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Opcon achieves a strategically important breakthrough in a new market

Opcon Autorotor AB, a subsidiary of the quoted Opcon AB Group, has won an order from the US company, Plug Power, for an air system for stationary fuel cells. The fuel cells will be used in small power stations to produce local electricity using a method that is both cleaner and cheaper than conventional methods. For Opcon Autorotor AB it means a breakthrough into a completely new market.

"This order gives us an opportunity to use our knowledge and technology in product development in a completely new sector. This is a market worth billions of dollars and studies in the US show that it is growing due to increased consumption of electricity and stricter environmental requirements," comments Sven G Oskarsson, CEO of Opcon

"The order is for a 50-250 kW plant generating power for electricity, cooling and heating," explains Roland Ärlebäck, Managing Director of Opcon Autorotor AB.
All over the world people want to reduce consumption of fossil fuels in order to decrease dependence on oil and reduce emissions. The environmental aim is to slow the greenhouse effect and reduce damage to the ozone layer. Alternatives to fossil fuels include biogas or solar energy. Fuel cells create electricity via a chemical process involving hydrogen and oxygen. The only by-product is hot water. The new fuel cell radiators now being developed produce a process temperature of around 160°C, which means that they can be used for heating. In a new development, Plug Power has discovered that fuel cells are even more effective using pressurised air. Plug Power selected Opcon Autorotor AB's double screw compressor for its system. The result is a significantly enhanced level of performance.

The fuel cell principle was discovered in the 1830s but fuel cells did not gain any significant advance until NASA began using them for its space programme. Many observers now believe that widespread use of fuel cells will bring considerable environmental benefits in the form of less pollution and thus less acidic precipitation. Power stations based on stationary fuel cells produce more power and consume less fuel.
Stationary fuel cells generate energy that can be used to produce both heating and cooling for buildings, as well as normal electricity used in the home and by industry.
"We have received an order for an air system for a pilot plant. If it works well, this area can become extremely big. It would mean a breakthrough earlier and in larger volumes than we are predicting for the auto industry," says Roland Ärlebäck.

Plug Power Fuel Cell Systems was formed in 1997 as a joint venture between MTI and Detroit Edison. Plug Power has continued the work started by MTI aimed at developing and producing fuel cell systems designed for generating electricity for homes, smaller factories and offices and the transport sector. Plug Power was quoted on the Nasdaq in the US last year. Investors include Detroit Edison, General Electric and Southern California Gas Co. Plug Power has attracted great interest among investors and other parties in the US and its stocks have performed well, as have stocks of other US companies that focus on fuel cell technology. Opcon Autorotor AB, which is based in Nacka near Stockholm, develops and produces air systems for various applications. The company is a world leader in double screw compressors for fuel cells and other applications.