BMW GROUP
Corporate Communications

BMW Group Plant Debrecen

Press shop

- High productivity, thanks to optimal value stream
- Up to 60 tonnes of sheet metal scrap is collected, separated and recycled
- High-tech press shop capable of producing up to 10,000 parts per day

The life cycle of a vehicle begins in the press shop, like the one at the new BMW Group Plant Debrecen. It is here that the first body parts are made from steel and aluminium sheets. A 55-tonne overhead crane feeds the large steel and aluminium coils into a coil line. This cuts the sheeting into individual blanks – rectangular cut-offs or special shapes – at up to 80 strokes per minute. These blanks are then ready to be fed into the five-phase press line, where they are formed into the final body components.

Proven strategy, high productivity
An optimal value stream and efficient systems in the press shop enable demonstrably high levels of productivity. To make this possible, the BMW Group is employing a proven strategy of using the same tools and presses across its global network. Providing a model for the Debrecen plant are the press shops in Spartanburg (USA) and Swindon (Great Britain), whose know-how and technologies have been further developed for Debrecen. In the case of design-related exterior components, in particular, the BMW Group has a high level of core expertise and produces the components in its own press shops.

The press line in Debrecen is equipped with the **latest servo technology**. This enables the BMW Group to produce large quantities of components very efficiently. An overhead crane moves the correct press tool into each station. The blank is fed into the first press station and transferred from one station to the next by a robot-like automation technology – referred to as the "crossbar feeder" – for additional forming and trimming. The line is capable of running up to 18 strokes per minute, which means more than 10,000 components can be produced each day, depending on the size.

Quality control with AI, closed-loop material cycle
At the end of the line, all the parts undergo quality control, during which permanently installed, high-resolution cameras are used for the first time. AI performs a comparison with stored reference images, automatically identifies any possible fissures in the material and displays these on a screen. Like other plants within the BMW Group, Debrecen has a closed-loop material cycle for scrap steel and aluminium from the press shop. Underneath both the press and coil lines are areas where the scrap metal is gathered and sorted

after the parts are stamped. In series production and when the plant is at full capacity, as much as 60 tonnes of scrap metal is accumulated each day. A roughly 300-metre-long conveyor carries the scrap away to be loaded onto trailers. All this material is then taken off-site to be recycled in a closed loop and reused to manufacture new steel and aluminium coils.

Body shop

- Robot ballet: roughly 1,000 high-precision industrial robots can produce multiple models on one line in the body shop
- Latest generation of welding guns for increased energy efficiency
- Reduced number of joining processes; smart predictive maintenance for greater reliability

There is something magical about every new beginning, and the body shop is no exception. Here, the metal sheets shaped in the press shop are joined together, after which the contour of the vehicle is recognisable for the first time. Here, highly-automated industrial robots take roughly 450 individual sheets and some aluminium parts, and transform them into bodies for the new BMW iX3. The body shop in Debrecen is designed to produce multiple chassis variants on one line.

High degree of flexibility: multiple models at the same time
The finished pressed parts are delivered straight from the press shop to the adjacent body shop. The structure of the car emerges here – in digital, high-precision, efficient and flexible processes – thanks to precise connections. The choreography of the roughly 1,000 industrial robots is tested in advance with a virtual twin of the plant, and is perfectly tailored to the requirements at hand. New servo-electric welding guns allow the robots to work with an even greater degree of energy efficiency.

A key driving force in the body shop is digitalisation. In order to determine an ideal value stream and place each of the roughly 1,000 robots in its optimal position, every detail of the processes is simulated digitally in advance. Smart maintenance apps, which every employee has on their mobile phone, support smooth operation and efficient production. In total, the body shop in Debrecen covers an area of more than 95,000 square metres – that is the equivalent of 13 football pitches. A conveyer level eleven metres above the floor arranges the individual production cells into a continuous production system.

New welding guns increase efficiency
The latest generation of welding guns are used here. They are operated servo-electrically – with electricity rather than compressed air – and allow more efficient energy use than conventional guns, which operate with compressed air at twelve bar. BMW Group Plant Lydia in Shenyang (China) and Plant Spartanburg (USA) already work with this technology. Debrecen is the first facility in Europe to exclusively use these servo-electric welding guns.

