



Bosch showcases a personalized range of advanced solutions for smarter mobility

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- Bosch has the technological know-how and offers intelligent solutions for BS VI compliant vehicles
- Bosch actualizes electrification with electric powertrains designed to be more efficient, economical and dynamic
- Bosch interlinks smart cars to smart homes and infrastructures through various Connected Mobility solutions and services
- With its focus on clean energy, efficiency and safety, Bosch's vision for the future of mobility revolves around the technological developments in automation, electrification, connectivity and safety.

New Delhi – Bosch showcases a range of personalized connected solutions to transform the future of mobility. Bosch's comprehensive portfolio of future-ready mobility products and services are in line with the market demand for advanced safety features and BS VI compliant vehicles. To ensure a smooth transition from BS IV to BS VI engines, Bosch meticulously collaborates with OEMs and end customers to develop innovative and intelligent future-ready mobility solutions. Backed by its global IT expertise and technical know-how in the mobility space, Bosch aims to usher a new era of automated, electrified and connected driving.

Being involved in more than 70 projects for passenger cars and commercial vehicles, Bosch is all set to further support OEMs in their launches of BS VI compliant vehicles through tailor-made solutions and requisite servicing.

Dr. Markus Heyn, Member of the Board of Management, Robert Bosch GmbH said, "Bosch is a company with vast experience in mobility and beyond. We not only focus on creating an automated, electrified and connected mobility ecosystem but also strive towards making vehicles a smart and safe companion in the future. Bosch is committed to working towards unleashing the full potential in the Indian mobility space by combining its global expertise and innovative technology in order to provide the best of solutions to end customers."

"The future of mobility in India will be clean, efficient, safe and connected. Bosch has been providing technological solutions for 98 years in India and continues to be a leading provider of mobility services. With the transition to BS VI, we have

been at the forefront in partnering with our customers in delivering cutting edge solutions to meet the mandate.” said **Mr. Soumitra Bhattacharya, Managing Director, Bosch Limited & President, Bosch Group in India**. He further added, “We are actively participating in shaping the future of mobility in India through our technology agnostic approach. “With a customer focused approach, we actively support the Government’s initiatives towards the auto sector with an India first objective.”

Products and Solutions for Indian market

Bosch’s vision for the future of mobility is to focus on areas such as clean, efficient, safe, automated, and connected. This is tied to three technological developments: automation, electrification, and connectivity.

Electromobility: Bosch accelerates development of EVs with customized solutions

Electrified and Powertrain Solutions

Bosch’s electric powertrain system is engineered for efficiency, economy, and dynamics. Aligned with Bosch’s goal of achieving carbon neutrality, these optimized powertrain systems are key to solving challenges in energy usage and climate change.

Integrated System for light electric vehicles

Bosch has devised an integrated system for Light electric vehicles with performance classes ranging from 1 to 20 KW, to have an all-in-one solution that enables a safe and dynamic ride experience. The motor, control unit, battery, and innovative connectivity functions synergize perfectly to ensure well-balanced vehicle performance and long range.

Electronic Engine Management Systems (Two-wheeler electrification)

Bosch offers a comprehensive range of engine management systems’ technologies specifically designed for two-wheelers. These include innovation in components for fuel injection and supply, air management, ignition and exhaust-gas treatment, and engine control units. Apart from being BS VI compliant, the Electronic engine control with sophisticated sensors provides significant benefits over the conventional carburetor systems, making it fuel efficient and reducing up to 16 per cent of CO₂ emissions.

Electronic battery sensor

The Electronic Battery Sensor (EBS) provides information on the status of 12-V lead-acid batteries used in the electric vehicles, while keeping the battery aging

effects at bay. By providing this relevant information, the EBS allows for the implementation of an optimized electrical-power management (EEM) system in the vehicle and supports fuel- and CO₂ saving technologies.

Hybridization solutions with 48V systems

The 48V hybrid system facilitates continued powertrain electrification for small passenger cars with complete charging through recuperation. The system helps functions like advanced start-stop, regenerative braking and coasting while improves efficiency and driving experience

Connected and Services

Bosch combines its IT competence with extensive automotive know-how, to be the most reliable partner to set up end to end connectivity solution across segments. As a leading player in the mobility sector, the company ensures it's connected and services solutions are personalized, comfortable, convenient, safe, and secure. With an in-depth understanding of vehicle data, long-term experience with mobility services and with connectivity solutions with the ecosystem, Bosch creates a new range of services, driving efficiency and reducing stress while offering scalability for future possibilities. The multilevel security solutions provide maximum data protection and data security.

