IAA 2017: Brose showcases "Competence in Mechatronics” for the vehicles of tomorrow

The Brose interior concept enables new scenarios for working and relaxing, for example meetings with up to four participants.

Frankfurt am Main (13. September 2017) Brose’s exhibition stand at the IAA 2017 is all about e-mobility, autonomous driving and connectivity. Intelligent interaction between door and seat functions makes vehicle access a comfortable experience. The company will also be showcasing an innovative interior concept that dynamically adapts to changing driving situations and offers a previously unheard-of level of flexibility. The automotive supplier has designed its electric drives for use in electrical systems ranging from 12 to 810 Volts.

“We have carved out a unique selling point in some fields with our decadelong mechatronics expertise, the intelligent interaction of mechanical, electric, electronic and sensor systems, and are therefore well positioned for new automotive applications. Brose is taking advantage of the opportunities offered by the transformation in the automotive industry,” explains Jürgen Otto, CEO of the Brose Group. The automotive supplier does not just want to focus on in-house development going forward: “We will prepare our product portfolio for the future by complementing our core business with acquisitions and partnerships where this makes sense and expand our system portfolio,” adds Otto.

The family-owned company has laid the financial basis for the planned business growth: “2016 was a good fiscal year for Brose. Turnover rose only slightly to 6.1 billion euros but earnings improved moderately compared to the previous year and we once again achieved the important target return required in order to secure our financial independence,” says Brose’s CEO. The automotive supplier expects turnover to increase to 6.4 billion euros for

2017. In the next five years, the business volume should exceed 8 billion euros. Acquisitions could even bring the figure to 10 billion euros.

Brose will invest 1.2 billion euros in new products, equipment and expanding international locations by 2019. China will play a major part besides North America in the further development of the company. It is already the world's largest automotive market and will grow from around 28 million units today to nearly 40 million by 2025. "This is why we are developing our own concepts for Chinese carmakers. We want to achieve the same pioneering position with them as we have with other customers. China will be the leading market for e-mobility," emphasized Jürgen Otto.

System expertise for hybrid and electric cars

Brose has aligned its drives to advances in vehicle electrification and will be showcasing its modular motor and electronics system in Frankfurt. Standardized components enable the automotive supplier to efficiently meet a variety of electrical systems architecture requirements ranging from 12 to 810 V. Independent of the vehicle drive, carmakers benefit from short development times, robust products, a high level of flexibility and economies of scale in global production. Brose supplies about 200 million motors for various applications in the automotive industry worldwide.

New to the product portfolio is the 48 V hybrid booster, which supports the main engine in hybrid vehicles as needed. It can move the car in situations such as traffic jams or parking garages without having to use the internal combustion engine.

Brose will start series production of the electric air conditioning compressor as early as 2020. The high power density of the system – consisting of a motor, compressor unit and power electronics – makes it optimal for the flexible use in electric vehicles with electrical systems from 48 to 810 V. The compressor can also be used as a heat pump if needed, ensuring heating and cooling of the vehicle interior – if desired even before the driver enters the vehicle. Air conditioning is not the only challenge for cars without an internal combustion engine: the space needed for the batteries makes the wheelbase longer. Brose is presenting a drive for rear axle steering at the IAA that reduces the turning circle and improves handling and driving comfort.

Connected door and seat functions make vehicle access easier

The automotive supplier will showcase the intelligent interaction between its door and seat functions in a near-series concept car: the car recognizes and welcomes the driver with projections on the ground. The door opens automatically and the side bolsters on the front seats are lowered. Power seatbelts and belt lock presenters make it easier to buckle up. Sensor technology actively adapts the headrest to the passenger.

Brose developed the power side door drive and added a number of new features: the system includes power locks and a radar sensor, which identifies obstacles and stops the door before a collision occurs. A capacitive sensor in the door provides anti-trap protection for increased safety.

A hands-on vision of the future: the reinterpreted vehicle interior

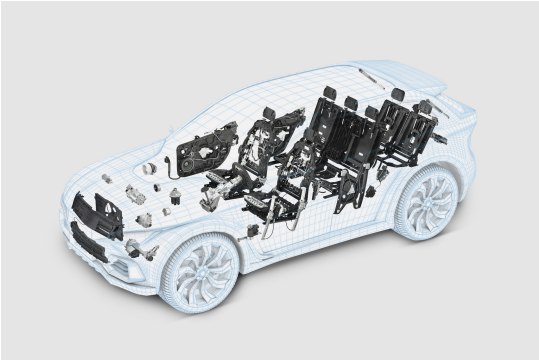
Brose's futuristic exhibit will show how the complete interior can be dynamically adapted to changing usage situations for autonomous driving to enable drivers and passengers to work or relax, for example. It draws on the mechatronics specialist's decades of experience and expertise in front and rear seats: the front seats automatically move toward the door for comfortable vehicle access. They can be rotated 180 degrees, enabling four people to talk face-to-face during meetings. The reclined position with leg and armrests provides a new level of comfort and previously unheardof legroom of up to one meter, while the contourable rear seats can be folded extremely flat and lowered completely.

For the first time, the company will also showcase adjustment technology that goes above and beyond the seat for maximum interior flexibility: adjusters for the steering wheel, display and footrests as well as multifunctional consoles that adapt to different seating positions. Connecting and coordinating all of the functions demonstrate the supplier's electronics expertise, making it the ideal development partner for all adjustment systems in the interior.

A vibration massage offers the next level in comfort, using a specially developed algorithm to massage the passenger to the rhythm of the music. Another effective application of the vibration function is as a warning signal. It can be used to immediately warn the driver of hazardous situations, for example if they fall asleep for a second.

About Brose

Brose is the world's fifth-largest family-owned automotive supplier. The company develops and produces mechatronic systems for vehicle doors and seats as well as electric motors and drives and electronics. More than 25,000 employees at 60 locations in 23 countries generate 6.1 billion euros in turnover. Every second new vehicle worldwide is equipped with at least one Brose product.



At the 2017 International Motor Show Brose showcases products for safer, more comfortable and more efficient driving.