High-precision connections, intelligently connected systems
The welding guns at Plant Debrecen perform roughly 4,500 high-precision spot-welds per chassis. Laser welding procedures in the doors have made it possible to reduce the amount of adhesive used there. As such, these chassis parts remain a mono-material, which is easier to recycle. Smart predictive maintenance is used to identify in advance potential welding gun malfunctions that may occur during production. Specially developed software continuously monitors different parameters during the welding process. With the help of algorithms, the software can predict when there is a danger of potential malfunction. Repairs are then carried out before any system downtime is required. Dashboards are available for the visualisation of all data and also help with maintenance. The overall energy consumption of the systems is continuously monitored, meaning it can be constantly optimised.

Fewer joining processes and beneficial design features
The close cooperation from the outset between the development and production teams has led to a high degree of production efficiency and maximum benefits for the customer. For example, the number of joining processes has been significantly reduced compared to similar models, thus also reducing complexity. Design features worked on in the development phase can also be found in details of the Neue Klasse – for example, the invisible door seal. Here, the window appears to be connected directly to the door, giving it a unique look.

The "pack to open body" principle, employed for the first time with the Neue Klasse, has created more installation space for the high-voltage battery. The optimisation of the space available for the battery in the chassis structure benefits the customer directly by allowing a more-powerful battery to be fitted. Furthermore, integrated, reinforced side sills increase passive safety. And the chassis concept of the Neue Klasse allows features to be carried over into other models and derivatives.

Paint shop

- Exclusive use of electricity from renewable energy sources in normal operation; zero fossil fuels
- Use of electricity in the paint shop contributes significantly to lower CO_2e emissions in production of the BMW iX3
- CO_2e emissions per year reduced by 12,000 tonnes in the paint shop alone
- Exhaust air purification through innovative eRTO process

The state-of-the-art paint shop at BMW Group Plant Debrecen is the central factor behind a **significant reduction of the CO_2e footprint for the BMW iX3.**

In total, roughly 80 kg of CO_2e (scope 1/2 emissions) are emitted during production of the new BMW iX3. This figure includes CO_2e emissions from Plant Debrecen, as well as the production of BMW parts at other BMW Group facilities – such as components made in Landshut. This is a **reduction of roughly two thirds compared to the production of previous BMW derivatives.**

Looking solely at the figures for Plant Debrecen, **CO_2e emissions from the production of a vehicle, including its high-voltage battery, have been reduced by approximately 90 per cent** to roughly 34 kg of CO_2e (when operating at full capacity, compared with other BMW Group plants).

Paint shop contributes significantly to reducing CO_2e emissions in production of the BMW iX3
Paint shops usually operate with gas in order to achieve the high temperatures of up to 180 degrees Celsius required. Plant Debrecen is the BMW Group's first car plant to be supplied exclusively with electricity from renewable energy sources – i.e. without using of fossil fuels like oil and gas – during normal operation. Up to a quarter of the electricity needed each year for the whole plant comes from a 50-hectare photovoltaic facility on the plant site.

Due to its high energy requirement, the paint shop is also the biggest factor behind Plant Debrecen emitting far less CO_2e. **In the paint shop alone, the use of electricity from renewable sources has reduced annual emissions by up to 12,000 tonnes of CO_2e**. This is made possible here by a unique combination of different process and systems, such as power-to-heat technology, Heat Grid and eRTO.

Power-to-heat significantly reduces CO_2e footprint
The power-to-heat principle is essential to operating the Debrecen paint shop with electricity from renewable energy sources. All ovens and other processes necessary for painting run entirely on electricity – rather than natural gas, as was the case in the past. This approach significantly reduces the paint shop's carbon footprint, even if operating without natural gas means electricity consumption increases. In Debrecen, the BMW Group obtains the external power it needs for production exclusively from renewable energy sources.

Heat grid cuts energy use by another ten per cent
The "heat grid" energy efficiency project was successfully implemented during the planning stage of the new paint shop and achieves additional energy savings of up to ten per cent. This innovative concept combines several measures for efficient **energy recovery** from the compressed air supply, drying ovens and cooling systems. The waste heat is then used to preheat the water circuit.

