift (VVL) and camless valve trains. Recently, a new fully flexible hydraulic variable valve actuation system for engines using rotary spool valves is been developed. For instance, Eaton launched new variable valve actuation system, used with all SRFF based VVA solutions to enable functions such as cylinder deactivation, Miller cycle, internal exhaust gas recirculation (iEGR) or early exhaust valve opening.

Based on fuel, the Diesel VVT System based engines are favored in heavy-duty commercial and military applications as they have high performance in terms of fuel economy, torque at low speed, and power density. Several different VVA mechanisms have been implemented into diesel engines for low emissions and high thermal efficiency.

The Asia-Pacific is projected to be the largest market during the forecast period due to the stringent vehicle emission regulations and increasing vehicle production. The contributing countries for the market are China, India, and Japan.

Some of the key players in Global Variable Valve Timing (VVT) market are Aisin Seiki Co Ltd, BorgWarner Engine, Continental Powertrain, Delphi Powertrain Systems, Eaton Automotive, Hilite Engine Products, Hitachi Engine management Systems, Johnson Controls Power Solutions, Maxwell Ultracapacitors, Metaldyne Sintered Products, Valeo S.A Powertrain Systems and DENSO Powertrain Control Systems.

#### Valve Trains Covered:

Single Overhead Camshaft (SOHC)

Dual Overhead Camshaft (DOHC)

#### Technologies Covered:

Cam-Phasing Plus Changing

Cam-Phasing

Variable Valve Actuation (VVA)

Cam-changing VVT

#### Fuels Covered:

Diesel VVT System

Gasoline VVT System

#### Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

Market share assessments for the regional and country level segments

Market share analysis of the top industry players

Strategic recommendations for the new entrants

Market forecasts for a minimum of 7 years of all the mentioned segments, sub segments and the regional markets

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

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