

Mitsubishi Electric Europe and Novali:

New partnership agreement helps to move Europe closer to large-scale battery cell production

Ratingen, Germany 4th July 2022

“Industry and government both agree on the need to establish battery cell production in Europe. It is essential to meet demand and establish production independence for the EU trading bloc.”
Roald De Meyer, Co-Founder at Novali.

The signed memorandum of understanding between Belgium based battery company Novali and industrial automation solution supplier Mitsubishi Electric Europe B.V. demonstrates quite how soon that agreement may be realized.

Novali was set-up to finance and deliver multiple ‘giga factories’ across Europe, with production scheduled to start in 2025. In order to meet these deadlines Novali has signed a technology partnership agreement with Mitsubishi Electric Europe.

‘The relationship will encompass fast deployment of existing automation solutions for battery cell production, and then collaboration to build the value chain for the next generation of batteries manufactured in Europe.’ Klaus Petersen, Director Lithium Battery Industry EMEA, Mitsubishi Electric Europe BV

Mitsubishi Electric has long term experience in supplying automation solutions in the lithium cell manufacturing industry in Asia, and a well-established customer base of machine builders in Europe. While the value chain in Europe still needs to be built up, the partners aim at creating a network of local machine builders capable of delivering a complete cell manufacturing line at gigawatt hour (GWh) scale. The focus will be on building best in class cells while avoiding wastage within the process, something that has so far been a challenge in the sector.

‘Lithium battery cell manufacturing is a relatively new field in Europe that is being built-up quickly. Any lessons already learned by our partners that we can take advantage of can help us to reach start of production (SOP) quicker. Scaling-up a factory to GWh capacity is ambitious and Novali sees this as an opportunity to build up a local value chain. That is why this project is so

important in our opinion as the whole European electrification initiative will profit from that.’ Thomas De Clippeleer, Co-founder.

The company also believes that its mission goes beyond commercial necessities and extends to the general challenge of sustainability. The target is to achieve CO2 neutral manufacture of batteries. One of the key aspects is reducing consumption of energy and raw materials, which is also why a high-level of factory automation is required. The cell manufacturing process itself is challenging and Mitsubishi Electric’s automation solutions have already proven how well they can manage this task, setting high production quality standards while still prioritizing energy efficiency.

Big plans and the benefits of being agile

‘Novali provides a platform for scaling up manufacturing of next generation battery technology. On the one hand we partner up with technology companies that are frontrunners in their respective field, and on the other hand we work together with automotive and industrial partners like Mitsubishi Electric for developing the supply chain and bringing the batteries into mass production.

As a startup, we are agile and able to quickly set up collaborations with technology companies. This allows us to jointly offer automotive vehicle OEMs flexibility and a future-proof mix of different technologies.

We plan to manufacture four generations of battery cells. Lithium iron phosphate (LiFePO) or (LFP) cells for low-cost market segments, state-of-the-art nickel manganese cobalt (NMC) cells transitioning to high voltage cathodes and silicon anodes for mid-market segments. Solid state or lithium metal batteries we predict will enter the market at a premium.

Another important aspect is that the batteries should be available at a high volume. This requires record investments in cell manufacturing and the downstream supply chain. We are working together with global investment funds and industrial partners setting up joint ventures with automotive companies to achieve this.

Manufacturing equipment and general factory automation is a crucial element in the supply chain. Mitsubishi Electric has decades of experience supplying automation products to all the incumbent cell and equipment manufacturers in Asia. The goal of this alliance is to tap into this expertise for establishing a local ecosystem of European manufacturers.’ Roald De Meyer.

Image Captions:



Image 1: Roald De Meyer, Co-Founder at Novali.
[Source: Novali]



Image 2: Klaus Petersen, Director Lithium Battery Industry EMEA,
Mitsubishi Electric Europe BV.
[Source: Mitsubishi Electric Europe BV]



Image 3: Thomas De Clippeleer, Co-founder at Novali.

[Source: Novali]

About Novali

Novali is a cell manufacturing company serving the mobility and energy storage markets. We offer technology companies a platform for scaling next-generation battery technology. Our mission is to contribute to the realization of the energy transition by increasing the energy and power densities and reducing the cost of batteries. We believe batteries should be manufactured CO2 neutral, relying on local supply chains and recycled materials. We also believe that industry should serve the general wellbeing of people and find it important that Novali, as a direct employer and indirectly through the employees of our suppliers and through the local communities we impact, serves this purpose.

www.novali.energy

About Mitsubishi Electric Corporation

With more than 100 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Mitsubishi Electric enriches society with technology in the spirit of its “Changes for the Better.” The company recorded a revenue of 4,476.7 billion yen (U.S.\$ 36.7 billion*) in the fiscal year ended March 31, 2022. For more information, please visit www.mitsubishielectric.com

*U.S. dollar amounts are translated from yen at the rate of ¥221=U.S.\$1, the approximate rate on the Tokyo Foreign Exchange Market on March 31, 2022.

About Mitsubishi Electric Factory Automation Business Group

Offering a vast range of automation and processing technologies, including controllers, drive products, power distribution and control products, electrical discharge machines, electron beam machines, laser processing machines, computerized numerical controllers, and industrial robots, Mitsubishi Electric helps bring higher productivity – and quality – to the factory floor. In addition, our extensive service networks around the globe provide direct communication and comprehensive support to customers.

Factory Automation EMEA

Mitsubishi Electric Europe B.V., Factory Automation EMEA has its European headquarters in Ratingen near Dusseldorf, Germany. It is a part of Mitsubishi Electric Europe B.V. that has been represented in Germany since 1978, a wholly owned subsidiary of Mitsubishi Electric Corporation, Japan.

The role of Factory Automation EMEA is to manage sales, service and support across its network of local branches and distributors throughout the EMEA region.

For more information, please visit emea.mitsubishielectric.com/fa

About e-F@ctory

e-F@ctory is Mitsubishi Electric’s integrated concept to build reliable and flexible manufacturing systems that enable users to achieve many of their high speed, information driven manufacturing aspirations. Through its partner solution activity, the e-F@ctory Alliance, and its work with open network associations such as the CC-Link Partners Association (CLPA), users can build comprehensive solutions based on a wide ranging “best in class” principle.

In summary, e-F@ctory and the e-F@ctory Alliance enable customers to achieve integrated manufacturing but still retain the ability to choose the most optimal suppliers and solutions.

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Press contact:

Mitsubishi Electric Europe B.V.

Factory Automation EMEA

Monika Torkel

Media Relations

Mitsubishi-Electric-Platz 1

40882 Ratingen, Germany

Tel: +49 (0)2102 486-2150

Mob: +49 (0)172 261 4824

Monika.Torkel@meg.mee.com

de.linkedin.com/in/Monika-Torkel

www.xing.com/Monika_Torkel

Story/Editor:

DMA Europa Ltd.

Philip Howe

Progress House, Great Western Avenue, Worcester, UK, WR5 1AQ

Tel.: +44 (0)1905 917477

philip@dmaeuropa.com

www.dmaeuropa.com

Distribution/Circulation:

MEPAX

Romain CLASS

Tel.: +33 (0) 6 12 80 47 76

r.class@mepax.com

www.mepax.com