There is also a **thermal storage system** holding 1,800 m³ of water and with a capacity of 130 MWh. The system stores excess energy generated by the photovoltaic facility during off-peak periods in the form of heat. This can then be used to cover power peaks.

The second special feature of Debrecen is that the whole system operates at a water supply temperature of just 65 degrees Celsius, compared to 90-120 degrees Celsius in previous installations. The hot water is used to supply the paint shop's hall ventilation systems and maintains a process temperature of 22 degrees Celsius and 60 to 65 per cent humidity in the spray booths.

Exhaust air purification through innovative eRTO process
The innovative eRTO process is used to purify the exhaust air. eRTO stands for "electric regenerative thermal oxidation", a process that purifies exhaust air from the paint shop at temperatures of 800 to 1,000 degrees Celsius and, unlike in the past, runs exclusively on electricity. During the purification process, the exhaust air passes through a ceramic bed where solvent residues are burned off. To do this, the air has to be heated to high temperatures in a short space of time. Due to its high thermal recovery rate, with heat effectively retained within the system, the eRTO system delivers a very high level of energy efficiency.

As well as exhaust air from the drying ovens, waste heat is also recovered from compressors and heat pumps, and then fed back into the painting process. Depending on how busy the plant is, the system can reduce primary energy consumption in the paint shop by up to 97 kWh per vehicle produced.

Fully-automated dry separation
Like many other BMW Group locations, the paint shop in Debrecen uses modern, environment-friendly dry separation technology. Any paint overspray that does not adhere to the body in the spray booth is filtered out and mixed with limestone powder. This significantly reduces water consumption and allows the spray booth to operate with up to 90 per cent recirculating air. This means only ten per cent of the air needs to be temperature controlled and humidified, rather than 100 per cent – resulting in substantial energy savings. The used stone powder can also be fed back into the material loop and reused, for example, in the cement industry, rather than requiring disposal as contaminated wastewater, as was the case with the previous wet-scrubbing method.

Comprehensive digitalisation
Alongside innovative technologies, such as Heat Grid and eRTO, comprehensive digitalisation also contributes to the high level of efficiency at Debrecen's new paint shop. Fully-automated driverless AGVs (Automated Guided Vehicles) transport car bodyshells to their respective work steps. In addition, Automated Surface Inspection (AOI) utilises artificial intelligence to detect post-painting irregularities and identify any areas requiring post-processing. The planning for the paint shop was all implemented virtually. This allowed structural planning to be tested virtually before actual construction began. This represented a quantum leap compared to the training of painting robots that happened previously. Initial training sessions for employees were also held virtually.

Expertise from the production network
The state-of-the-art facility, which paints vehicle bodies in a fully-automated process, was developed and planned by leveraging existing expertise from within the production network. With a footprint of 33,000 square metres, the three-storey paint shop building provides the required workspace for modern production – and there is room to increase capacity further still.

BMW GROUP
Corporate Communications

High-voltage battery production

- First of five new assembly sites on three continents
- Battery production on plant premises: “local for local”
- Consistent zero-defect approach with AI and data analytics
- Knowledge sharing in the production network: virtual and in person

With the start of production of the Neue Klasse, in the form of the BMW iX3 in Debrecen, the BMW Group is also commencing large-scale production of a key component of the electric vehicle at its new plant: the high-voltage battery. Following the development of the production process and tests on pre-series batteries at the pilot plants for high-voltage batteries in Parsdorf, Hallbergmoos and at the Research and Innovation Centre (FIZ) in Munich, Debrecen is now the first of five new assembly plants on three continents to begin series production.