These solutions include 3D display, Driver and Passenger Monitoring (AI), Battery in the Cloud, Convenience Charging and Perfectly Keyless solutions enhanced with advanced security.

Another noticeable solution from Bosch is the eCall, an emergency call system for cars, which enables a faster emergency response in case of accidents and other emergencies. Bosch already delivers this service to Daimler in more than 50 countries and in 18 languages, and is now expanding its services to the rest of the world.

Safety and Automated Solutions

Driver assistance systems are the starting point for safety in mobility. Bosch's precision systems greatly increase safety and assist a driver throughout the journey.

Advanced Driver Assistance Systems (ADAS)

Bosch's driver assistance systems are enabled by data fusion and smartphone integration which makes it possible for all OEM's to support the driver in complex and critical traffic situations. Features such as Electronic Stability Program (ESP),

predictive emergency braking, adaptive cruise control, forward collision warning, traffic jam assist guarantee enhanced driving safety and comfort.

Connected mobility: Value proposition, market differentiation and safety features at competitive prices

With the economy gearing up for implementation of BS VI norms by April 2020, Bosch draws up on its automotive lineage to manufacture end to end solutions. The use of re-engineered parts such as the Lean Electronic Fuel Injection System (LEFIS) for three-wheel vehicles by Bosch will effectively address BS VI norms and reduce the industry's carbon footprint over time. On par with the rising demand for connected vehicles, Bosch is constantly attempting to develop technologies and solutions for emission, stress and accident-free mobility.

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About Bosch in India

In India, Bosch is a leading supplier of technology and services in the areas of Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. Additionally, Bosch has in India the largest development center outside Germany, for end to end engineering and technology solutions. The Bosch Group operates in India through twelve companies, viz, Bosch Limited, Bosch Chassis Systems India Private Limited, Bosch Rexroth (India) Private Limited, Robert Bosch Engineering and Business Solutions Private Limited, Bosch Automotive Electronics India Private Limited, Bosch Electrical Drives India Private Limited, BSH Home Appliances Private Limited, ETAS Automotive India Private Limited, Robert Bosch Automotive Steering Private Limited, Automobility Services and Solutions Private Limited, Newtech Filter India Private Limited and Mivin Engg. Technologies Private Limited. In India, Bosch set-up its manufacturing operation in 1951, which has grown over the years to include 18 manufacturing sites, and seven development and application centers. Bosch Group in India employs over 31,000 associates and generated consolidated revenue of about ₹.21,450 crores (2.66 billion euros) in 2018 of which ₹. 15,824 crores*(1.96 billion euros) from third party. The Group in India has close to 18,000 research and development associates.*

In India, Bosch Limited is the flagship company of the Bosch Group. It earned revenue of over ₹. 12,460 crores (1.54 billion euros) in 2018. Additional information can be accessed at www.bosch.in

About Bosch Group

The Bosch Group is a leading global supplier of technology and services. It employs roughly 403,000 associates worldwide (as of December 31, 2019). According to preliminary figures, the company generated sales of 77.9 billion euros in 2019. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT company, Bosch offers innovative solutions for smart homes, smart cities, connected mobility, and connected manufacturing. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group's strategic objective is to deliver innovations for a connected life. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 440 subsidiary and regional companies in 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. The basis for the company's future growth is its innovative strength. At 125

locations across the globe, Bosch employs some 72,000 associates in research and development.

The company was set up in Stuttgart in 1886 by Robert Bosch (1861–1942) as “Workshop for Precision Mechanics and Electrical Engineering.” The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-two percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The majority of voting rights are held by Robert Bosch Industrietreuhand KG, an industrial trust. The entrepreneurial ownership functions are carried out by the trust. The remaining shares are held by the Bosch family and by Robert Bosch GmbH.

Additional information is available online at www.bosch.com, www.iot.bosch.com, www.bosch-press.com, www.twitter.com/BoschPresse.