Auto Shanghai 2019: "Systems for Future Mobility" by Brose enable New Driving Experiences

Shanghai/China (16. April 2019) At the Auto Shanghai 2019, Brose – the specialist in the interaction between mechanical, electric, electronic and sensor systems – will be offering insights into new products that will help shape the transformation of the industry. In addition, Brose will unveil its value-added system solutions tailored to customers in the Chinese market as part of its commitment to "Systems for Future Mobility".
„It's all about improving the user experience. It starts before sitting in the vehicle with opening the doors, putting the seats in the right position and preparing the right climate", emphasizes Kurt Sauernheimer, CEO of the Brose Group. Brose will invest more than 300 million euros in China for new products and new technical equipment within the next 3 years.

New driving experience for future mobility

Brose will showcase the intelligent interaction between its door and seat functions in a near-series concept car. The vehicle recognizes the driver, the door opens automatically and the side bolsters on the front seats are lowered to make entering the vehicle easier. One of the core elements of these comfort features is a power side door drive system developed by Brose. It opens and closes controlled by a smartphone or gestures. What is a comfort feature today will become essential in the age of autonomous driving or car sharing: if passengers do not close the door properly when exiting, the vehicle has to be able to do this itself before driving off. An integrated radar sensor recognizes obstacles and suspends door movement before a collision occurs.

Autonomous driving is also changing car users' demands towards vehicle interiors. Brose will be showing how the complete interior can be dynamically adapted to different driving situations. For example, the front seats can be rotated 180 degrees, enabling four people to talk face-to-face during meetings. To create the interior of the future, Brose expanded its expertise in seat systems to the entire vehicle interior, with adjusters for the steering wheel, display and footrests as well as multifunctional consoles that adapt to different seating positions.

Brose has developed a cross-product modular motor and electronics system with standardized components. It enables the automotive supplier to react to a range of demands and meet a variety of electrical systems architecture requirements ranging from 12 to 810 Volts so they can be used in conventional, hybrid and electric cars alike. One example is the electric air conditioning compressor, which combines the motor, compressor unit and power electronics to create a perfectly tuned system. It is more economical than conventional variants powered by the internal combustion engine because it only operates when needed. The compressor can also be used as a heat pump, ensuring efficient heating and cooling of the vehicle interior – if desired even before the driver enters the vehicle.

Systems committed to fulfilling consumers' needs

As a global market leader, Brose has always paid close attention to consumers' requirements – especially with regard to safety, comfort and efficiency. A vibration seat massage function offers the next level in comfort, using a specially developed algorithm to massage the passenger to the rhythm of the music. This vibration can also act as a signal to warn the driver of hazardous situations, for example if they fall asleep for a second or veer out of their lane.

Lightweight concepts realized through new materials and optimized structural design not only facilitate energy conservation and emission reduction for vehicles running on traditional fuels, but also increase the efficiency and driving range for new energy vehicles. Brose's cooling fan modules are optimized in terms of system efficiency, acoustic performance and weight. They have the best weight and size specifications among brushless motor cooling fans of the class "less than 600 watts". Brose's extended lightweight door module made from organo sheet (glass-fabric-reinforced thermoplastics) is large enough to nearly cover the whole interior door metal plate. This reduces the weight of the vehicle by up to 9 kilograms compared with conventional steel doors, and the same level of crash safety performance is ensured.

Local for local: Products tailored for Chinese market

Brose will be presenting a 14-way adjustable power seat structure, which was developed in China for the local market. It is a best practice example regarding local development and application as a systematic approach. With minimal adjustments, it can be used for various vehicle platforms of different car manufacturers. Starting in 2020, Brose will supply this product for certain conventional and new energy vehicles manufactured by a renowned local carmaker.

"Our goal is to become the strategic technical partner of our customers in China and work hand-in-hand with them to boost the Chinese automotive industry," says Jenny Xiang, President Brose China. "The Chinese market has the greatest potential in the global automotive industry and it has always been one of the focus regions of Brose's global business development strategy." Brose will strive to expand its customer portfolio in the Chinese market with an eye on building up local expertise – particularly in research and development – in order to provide customers with value-added solutions.

Discover more at the Brose stand 6BF100 in hall 6.2.

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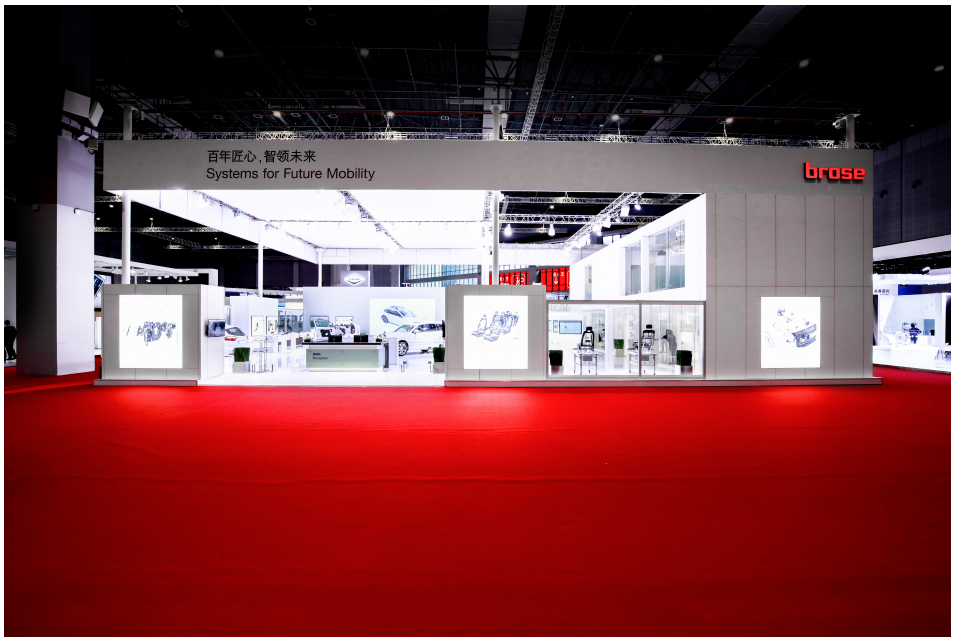

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