Quality is key: Consistent zero-defect approach
For the new, in-house developed high-voltage battery, the BMW Group has implemented highly intelligent production processes. The Debrecen plant is the first of five plants around the world to mass produce the Gen6 high-voltage batteries. Prior to this, the production processes were developed and tested in high-voltage battery pilot plants in Bavaria. Artificial Intelligence, data analytics and constant knowledge sharing in the production network play a major role in the scaling up of production. Digital production twins and extensive AI databases are used to optimise the process and train employees. The consistent zero-defect approach is made possible by seamless in-line monitoring and a 100% end-of-line inspection. In line with its “local for local” principle, the BMW Group has located Gen6 high-voltage battery assembly on the plant premises. This way, production benefits from infrastructure advantages and short distances. The start of high-voltage battery production in Debrecen, at the same time as series production of the BMW iX3 gets underway, will be followed within less than two years by battery assembly plants in Shenyang (China), Irlbach-Straßkirchen (Lower Bavaria), Woodruff (USA) and San Luis Potosí (Mexico).

How the BMW Group builds Gen6 high-voltage batteries
The BMW Group sources battery cells for its high-voltage batteries from leading cell manufacturers, who produce the cells to the company's specifications. The highest technical standards apply. Upon receipt of goods, additional measurements – such as voltage checks – are carried out. Next comes cell clustering, where the battery cells are connected to cooling elements. This step ensures optimal insulation and cooling of the cells. The cell clusters and cell contact system are then laser-cleaned and welded with pinpoint precision. The in-line inspection continuously monitors each weld

seam in real time. An innovative foaming process follows, ensuring that all elements are protected as a mechanical unit. The foam thus guarantees the safety, stability and durability of the high-voltage battery. The housing is then closed, sealed and riveted.

20 per cent higher energy density, 30 per cent faster charging time
In the final assembly step, the Energy Master – the central control unit – is installed onto the high-voltage battery. A permanently elastic sealing adhesive is applied to ensure a reliable seal. Finally, each high-voltage battery undergoes a 100% end-of-line inspection to ensure quality, safety and function. The new round cells in the high-voltage batteries for the Neue Klasse have an energy density that is over 20 per cent higher. This means customers benefit from a 30 per cent shorter charging time compared to the previous generation of batteries. The BMW iX3 50 xDrive has a range of 805 kilometres (500 miles) and can be charged with sufficient power for up to 372 kilometres (231 miles) of range in just ten minutes, thanks to the 800-volt technology.

Knowledge sharing in the production network: virtual and in person
The high-voltage battery production has a highly automated production system – with greater overall equipment effectiveness and operational excellence. Technical cleanliness is vital in production. Employees are trained for their job in the DLab training room, which has 3D images of the new production lines, which can be explored virtually. This provides a safe simulated environment in which to raise levels of expertise and confidence in understanding the process, operating the system and troubleshooting – and so learn and master the features of the production line. Among other things, virtually generated errors are used to help employees learn how to find quick solutions in the new production environment. The whole global production network for high-voltage batteries benefits from the close collaboration between the pilot and series plants – whether virtual or in person.

Electric drive system

- First fully electric drive unit from Plant Steyr for the BMW iX3
- All core components will be manufactured in-house
- Significant contribution to 20 per cent increase in overall vehicle efficiency

The electric motor for the BMW iX3 produced in Debrecen will be manufactured at BMW Group Plant Steyr. The electric motor for the sixth generation of BMW eDrive is the first fully electric drive unit to be produced at the long-standing location in Austria.

The BMW Group has invested heavily to facilitate this: new halls have been built and existing halls have been converted since 2022. Employees have acquired new, additional skills through education and training. This means that all core components of the drive, such as rotors, stators, transmissions, inverters and casings can be manufactured and assembled in-house. Inverter production in an in-house clean room environment marked the plant's entry into the field of electrical engineering. Half of the Steyr location's total workforce could be employed in e-mobility by 2030, depending on how global demand develops.

Efficiency redefined: Gen6 electric motor contributes to 20 per cent increase in overall vehicle efficiency
The new electric drive unit impresses with in-house manufacturing and system integration, and primarily through technological excellence. For example, comparing the new BMW iX3 50 xDrive – the first Neue Klasse model – with a Gen5 xDrive model shows the following improvements in the electric motor: energy loss is reduced by 40 per cent, costs by 20 per cent and weight by 10 per cent. All this makes a significant contribution to the up to 20 per cent increase in overall vehicle efficiency compared with the BMW Group's current generation of fully electric vehicles.

