BEYOND THE CONFINES OF THE MILL

Creating a custom robotic solution

by Ocrim, Italy

Some projects represent more than just a technological advance. And often an advance that meet the miller's needs do not always begin in the milling industry. That's the case with Ocrim's new 'end-of-line' application.

While it involves method, industrial vision and design capabilities synonymous with milling, Ocrim's creative 'robotic island' has been developed for the Italian company Caviro Extra, which is a historic distillation company with a product range from the wine and agri-food supply chain and includes second-generation alcohol, tartaric acid and related extracts through to fertilisers and renewable energies. The company sees its development for a related agri-industry representing confirmation of its cross-functional and tailored approach that allows it to go beyond its core sectors.

Technically aligned, operationally distinct

Active in the recovery of waste from the winemaking and agri-food supply chains, Caviro Extra operates in a sector far from the milling industry, but in a field that is historically associated with the company's name.

However, this is not the first time the Cremona-based company has made its expertise available beyond the flour mill: over the years, Ocrim's 'end-of-line' department has developed dedicated solutions for various sectors, demonstrating how automation, reliability and precision can be successfully applied across diverse production systems.

The project was conceived to meet a specific need: to optimise the palletising process for 20-25kg bags of tartaric acid, ensuring operational continuity, safety and load quality, all within a highly constrained space.

This wasn't a standard request, but a design challenge that required careful analysis of flows, geometries and interactions between humans and machines. The company's response was a completely custom-built robotic island, designed as a compact and highly integrated system.

The core of the solution is a multifunctional gripper capable of handling bags and palletising accessories such as cardboard sheets, without the need for separate modules. This choice made it possible to minimise space requirements, improve handling efficiency and deliver a compact, safe and reliable solution.

Process design

More than just automation, the project involved a customised process design, where every element was calibrated to the customer's actual production needs. The result is a stable, flexible line, ready to adapt to any future developments, in line with the company's philosophy of systems designed to last and grow over time. These are elements that can and are being passed into the milling sector.

This project confirms how the company's 'end-of-line' department today represents a laboratory for advanced solutions, capable of transferring skills developed in the milling industry to other industrial sectors as well, maintaining the same level of engineering care. It's not about 'stepping out of one's comfort zone,' but rather applying a proven method to new production scenarios.

Innovation built on listening

In an industrial context where sustainability, resource optimisation and intelligent automation are strategic aspects, the collaboration between Ocrim and Caviro Extra demonstrates how innovation doesn't necessarily come from so-called revolutionary technologies, but from the ability to listen to customers and build solutions that precisely meet their needs, and yet can be utilised across industries. A project of this nature fits into the production path of a company like Ocrim that focuses on design versatility and custom engineering as one of its distinctive traits.