



Manufacturing of a generator rotor in the GenerPro workshop in Västerås, Sweden.

Generator Manufacturer Specializes in Outsourced Work

Outsourcing has been the common way to go within many industries, with one clear example being the automotive industry. Outsourcing may cover all from manufacturing of components to complete manufacturing and product assembly.

The scope of outsourcing differs, and frequently the OEMs elect to keep the manufacturing of noble parts under their own stewardship. The advantages of outsourcing are sometimes obvious. It is expensive to keep one's own manufacturing process up-to-date or when the capacity is short. In these instances outsourcing is a feasible alternative to an investment in production capacity, also keeping a view on core business and focusing on what you do best.

When GenerPro of Sweden started its activity in Västerås as the first full-fledged contract manufacturer of electrical generators for the power industry, they decided to work only with OEMs and service providers. Traditionally, the generator manufacturers preferred to manufacture the generators in their own facili-

ties, but the trend today seems to be to outsource production. GenerPro focuses on the production technology, working out from the drawings and specifications provided by the OEM. Over the years they have worked with most of the world's generator majors.

GenerPro has found its concept successful and strong proof of this was a decision by Japan's Toshiba to let GenerPro manufacture a generator for a gas turbine combined-cycle plant. This Toshiba generator manufactured by GenerPro successfully passed all tests last spring in the Västerås facilities and is now being commissioned at the site in Italy.

"GenerPro has a combination competent staff, modern machinery and a high lifting capacity," says Hiromichi Ito, chief engineer of Toshiba, "and these factors have been important for our choice of a manufacturing partner."

Testing of rotors and the complete generators is another important part of the process. Two balancing pits handle rotors up to practically any size, with the largest test units thus far being for the

nuclear industry. Balancing of rotors under conditions as real as possible is undertaken, i.e., windings with current and air or water cooling in effect.

"This allows us to run tests very close to energy production conditions," says Kåre Gundersen, sales manager for GenerPro.

"Our manufacturing site is well situated logistically with easy access to electrical steel, rotor forgings and copper winding, as well as tooling. Some of our clients appreciate that our site gives them a local presence in the EU that they do not have otherwise," says Pekka Södervall, marketing and sales manager.

The growing demand for two-pole motors can be seen in the GenerPro workshop, where two 40 to 50 MW motors for the oil industry in Norway and the Americas are being manufactured for Alstom.

Recent projects include the manufacturing of a new 75 MVA rotor, and punching the stator core laminations for National Electric Coil (NEC). The project is for RWE Innogy plc of U.K., and NEC was responsible for completely re-engineering an old generator that was damaged.

"I feel most of the OEMs do not operate works as modern as ours," says Gösta Hesslow, president and partner of GenerPro. "Since the start, we have spent considerable efforts and money on modernizing and making our machinery flexible to meet with the pallet of requirements put forward by generator and motor clients.

"We have further expanded our capability and experience in manufacturing two-pole generators and motors during the past five years of working with a variety of OEMs and designs," says Hesslow. "Over that time we have been active as a contract manufacturer, we have seen the dialogue and work with the U.S. and European manufacturers grow. And also how the interest of the Asian manufacturers has materialized and resulted in the manufacturing of complete generators, like in the cooperation with Toshiba." ▽

SEE DIRECTLINK @

WWW.DIESELGASTURBINE.COM