Assembly

- Assembly process supported entirely digitally
- Automated quality control with help of camera system and sensors in production line sections
- Efficient, ergonomic assembly processes thanks to extensive modularisation, a simplified wiring harness and height-adjustable workspaces
- Smart conveyer maintenance: systems report maintenance requirements and errors themselves

Assembly is the beating heart of an automotive plant. It sets the tone for all the technologies in the plant and is where the most employees work. They install the individual components and systems in the painted body – and at the end of the process, a ready-to-drive vehicle rolls off the production line.

Digital live tracking, automated inline quality control and smart system maintenance
Like the Neue Klasse, assembly in Debrecen is digital. The production facilities and tools, components and every BMW in assembly are digitally connected to the BMW production system. Digital live tracking makes it possible to seamlessly follow the status of every BMW being built at any time. Camera systems and sensors along the production line also supply large volumes of data, which is analysed by AI. As a result, the employees on the production line receive feedback in real time. With the Neue Klasse, a wide range of quality checks can already be performed digitally while still on the production line. Having been employed for the first time in Debrecen, this approach will now also be implemented at other sites. The next point of use will be at Plant Munich, which will produce the Neue Klasse sedan model from 2026. As well as the vehicles, the conveying technology is also constantly checking itself, making maintenance intervals a thing of the past. The systems independently report errors and any maintenance requirements to the maintenance staff.

The innovative vehicle architecture of the Neue Klasse also opens the door to totally new possibilities: greater efficiency thanks to modularisation, fewer different connecting elements and simplified installation of the wiring harness. For example, the front end of the car consists of over a third fewer components.

Neue Klasse enables simple, fast assembly processes
A number of features of the Neue Klasse are new territory for everyone. Unlike in previous models, the wiring harness is divided into multiple parts, making it easier and more ergonomic to install. This fundamental component

of the digital nerve system of the BMW iX3 is based on a "zonal" wiring harness architecture, which requires 600 fewer metres of wiring and weighs 30 per cent less than the previous generation. The harness is split into four zones: front end, body, rear and roof. The superbrains of the Neue Klasse are connected via high-speed data connections to smaller control units, the zone controllers. These control and consolidate the data flow of the electronics in and out of the zones. This means the cables wiring in the car is zone-related and can therefore be shorter, thinner and lighter. Height-adjustable workspaces and swivel mounts also have a positive effect. Ergonomics are improved by 30 per cent overall.

Modularisation reduces complexity
BMW also employs modularisation when it comes to components. Many small individual parts are grouped into one module. The variation of connecting elements has also been radically reduced for the Neue Klasse. This in turn reduces the number of different plugs, screws and clips. All of this makes assembly significantly more straightforward.

High-tech solutions from existing plants
When planning the new production site in Hungary, the BMW Group used a completely virtual design process and BMW iFACTORY principles. It also referred to tried-and-tested standards and high-tech solutions from existing plants on many occasions. For example, many ideas and proven structures from Plant Lydia in China and Plant Leipzig can be found in the assembly area at Debrecen.

Further development of the "finger structure" at Leipzig
These structures include the "finger structure", or "comb structure", developed by the BMW Group specifically for Plant Leipzig, which opened in 2005. This structure allows supply parts and preassembled modules to be transported directly to the assembly lines: a record share of total parts – up to 80 per cent – can be delivered directly in Debrecen, as the "fingers" are supplied logistically from both sides for the first time. This is the highest proportion in the BMW Group's production network. The finger structure allows subsequent extension and the integration of further assembly steps. This kind of flexibility is characteristic of production at the BMW Group.

Production processes similar to those at Plant Lydia
Plant Lydia in China also inspired many structures and processes in the assembly area at Debrecen. Plant Lydia opened in 2022 and was the first BMW Group location to be completely planned and simulated in the virtual world from the outset. The hall for the assembly line and the complete conveyor system in Debrecen are set up identically. The technology was therefore available quickly and had already been tried and tested, simplifying the start-up of a completely new production line.

