

Media Information
25 September 2020

Building for the future: BMW Group enters a new era of R&D with FIZ Nord

- The heart of the BMW Group's worldwide R&D network
- Smart Building as innovation platform for 4800 vehicle developers
- Space for 100 state-of-the-art test benches and 200 laboratories
- Flagship for Germany as a location for research with an investment of approx. 1 billion euros
- Setting the pace of transformation in automotive development

Munich. With the FIZ Projekthaus Nord, which went into operation today, the BMW Group is opening the new heart of its global research and development network. The architecturally impressive building complex makes the successively expanded Munich Research and Innovation Centre (FIZ) one of the largest R&D locations in Europe and manifests the clear commitment to Germany as a location for research and development. The FIZ Projekthaus Nord is a milestone of the long-term "FIZ Future" program, in which the company has already invested about 1 billion euros.

Professor Reimund Neugebauer, President of the Fraunhofer-Gesellschaft, Munich's Lord Mayor Dieter Reiter, Oliver Zipse, Chairman of the Board of Management of BMW AG, Frank Weber, Member of the Board of Management for Development, Ilka Horstmeier, Member of the Board of Management for Human Resources, and Manfred Schoch, Chairman of the General Works Council of BMW AG, jointly ramped up the first of a total of 100 ultra-modern test benches on Friday, thus officially opening the progressive building.

Specialists are now developing the hardware and software for the future generations of BMW Group vehicles on a gross floor area of around 150,000 square meters - which corresponds to about half of the Oktoberfest area in Munich. Up to 120 construction planners and more than 1,100 workers have been working on the construction site in recent years. In addition to the enormous dimensions, construction activity was also characterised by the use of state-of-the-art applications: The construction planners used virtual simulation methods such as wind simulation and design computing to validate the innovative building design. The building was constructed according to the principle of smart building technology and digital user control -

this allows its energy efficiency to be significantly increased and, above all, every construction-specific process to be consistently digitized.

"In the FIZ we are working on the future of automobiles every day of the week. This is where we develop the technologies that will shape tomorrow's mobility and ensure that our premium automobiles provide sustainable pleasure," said Oliver Zipse, Chairman of the Board of Management of BMW AG. "With the FIZ Nord we are taking the next big step in our transformation process: We are setting up our research and development for the future. It's going to be digital, fully connected and more agile than ever before to bring the technologies of the future into series production. This will strengthen our role as a high-tech company and at the same time reinforce Germany's position as a research and development location."

Like no other building, the FIZ in Munich embodies the transformation of BMW Group automotive development. The FIZ now provides the structural prerequisites for the new R&D priorities of electrification, digitization, and increasing vehicle connectivity. As a data driven company, the BMW Group has planned enormous data processing capacities - the FIZ complex has over 20,000 servers and a capacity of over 90 petabytes of storage, which corresponds to the data volume of 24 billion smartphone photos of 4 MB each. The daily data exchange from and to the Munich FIZ amounts to 115 terabytes - not including the data centre for autonomous driving in Unterschleißheim, which was built especially for this purpose.

For the first time, all drivetrain developers will work together under one roof at FIZ Nord - regardless of whether they are working on ultramodern and efficient gasoline engines or developing the latest generations of electric drives. This ensures intensive collegial exchange and thus the transfer of knowledge between the technologies. In this way the BMW Group is laying an important building block for developing the skills for the employees who work there. In addition to drive development, the FIZ Nord places a second focus on complete vehicle integration - and thus on mastering ever-increasing complexity levels. The more than 2,000 employees of the complete vehicle integration division benefit from being physically close to the many test benches. In the workshop building for test benches and measuring equipment there are 100 test benches and 200 laboratories equipped with the very latest technology.

Inspection, testing and validation facilities for hardware and software as well as prototype construction are the core of the concept, which integrates all essential functions and is intended to significantly improve processes.

Frank Weber, Member of the Board of Management for Development, comments: "Like no other brand, BMW stands for technical precision. The technological heart of the BMW Group beats in the FIZ, our most important R&D location. We are focusing our innovative strength and essential future competencies in the new FIZ Nord. A state-of-the-art tech campus with 100 test benches, 200 laboratories and connected working environments is being created. This is where our employees are developing the future."

The BMW Group sets architectural and functional standards with the FIZ Nord building. The Projekthaus Nord, two associated office complexes and a building for test benches and measuring equipment will be home to around 4,800 vehicle developers. The hardware-driven, industrial character of the FIZ is symbolised by the functionalist building style. The loft-like atmosphere of the building underlines the company's orientation as a tech company. The BMW Group also attached importance to mapping the needs of its employees in the building and conducted a prior network analysis in the architectural planning process. Last but not least, the structure of the building was intended to promote cooperation and stimulate exchange - with multifunctional project areas for interdisciplinary collaboration. "With the Projekthaus Nord, we are continuing the success story of our largest Tech Campus. We are literally building the future of the BMW Group here: The FIZ Nord is a major milestone of our FIZ Future project," explains Ilka Horstmeier, Member of the Board of Management for Human Resources and Labour Director. "The new working environments bring our employees together across topics and functions and support our complex integration services and modern vehicle development."

The FIZ FUTURE program

The FIZ Nord is a major step of the comprehensive and long-term "FIZ Future" urban development program. Several years ago, the company realised that it needed to expand and reorganise its development competencies in order to meet the technological challenges of the 21st century. In 2014, the BMW Group developed the key elements of the program in an

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urban planning competition together with the Munich Department of Urban Planning and Building Regulations and with the active involvement of local residents.

FIZ history

The Research and Innovation Centre of the BMW Group, for which construction work began in the mid-1980s, was inaugurated in 1990 and has been growing continuously ever since. For decades it has been home to engine developers, designers, bodywork experts, chassis experts and electronics specialists - but also to physicists, chemists, materials researchers and software engineers. In addition, buyers, production planners and construction specialists and many other specialists required for developing a modern vehicle work on the site, which is modelled on a university campus. In the FIZ all models for all brands and markets of the BMW Group are created. It is the company's think tank and nerve centre, where all the important information from the global research and development network comes together and where decisions are made about new technologies and vehicle concepts.

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The BMW Group

With its four brands BMW, MINI, Rolls-Royce and BMW Motorrad, the BMW Group is the world's leading premium manufacturer of automobiles and motorcycles and also provides premium financial and mobility services. The BMW Group production network comprises 31 production and assembly facilities in 15 countries; the company has a global sales network in more than 140 countries.

In 2019, the BMW Group sold over 2.5 million automobiles and more than 175.000 motorcycles worldwide. The profit before tax in the financial year 2019 was € 7,118 billion on revenues amounting to € 104,210 billion. As of 31 December 2019, the BMW Group had a workforce of 126,016 employees.

The success of the BMW Group has always been based on long-term thinking and responsible action. The company has therefore established ecological and social sustainability throughout the value chain, comprehensive product responsibility and a clear commitment to conserving resources as an integral part of its strategy.

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