



Festo's holistic technological training solutions help to upskill the competencies of individuals for Industry 4.0

# Festo Delivers Industrial Training and Smart Automation to Asian Carmaker

German automation specialist Festo worked with Vietnamese auto manufacturer VinFast to set up world-class training labs and factory systems.

When Vietnam's first volume automaker VinFast unveiled its initial two car models in the 2018 Paris Motor Show, it set a bold release schedule of mid-2019 amidst a vow that it would only take half the usual time to develop a new car. To make this happen, the automaker partnered with automation technology provider Festo.

VinFast tapped Festo to set up several labs capable of providing training that meets the DIHK standard in Germany. **Nguyen Tien Dong**, Head of VinFast Training Centre, said Festo was chosen because it provides holistic training solutions in all fields of technology for industrial automation. These solutions are available in 40 languages and have benefitted over 42,000 clients worldwide.

As part of the partnership, Festo provided not only training equipment, but also lab designing and training for VinFast trainers. "What Festo can provide are closely matched with what the VinFast Training Centre needs," said Dong, noting that there are currently eight labs which house Festo solutions, including basic and advanced pneumatics, basic and advanced hydraulics, controller-sensor-fieldbus, MPS, PA and the cyber-physical learning and research platform CP Lab.

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The VinFast Training Centre is critical in developing highly skilled workers for the carmaker's newly built 335-hectare production complex on Cat Hai Island near Hai Phong. The training centre will ensure the factory, designed to be one of the most advanced in the world, operates smoothly despite its complex web of systems, data collection and managements systems, and interconnected sensors and cloud servers.

### Overcoming challenges

Festo began working with VinFast in 2018, fully aware that it needed to meet the automaker's unique



VinFast's newest SUV model

requirements, both on project timelines and local operative support. "Although there was a rather tight timeline to be kept in the delivery of components to VinFast, the swift delivery was executed successfully due to close collaboration between Festo parties from various countries," said **Nguyen Hoang Khanh**, Country Manager for Vietnam, Festo.

Headquartered in Germany with about 20,000 employees in over 250 branch offices in 61 countries, Festo leveraged on its global presence to accelerate its delivery schedules in the provision, installation, and commissioning of lab equipment in the VinFast training centres, as well as technical and maintenance support.

VinFast leaned on Festo's experience in providing high-quality training worldwide in local languages to upskilling a largely domestic workforce in its Vietnam plant. Festo equips VinFast employees with practical training in the use of new technologies through CP Lab, where workers can learn how to program facilities, set up networks and optimise many other aspects of the production workflow.

### Industrial automation solutions

Besides training equipment and skills learning, Festo is a critical supplier to VinFast's manufacturing processes, particularly industrial automation solutions via original equipment manufacturers at all stages of VinFast's production line, from the body-in-white stage where a car body's sheet metal components are being welded together, through to painting, sub-assembly and general assembly.

Festo advised the carmaker on manufacturing solutions and provided maintenance, repair and operations. VinFast was especially keen on receiving inputs from Festo since the German company is a member of Germany's Industry 4.0 initiative and actively involved in all key standards associations.

"With the real and virtual world growing increasingly closer together, modern information and communication technologies are merging with industrial processes and increasingly changing the production landscape," said **Philippe Andre Vyain**, Technical Manager at VinFast. "It is therefore important that the VinFast manufacturing facility harnesses and is integrated with Industrial 4.0 technologies to achieve greater efficiency and productivity."

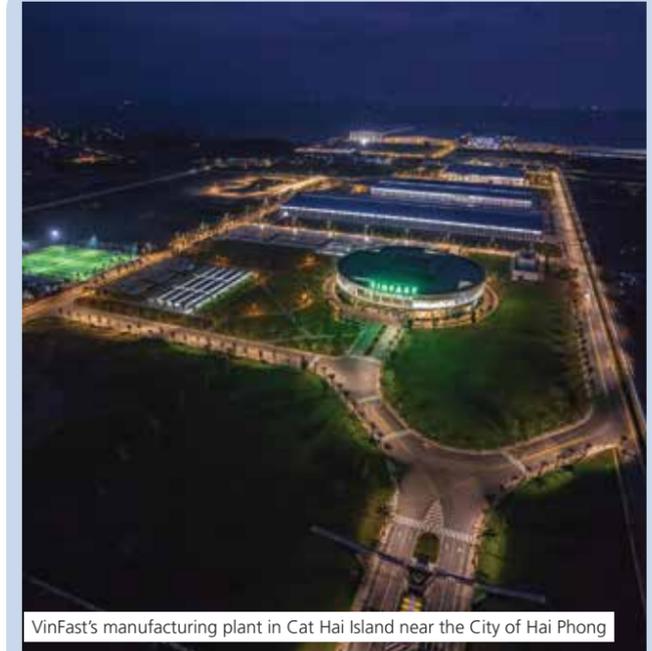
"At Festo, we recognise and understand that different customers have unique needs and require different expertise at varying points of their productivity process, be it simulating engineering designs or perhaps providing maintenance support," said Khanh.

### Growth in 2018 and beyond

Having entered Southeast Asia in 1977, Festo continues to expand its market share in the budding region. Overseeing this business sector from Festo is **Ee Sian Lee**, Head of Sales Cluster for Southeast Asia and the Pacific: "2018 was a successful year for us. In terms of unit sales, we achieved record-high sales at many of our national companies."

Looking forward, Festo expects to galvanise growth in Vietnam, following major foreign direct investments in their manufacturing sector, as well as increased demand from the local market for goods made domestically as the nation continues to develop. The growth potential in Vietnam's automotive industry is very large. The market is relatively untapped, with a low percentage of local car owners. However, this figure is set to increase as the standard of living in Vietnam rises and more people buy cars.

Festo currently has offices in Hanoi and Ho Chi Minh, with competent local staff to serve the Vietnamese market. Festo also expanded its regional logistics centre in 2017 to better support the Vietnam market as well as other countries in Southeast Asia.



VinFast's manufacturing plant in Cat Hai Island near the City of Hai Phong

### Leading with innovation

With VinFast and other companies looking into cutting-edge technologies to improve their industrial production processes, Festo is continuing to invest around 8% of its revenue annually on research and development. "One of the reasons Festo is at the forefront of industrial automation is due to our strong emphasis on research and development," said Lee, adding that the German company currently has 100 new products ready for patenting annually.

In addition, Festo established the Bionic Learning Network, a research network that links the German conglomerate to leading universities, institutes, development companies and private inventors.

"It is important for companies to stay ahead in terms of innovation and sustainability. As a leader in tomorrow's world of production, we are acutely aware of our world resources," said Lee. "Environmental protection, energy management and sustainable construction are closely linked with one another. Besides treating the environment with care, the economic and efficient use of energy in the face of advancing climate change is a key task of the current era."

Festo is also actively advancing the use of AI for industrial applications, making a big commitment in the field with its takeover of the software company Resolto in April 2018. All of these contribute to a more well-rounded delivery of solutions, as highlighted recently with its VinFast partnership.

"Festo has a holistic view of the changes in the production world, considers different perspectives and – in addition to technology – also takes other key points into account, such as the interaction between man and machinery and the issue of training and qualification," said Lee.

"Likewise, the Festo solution to VinFast is comprehensive, covering both the business and training side of the house while ensuring that the manufacturing facility is also digitalised, serving as a learning factory for greater efficiency and productivity."