Logistics

- Digital networking of all internal and external databases automates countless processes
- High degree of flexibility and efficiency, thanks to "finger structure" and 80 per cent direct delivery
- All-electric in-house logistics with seven different vehicle concepts, some autonomous

Rapid and flexible logistics with short distances and reaction times, coupled with comprehensive checks, are an important component of the efficient assembly process at the new BMW Group plant in Debrecen. The basis for this are the structural conditions at the new site, which have allowed a completely single-storey factory, and the full digitalisation of all incoming and outgoing deliveries.

Every process step is documented and visualised
Innovation begins with an automated and transparent reporting system. Connecting all internal and external databases brings unprecedented digital depth to the logistics set-up as a whole. Many interlocking manual analysis processes are automated this way. As a result, structured and analysed information is available at the "push of a button" at any time. A live system – featuring real-time data – documents and visualises every single process step, from the arrival of a delivery at the plant, through automatic number plate recognition on the truck and unloading by forklift, to delivery at the point of assembly. A dashboard displays everything clearly and allows effective and quick decision-making at all levels. As the system is completely automated, no printouts or manual steps performed by individual employees are necessary. This saves a lot of time and increases efficiency.

High degree of automation
When it comes to the distribution of individual components at the plant, BMW employs a high degree of automation. For example, seats are delivered by driverless Smart Transport Robots (STR). Autonomous rack changers automatically exchange empty transport boxes for full ones on tugger trains – which take their bearings from network antennas and defined fixed points – without requiring supervision by employees. The fully-assembled high-voltage batteries are also transported to their installation point by these tugger trains.

Finger structure allows 80 per cent direct delivery
With 80 per cent direct delivery overall, the new plant in Debrecen posts the highest figure in the BMW Group's production network. This enables the "One move, one touch" principle whereby delivered components are only

touched once when being unloaded and are immediately deposited at the installation point. Where multiple steps were previously required, now only one is necessary. Furthermore, there is no need to store a large number of components. Underpinning the high percentage of direct deliveries is the smart "finger structure". This is based on the set-up used at the Leipzig plant, but has been further developed. Each finger has three to five gates for direct delivery to the assembly line. These can be used flexibly and as required. Plus, the direct delivery can react quickly to changes in the pace of assembly or amended installation points on the assembly line. Trucks without direct delivery capability unload their freight at the assembly logistics centre next to the assembly halls.

Sustainable, electric and paperless

All vehicles used for in-house logistics at the plant site are 100 per cent electric. The fleet consists of seven vehicle concepts for a wide range of application scenarios, from the standard forklift to the autonomous, driverless transport system. The logistics department at the new plant is also completely paperless. There is no need for analogue delivery notes and lists, and the labels for the shelves are not printed out. Instead, they take the form of small displays, as can be found in modern supermarkets. This saves both paper and time: if changes are made to the storage system, the displays can be quickly reprogrammed with a single click – and no paper labels need to be swapped over.

Quality

- Quality assurance achieved digitally, with automated, AI-assisted tech and a digital twin
- Virtual error recognition; real-time cause analysis and intuitive evaluation using augmented reality
- Automated checks by robots set new benchmarks and deliver reliable results

Exceptional quality is an essential ingredient of all BMW Group products – and BMW Group Plant Debrecen is now taking quality assurance to the next level. Underpinning these advances are digitalised and automated processes, early error recognition and correction, a high degree of agility and, last but not least, the highly qualified and motivated employees at the plant. With their quality-led mindset, they all live and nurture the culture of quality at Debrecen and actively contribute to continuous improvements within the plant – always with a focus on the customer and product.

Premium quality with digital assurance
At Plant Debrecen, the principle of error avoidance is applied through proactive identification of quality risks prior to production, early virtual error recognition and cause analysis in real time. Recording and monitoring all relevant production processes digitally achieves maximum transparency. Accurate data analysis avoids extra work and waste. All this is supported by automated, AI-assisted testing methods. These include an assistant device positioned in the vehicle, that automatically tests and analyses all voice commands, and tests for operating comfort – such as when opening and closing doors – using robots. The visual, non-contact geometric measurement of the vehicle is also automated and compared with the digital twin. These automated processes guarantee consistent quality and achieve robust testing standards. Augmented reality technology also allows intuitive analysis of the vehicle geometry.

