

VVT & Start-Stop System Market by Technology (Cam-phasing, Cam-phasing Plus Changing, BAS, Enhanced Starter, Direct Starter, ISG), Phaser Type (Hydraulic, Electronic), Valvetrain (SOHC and DOHC), Fuel type, Vehicle, and Region - Global Forecast to 2027

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Abstracts

The automotive VVT & start-stop system market is projected to grow at a CAGR of 5.7% reaching USD 58.8 billion by 2027 from USD 42.3 billion from 2021. The major factors responsible for the growth of this market include the stringent emission regulations and fuel-efficiency standards enforced by different legislative bodies across the globe. Also, increased production of hybrid vehicles would drive the start-stop system market.

However, COVID-19 pandemic had an impact on the market in the first few months. Both the demand and supply of automotive vehicles and components had come to a halt in the first few months of 2020 across the globe as the whole ecosystem had been disrupted. However, in the next two quarters, the demand had been increasing. Additionally, the sales and production of vehicle has increased at a rapid pace in this year but due to chip shortage incidence the vehicle production again got affected from the third quarter. Moreover, as per industry experts it is expected that this situation will continue till the third quarter of 2022, after then the things will again come on track.

Dual Overhead Cam (DOHC) for VVT and Integrated Starter Generator (ISG) for start-stop technology are estimated to grow at a higher CAGR during the forecast period

In case of VVT, Dual Overhead Cam (DOHC) technology is expected to grow at a faster

rate in passenger cars, LCVs, and HCVs. DOHC has dedicated valves for inlet and outlet. This leads to smooth transmission, enhanced control of valves, efficient use of fuel, and a noise-free ride. In case of start-stop systems, integrated starter generator (ISG) is expected to have the highest growth as it allows greater electrical generation capacity and better emissions benefits.

Asia Pacific shows high growth potential for VVT & start-stop system market

The Asia Pacific region comprises rapidly emerging economies such as China and India, along with developed nations such as Japan, and is the largest market for automotive. In recent years, the region has emerged as a hub for automobile production. As the governments of these countries have imposed stringent emission standards and fuel efficiency levels, upcoming vehicles must go through strict new car assessment programs. The major factors responsible for this region's growth include increasing demand for fuel saving technologies like turbocharging and VVT & start-stop system. In addition, improving socioeconomic conditions in countries such as India, Thailand, and Indonesia have resulted in the growth of the demand for premium passenger cars. This, in turn, has accelerated the market for VVT & start-stop system in these countries.

Direct starter segment by technology will hold the largest market for start-stop system

The function such as automatic start-stop system can save up to fuel and reduce of CO2 emissions. This technology is used in a direct injected internal combustion engine to enable its instant restart. The technology keeps the piston in an optimal position when the vehicle stops, so that instant restart of the engine is possible by injecting fuel into the cylinder. Measurements taken in the New European Driving Cycle (NEDC) proved engine efficiency and fuel savings of up to 5-8%. The direct starter technology holds the largest market in the start-stop systems due to its presence in conventional engines.

In-depth interviews were conducted with CEOs, marketing directors, other innovation and technology directors, and executives from various key organizations operating in the VVT & start-stop system market.

By Respondent Type: OEMs—29%, Tier-I—65%, and Tier-II & III—6%

By Designation: C Level Executives —23%, Directors —43%, and Others- 34%

By Region: North America—31%, Europe—39%, Asia Pacific—24%, LATAM—4%, and RoW 2%

The VVT & start-stop system market comprises major manufacturers such as Continental AG (Germany), DENSO Corporation (Japan), BorgWarner, Inc. (US), Robert Bosch GmbH (Germany), Valeo(France), Aisin Seiki Co., Ltd. (Japan) and Hitachi, Ltd. (Japan).

Research Coverage:

The study covers the VVT & start-stop system market across various segments. It aims at estimating the market size and future growth potential of this market across different segments such as camera type, component, vehicle type, and region. The study also includes an in-depth competitive analysis of key players in the market, along with their company profiles, key observations related to product and business offerings, recent developments, and acquisitions.

Key Benefits of Buying the Report:

The report will help leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall VVT & start-stop system market. This report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and devise suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

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