Walloon global player introduces revolutionary fiber placement machine with Siemens technology

Coexpair Dynamics first Belgian Solution partner of Siemens for Machine Tools Systems

Huizingen, 29 April 2022 - Siemens Belgium welcomes the Walloon Coexpair Dynamics, specialized in machine development for composite parts for the aerospace industry, as the first Solution Partner for Machine Tools Systems in Belgium. By combining their respective expertise in precise CNC control and automated fiber placement, the partners helping aerospace market leaders to more efficiently produce aircraft components that meet the ever-stringent quality standards of today and tomorrow. Coexpair Dynamics is highlighting the strength of the partnership with the introduction of a very innovative fiber placement machine equipped with Siemens technology.



Siemens Belgium shares a rich past with Coexpair, the sister company of Coexpair Dynamics. Coexpair is specialized in the engineering and production of resin injection and curing machines for composite parts for the aerospace industry. For years, Coexpair has relied on the full drive and automation portfolio of Siemens for these machines. With the creation of Coexpair Dynamics in 2020, the Walloon organization branched out to fiber deposit automation, where narrow strips of carbon fiber are placed on molds before resin is added. "In doing so, today we control all facets of the production process line, from the lay-up of the carbon fiber on the molds to the de-molding of the finished composite parts," says Cédric De Roover, business unit manager at Coexpair Dynamics. "In addition, we differentiate ourselves in the industry by acting as an R&D partner for our customers, supporting them in the engineering of their parts and then developing and producing custom machinery for this."

Industry standard

Like its sister company, Coexpair Dynamics also uses Siemens technology. Its confidence in the quality of Siemens' portfolio the company now solidifies by becoming the first Belgian player to join Siemens' partner network as Solution Partner Machine Tools Systems. "Siemens' control components are viewed as the standard in the aerospace industry. Incorporating this technology will help us to gain the market's trust in our solutions faster and guarantee the quality that our customers and prospects expect," says De Roover.

"With this partnership, we emphasize the complementarity of our products and expertise and strengthen our positions in the aerospace industry," continued Stein Monserez, sales manager Machine Tools at Siemens. "In addition, as Solution partner Machine Tools Systems, experts from Coexpair Dynamics are further trained in Siemens' technology that they implement in their solutions. In this way, we guarantee the end customer that they can always count on the best support and that Coexpair Dynamics, as a machine tool builder, masters our technology to perfection."

Breakthrough in automated fiber placement

With the support of the Walloon government, Coexpair Dynamics therefore developed a machine that should allow aircraft manufacturers to optimize their production of composite parts. The machine combines the precision of CNC control with Automated Fiber Placement from



Trelleborg Sealing Solutions in Albany, New York, US, developed to lay narrow strips of carbon fiber on complex shapes. Herein lies the strength and uniqueness of Coexpair Dynamics' machine.

"The machine is equipped with Trelleborg's thermoset automated fiber placement technology, integrated with Siemens latest generation Sinumerik One CNC controller. By combining this proven cutting-edge technology with the experience and background of our experts in the aerospace industry, we aim at unprecedented performance for optimum precision, and speed in the production of parts. In doing so, we would set a new standard in automated fiber placement," says Cédric De Roover.

Two types, one control

The machine exists both in a gantry X-Y-Z set-up and in a robot version. Both types operate on the control software Sinumerik Operate and can therefore be controlled in the same way by the user. "This is possible thanks to Sinumerik Run MyRobot /DirectControl," explains Stein Monserez. "This software solution allows the robot's movements to be integrated into the CNC control. Not only does this greatly simplify the operation for the user, the robot's movements boast the same accuracy that is known for CNC machines."



Coexpair Dynamics will be present at JEC World in Paris, the world's largest trade fair for the composition sector, from May 3 to 5. Visitors can discover all about the machine builder's new solutions there.