High degree of accuracy and speed through agile working methods
The working methods at Plant Debrecen are centred around agile processes, like those found in software development. Rapid feedback and adjustments accelerate development cycles and ensure continuous improvement. The many automated processes reduce instances of human error and guarantee premium quality.

BMW GROUP
Corporate Communications

The milestones of the BMW Group Plant Debrecen

31 July 2018	Announcement of new BMW Group production site in Debrecen, Hungary
12 Oct. 2018	Land purchase contract signed at the University of Debrecen with Oliver Zipse (then Member of the Board of Management at the BMW Group, responsible for Production), Péter Szijjártó (Hungarian Minister of Foreign Affairs and Trade) and Dr László Papp (Mayor of Debrecen)
Feb. 2019	City of Debrecen begins site preparation
18 July 2019	"Dual education" contract signed with the Vocational Training Centre of Debrecen, DSZC
3 Dec. 2019	Announcement that construction of new BMW Group Plant Debrecen will begin in spring 2020
15 May 2020	BMW Group acquires the land for the new plant. Modified timeline due to coronavirus
Oct. 2020	Announcement that Plant Debrecen will play a key role in the transformation towards e-mobility. Production will start with a new, fully electric model
18 Feb. 2022	Construction of first buildings begins
1 June 2022	Laying of the foundation stone for state-of-the-art plant. Announcement that series production of the fully electric Neue Klasse will begin in 2025
25 Nov. 2022	Announcement of battery production at Plant Debrecen
21 March 2023	Digital opening of Plant Debrecen (cooperation with Nvidia)
30 Oct. 2023	Training Centre opens
9 Feb. 2024	Central Communications Centre opens
27 Aug. 2024	Paint shop becomes first technology area to go on-stream
20 Nov. 2024	First Neue Klasse test vehicles roll off production line
3 Dec 2024	BMW Group Plant Steyr produces first electric motors for Neue Klasse test vehicles
27 March 2025	Heart of the plant begins to beat as assembly gets underway
26 Sept. 2025	Official opening of BMW Group Plant Debrecen
End of Oct. 2025	Start of BMW iX3 series production

BMW GROUP
Corporate Communications

If you have any queries, please contact:

Corporate Communications
Moritz Schmerbeck
Spokesperson Production Network BMW Group
Phone: +49-151-601-43233
E-mail: Moritz.Schmerbeck@bmwgroup.com

Benedikt Torka
Spokesperson Production Network, Logistics BMW Group
Phone: +49-151-601-32455
E-mail: Benedikt.Torka@bmwgroup.com

Christian Marxt
Spokesperson Production Network, Powertrain and High-Voltage Battery BMW Group
Phone: +49-151-601-79158
E-mail: Christian.Marxt@bmwgroup.com

Susanne Tsitsinias
Spokesperson BMW Group Plant Steyr
Phone: +43-676-8280-4111
E-mail: Susanne.Tsitsinias@bmwgroup.com

Cornelia Bovensiepen
Spokesperson Sustainability BMW Group
Phone: +49-151-601-94935
E-mail: Cornelia.Bovensiepen@bmw.de

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 services. The BMW Group production network comprises over 30 production sites worldwide; the company has a global sales net-work in more than 140 countries.

In 2024, the BMW Group sold over 2.45 million passenger vehicles and more than 210,000 motorcycles worldwide. The profit before tax in the financial year 2024 was € 11.0 billion on revenues amounting to € 142.4 billion. As of 31 December 2024, the BMW Group had a workforce of 159,104 employees.

The economic success of the BMW Group has always been based on long-term thinking and responsible action. Sustainability is a key element of the BMW Group's corporate strategy and covers all products from the supply chain and production to the end of their useful life.

www.bmwgroup.com
LinkedIn: http://www.linkedin.com/company/bmw-group/
YouTube: https://www.youtube.com/bmwgroup
Instagram: https://www.instagram.com/bmwgroup
Facebook: https://www.facebook.com/bmwgroup
X: https://www.x.com/bmwgroup