

Danfoss to launch production this year

MARCY — Danfoss Silicon Power will soon start production as the company steadily progresses with preparing and equipping a new facility inside the Quad-C building on the SUNY Polytechnic Institute campus.

As the ramp-up continues, Danfoss says it is gaining a unique position as the only independent silicon-carbide power module manufacturer in the U.S. It wants to be a leader in what it expects will be a burgeoning North American market. Power modules, which Danfoss now makes in Germany, are used in the industrial, automotive and alternative energy sectors. Specific applications range from data centers to wind turbines and automobiles to airplanes.

Silicone-carbide power modules can reduce power consumption in electric cars by 10 percent and the energy consumption in data centers by 5 percent, just as they can lower the weight of an airplane by more than 1,100 pounds, says Danfoss.

In the future, such devices are also expected to be applied in other sectors like shipping and hospitals.

The company has taken over the entire Quad-C building in collaboration with General Electric through the New York Power Electronics Manufacturing Consortium. The private-public group and similar programs were established in 2014 by the state to promote the creation of high-tech jobs.

Danfoss hopes to start making samples in Marcy by July with the objective of reaching full qualification and start-up and ramp up of production in the fourth quarter.

But before that happens the interior renovations at the \$125-million Quad-C have to be finished and equipment moved in.

Employees already hired for the Marcy facility have been learning processes in Germany and will be coming back to install the machinery and operate it, explains General Manager Michael Hennessey.

He's overseeing the transformation of the vacant 202,000-square-foot building with two cleanrooms to a production facility that meets his company's specifications. Hennessey has been in Marcy since shortly after the announcement last March the company had picked the Quad-C for its U.S. plant.

Shortly, the Nano Utica sign atop the of the Quad-C building will be taken down and replaced by a red Danfoss sign.

The state is spending \$100 million to upgrade and equip the Quad-C for Danfoss. The company will lease both the facility and equipment from New York state.

The general manager said in December that 160 tools and pieces of equipment had been ordered under 16 contracts. Hennessey said the plant has been designed for three production lines.

GE manufactures the silicon-carbide wafers used in the modules at SUNY Poly's Albany campus. GE will set up a dicing facility at the Quad-C to cut silicone-carbide chips from the wafers.

Danfoss will then make modules and power blocks that house the chips.

The first dozen Danfoss employees started in October. More have been brought on since then. Operations personnel, manufacturing associates, logistics associates and engineers will be added throughout 2018.

When all lines are operating full capacity in several years, employment of about 300 is anticipated.

"We are very excited to become part of the community and part of the team around the campus," Kim Fausing, Danfoss Group CEO, told a gathering of local and state government and company officials in the Quad-C lobby in October.

A unit of the Denmark-based Danfoss Group, which has more than 25,000 employees globally, Danfoss Silicon Power's Quad-C facility is one of 18 company sites in North America.

"With Danfoss' commitment to establishing state-of-the-art manufacturing operations in Utica, we are cementing New York's role as a leader in semiconductor research and development, while creating hundreds of good-paying jobs in the region," said Gov. Andrew Cuomo of the project. "This expansion is proof positive that we are attracting 21st-century companies from across the globe to Utica, and leveraging next-generation technology to foster the continued growth and success of Mohawk Valley communities for years to come."