EKPO Fuel Cell Technologies receives follow-up order on the development of fuel cell technology for commercial aviation application.

- Another order from the joint venture of Airbus and ElringKlinger to further develop and deliver fuel cell technology to the aviation sector
- Volume including development services and prototypes in the low double-digit million euro range
- With its benchmark performance characteristics, EKPO’s NM12 stack technology serves as the baseline platform for the development of bespoke aerospace products

Dettingen/Erms (Germany), February 4th, 2022  +++ EKPO Fuel Cell Technologies GmbH (EKPO), the joint venture between ElringKlinger (60%) and Plastic Omnium (40%), has received another large order from the joint venture of Airbus and ElringKlinger. As a follow-up order to the successful cooperation with Airbus to date, this contract confirms EKPO as the main development partner. EKPO will provide development services and manufacture fuel cell stacks optimized for aerospace application. The stacks, based on the NM12 platform, are integrated into the customer’s further development, aiming to use fuel cells power as main propulsion mean for the commercial aerospace sector. Overall, the order represents a volume in the low double-digit million euro range.

Julien Etienne, Chief Commercial Officer of EKPO, comments: “This order and the partnership with Airbus as a whole, demonstrate not only the wide range of applications of fuel cells, but also the technological leadership of EKPO. As a the logical next step of our cooperation with Airbus, we will provide development services to optimize the performance of our NM12 platform to aerospace standards, with innovation programs focusing on power density and durability. This new step in our partnership will allo EKPO to Through this project, EKPO will further expand its unique know-how in key components, such as the bipolar plates and sealing technology. In return, this innovation will spillover to our next generation of stacks, allowing us to bring even more attractive and performant products to market in the future.”

The NM12 stack is the most powerful product of EKPO’s stack portfolio. Its 359 cells achieve an output of up to 123 kW el with benchmark power density of above 6.0 kW/l. Furthermore, the stack design offers the best possible basis when it comes to scaling and modularization, thus allowing the end customer to design its usage application with maximum flexibility and efficiency. With these features, the platform was the ideal starting point for further development of the fuel cell technology in the aviation to further increase the power density of the stacks.

Through its parent company ElringKlinger, EKPO has been actively pursuing fuel cell research and development for around 20 years. The compact stacks are based on proton-exchange membrane (PEM) technology and convert chemical into electrical energy using hydrogen and oxygen. EKPO offers stacks in various configurations for integration into customer systems. Stacks with peripheral components and system functionalities integrated into the media module are also available as an option. These features enable considerable simplification and cost reduction with regard to the fuel cell system. Drawing on the system solutions of its parent company Plastic Omnium, EKPO can cover the entire value chain of a hydrogen-based fuel cell drive. EKPO has an initial production capacity of up to 10,000 stacks per year already installed in its Dettingen/Erms plant, and which will be gradually expanded in line with its order intake.
About EKPO Fuel Cell Technologies

EKPO Fuel Cell Technologies (EKPO), headquartered in Dettingen/Erms (Germany), is a leading joint venture in the development and large-scale production of fuel cell stacks for CO₂-neutral mobility. The company is a full-service supplier for fuel cell stacks and components used in passenger cars, light commercial vehicles, trucks, buses, as well as in train and marine applications. Within this context, the company is building on the industrialization expertise of two established international automotive suppliers - ElringKlinger and Plastic Omnium.

The aim of the joint venture is to develop and mass-produce high-performance fuel cell stacks in order to further advance CO₂-neutral mobility - whether on the road, rail, water or off-road.