COMAU TO DELIVER HIGH-SPEED AUTOMATION SOLUTIONS FOR MULTIPLE HYDROGEN ENERGY PROVIDERS

- Comau is integrating its advanced technology and automation expertise to manage the assembly and production of fuel cell components and electrolyzers
- By helping industrialize the traditionally manual manufacturing environment, Comau expects to reduce manufacturing costs by up to 20%
- Among other opportunities, the company has won a hydrogen fuel cell project in China for Shanghai Hydrogen Propulsion Technology, a subsidiary of SAIC Motor
- Similar projects are underway in the EMEA and OCEANIA regions

Grugliasco (Turin), June 30, 2022 – Comau is working with multiple clients in different parts of the world to automate the production of fuel cells and electrolyzers.

By leveraging its knowledge and expertise in electrification and renewable energies, Comau is helping facilitate the creation of reliable, zero-emission power. It is doing so by developing a proprietary solutions portfolio to automate key process steps, including cell preparation and stacking, leak testing and more, as part of its commitment to lowering the price point of fuel cell and electrolyzer manufacturing.

In China, for example, Comau is collaborating with Shanghai Hydrogen Propulsion Technology (hereinafter SHPT), a leading hydrogen fuel cell company, to provide an advanced production line for its hydrogen fuel cell stack. Similarly, and among other projects, the company is pursuing opportunities to design, produce and sell hydrogen solutions for light and heavy-duty vehicles and an electrolyzer manufacturing pilot project in the EMEA region, and opportunities in OCEANIA.

All these projects aim to industrialize the largely manual manufacturing environment, which will both scale-up production volumes and increase the quality of the high-precision process. Automation can also reduce operating costs by up to 20% according to internal estimates, thanks in part to the increased precision and the reduced burden of cleanroom security measures.
Taking a closer look at the hydrogen project in China, SHPT is a holding subsidiary of SAIC Motor, whose hydrogen fuel cell products are widely used in passenger cars, buses, light, medium and heavy trucks, forklifts, trailers and for many other applications. Hydrogen fuel cell and electrolyzer technologies can also be extended to distributed power generation and cogeneration, as well as ships, aviation and other non-automotive sectors.

Comau’s collaboration with SHPT for the fuel cell stack production line represents the company’s first project in China in the hydrogen energy field. As part of the project, Comau will develop and deploy its proprietary high-speed, high-precision multi-axis stacking technology to simultaneously perform a series of pole piece stacking operations. With delivery scheduled for the end of 2022, the state-of-the-art solution manages the pick-up, code scanning, secondary positioning, and shell loading, all within 4 seconds. As such, Comau will help SHPT achieve several of its production goals, including improving its annual stack production capacity, via the fully automating stacking stations.

According to internal estimates, which are based on data provided by IEA and IHS, Comau predicts hydrogen use will double over the next decade, largely driven by new applications such as mobility and energy storage. Green Hydrogen generation will also boost the demand for electrolyzers, from an estimated 120 MW installed in 2020 to more than 20 GW expected in 2030. In terms of fuel cells, Comau estimates the market will grow exponentially, from a few thousand fuel cell units deployed in 2020 to 1.2M units by 2030, equivalent to more than 100 GW of hydrogen energy.

“Comau has a strong reputation and expertise in the new energy vehicle industry and is known for providing comprehensive automation and electrification solutions,” mentioned the SHPT manufacturing engineering manager. “We hope that the collaboration on this project will make our production process more flexible and efficient, and to ensure that our fuel cells continue to be of excellent quality.”

“In partnering with industry-leading hydrogen fuel cell companies such as SHPT, we are providing both design for manufacturing services and innovative solutions that help them enjoy a greater market advantage,” added Nicole Clement, Chief Marketing Officer of Comau. “These collaborations also reconfirm Comau’s continued investment and further expansion in the field of electrification, thus helping create more sustainable mobility in the future.”

“We are pleased to partner with an industry-leading fuel cell company to provide innovative solutions that empower SHPT’s products with a greater market advantage,” said Gaetano Cantalupo, Apac Cluster Leader of Comau.
About Comau

Comau, a member of Stellantis, is a worldwide leader in delivering advanced industrial automation products and systems. Its portfolio includes technology and systems for electric, hybrid and traditional vehicle manufacturing, industrial robots, collaborative and wearable robotics, autonomous logistics, dedicated machining centers and interconnected digital services and products able to transmit, elaborate and analyze machine and process data. With over 45 years of experience and a strong presence within every major industrial country, Comau is helping manufacturers of all sizes in almost any industry experience higher quality, increased productivity, faster time-to-market and lower overall costs. The company’s offering also extends to project management and consultancy, as well as maintenance and training for a wide range of industrial segments. Headquartered in Turin, Italy, Comau has an international network of 6 innovation centers, 5 digital hubs, 9 manufacturing plants that span 13 countries and employ 4,000 people. A global network of distributors and partners allows the company to respond quickly to the needs of customers, no matter where they are located throughout the world. Through the training activities organized by its Academy, Comau is also committed to developing the technical and managerial knowledge necessary for companies to face the challenges and opportunities of Industry 4.0.

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