

## Machining

- Raptor bites in
- AM post-processing: All in the finish

# **Tooling**

- The critical role of selecting toolholders
- · Machining titanium economically







# Challenges that are out of this World

odem Composites
redoubles in-house
production capacity with
a new Belotti FLU 2617
5-axis machining centre.
The UK is proving

to be a key market for Belotti SpA in 2024, with orders and projects ranging from CNC machining centres to robotic automated solutions mainly applied to the aerospace and automotive industries. Enquiries come from new companies, but also from loyal clients such as Codem that, having to handle a greater production load, decide to invest in a new Belotti machinery.

Codem Composites is a Peterborough-based technology company deeply rooted in the fast-growing market of composites manufacturing. Serving a wide range of sectors such as Formula One, automotive, space, electric vehicles, defence, and bespoke applications, the company constantly strives for excellence when working closely with its customers to understand the technical requirements and engineering objectives, translating them into practical solutions.

Forging its success on the team's expertise,

precision, and commitment to quality, Codem has



become a leading provider of advanced composite solutions, offering end-to-end services from initial concept creation to product delivery with the goal of assisting customers in the ongoing effort to optimise the performance of their products.

"Our dedicated CNC team promotes efficiency and precision, supported by comprehensive in-house capabilities. From design to tool manufacturing, pattern machining, and final inspection, Codem offers a seamless and streamlined CNC machining experience. Our advanced scanning capabilities ensure accurate and thorough inspections, delivering exceptional results that meet specific requirements," says Ryan De'ath, CAM & Manufacturing Supervisor.

### The Challenges

In today's constantly evolving industry, sustainability has become Codem's core value, deeply embedded in the corporate culture, leading its efforts to become the best choice for sustainable composite solutions.

In addition to prioritising the sustainability of all operations, Codem is now facing an increasingly urgent need to develop the ability to machine complex and detailed patterns and moulds with unprecedented ease.

The collaboration between Belotti and Codem, dating back to 2014 with the first purchase of a Belotti FLU 2617 machining centre, has recently been further consolidated through the acquisition of a second Belotti FLU 2617 5-axis machine.

"Codem is thrilled to announce the upcoming installation of a second Belotti FLU 2617, scheduled for October 2024. This strategic investment expands Codem's technical capabilities and underscores our commitment to delivering cutting-edge solutions to meet the evolving needs of our customers. Recently, we secured a multi-year, multi-million-pound NATO satellite communications contract. The purchase of the Belotti FLU 2617 is a crucial investment to support this project, enabling us to deliver machined parts and tooling on schedule to meet customer deadlines," comments Rochelle Helliwell, Business Manager.

The NATO project requires the company to produce parts made of Rohacells and carbon, that will be processed with Belotti FLU 2617 CNC machining centres.

Codem has been also appointed as technological partner of B2Space company to revolutionise the approach to satellite launches. Precision in the tooling and machining of components is critical for the success of B2Space groundbreaking project, as they must withstand the rigors of both balloon flight and rocket launch, ensuring structural integrity and proper functionality throughout the ascent and launch phases. Even for this project, Codem will be able to rely on the guaranteed machining precision and reliability of Belotti FLU CNC machines in order to meet the tight requirements.

The new Belotti FLU 2617 set to be installed at the Codem facility with the support of Cannon Shelley's team, is customised with a recirculating cooling system with automatic tool changing device, and dust suction tanks.

In its gantry-style version featuring a robust structure specifically designed to dampen vibrations, the Belotti FLU Series provides maximum accessibility and use of the machining envelope, making it the ideal solution for advanced composite materials milling. Additionally, the high-speed processing reduces cycle times while maintaining excellent finish quality.

This new investment highlights Codem's dedication to remaining at the forefront of technology in the composites machining industry, enhancing its capabilities and fulfilling all of the customers' increasing requirements.

Belotti SpA and Cannon Shelley, official distributor for UK market, will be exhibiting at Advanced
Engineering show in Birmingham on Stand Y180.

www.belotti.com www.cannonshelley.com







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