

Eurotherm's headquarters in Volpiano (Turin), Italy.



SPECIAL PaintExpo

Artisanal Quality in Highly Industrialised Coating Systems: Why Eurotherm Chose to Go Against the Tide

From an interview with Paolo Ghiazza

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In the plant engineering sector in general and in the coating field in particular, the term "industrialisation" often has a negative nuance, as it seems to indicate a standard product that cannot be adapted to the requests of individual users. Eurotherm has shown that it is possible to industrialise the production of coating systems without losing sight of clients' needs, thus managing to customise each plant and meet

even particular requests by paying attention to details in each production phase.

The word "industrial" is often considered the opposite of "artisan", as it is believed that the result of an industrial process cannot maintain the care and flexibility levels that are typical of handcrafted products. It is indeed difficult

to find a compromise between these two elements. However, Eurotherm (Volpiano, Turin, Italy), a company specialising in the design and construction of complete coating lines for over fifty years, has managed to do it, thus giving a new meaning to the term "industrialisation" as the "evolution of artisan know-how".

Over half a century of history: Eurotherm's growth

"Our corporate history," explains Eurotherm CEO Paolo Ghiazza, "started in 1958, when this company, founded by three brothers, started manufacturing industrial ovens. In 1983, a new owner took over and converted the activity into the manufacturing industrial coating systems. Finally, in 1990, the current management acquired the company, but it maintained coating plants as its core business. The real turning point occurred in 2005 with the merger of Eurotherm with Riva Italia (Verona, Italy), a company specialising in the design of large-sized and high-engineering level coating machines."

The combination of these two expertises, one focussed on design and one on production, led to the development of a type of plants that the two firms would not have been able to build individually. "Thanks to this merger, strongly desired by both companies, we have been able to offer a wider range of systems, thus conquering



Metal carpentry department

difficult-to-penetrate markets and joining the small circle of European coating system manufacturers." Another important stage in the growth path of Eurotherm was the opening of its first agencies in Toulouse (France) in 2015 and in Stuttgart (Germany) in 2016, as these countries are its main target markets besides the Italian one.



The coating department.



The headquarters' offices.

The insourcing of the coating process

Simultaneously with its commercial evolution over the last decade, Eurotherm has gradually developed and expanded its production structure by insourcing some of the most important stages in its work flow. "This choice," says Ghiazza, "was motivated by the critical issues we were encountering with some outsourced phases, especially coating. Few coaters were able to properly treat our material due to the large size of our components, which can reach 8 metres, and to improve their aesthetic and functional performance. The insourcing of our coating department began in 2011.

Despite a rough start, we managed to reach full capacity quickly, so much so that, currently, it no longer only treats our systems' components, but is also offers a coating contracting service for parts mainly intended for the machine tool, furniture, and outdoor architecture sectors

through Colortec¹, a company owned by Eurotherm. We can now provide our customers with plants that not only present high-level engineering and operational peculiarities, but are also aesthetically pleasing, an aspect not to be underestimated because it is our best introduction."

The insourcing of its coating operations brought several benefits to Eurotherm: higher coating quality, significant lead-time reduction (from fifteen to two working days), and simplification of the packaging phase. It now occurs directly in the painting department, as a further guarantee of the optimal conditions in which the products reach their destinations.

¹ M. Fumagalli, "The key role of sheet metal preparation in the manufacture of coating systems and outdoor structures" in ipcm International Paint&Coating Magazine no. 49 (January/February 2018), pages 82-91.

Insourcing all the main production stages: Eurotherm's winning choice

"Following the benefits obtained with the insourcing of our coating process," says Ghiazza, "we decided to also insource all other operations, in order to achieve total control of our production flow. Therefore, in 2017, we acquired a new 5300 m²-wide plant to house a sheet metal processing department, equipped with integrated, Industry 4.0-oriented machinery. The department became fully operational in late 2018. In the wake of these successes, last year we took a further step by insourcing our carpentry processes." These strategic choices have enabled the company to consolidate its presence at both the national and European levels: in 2018, it installed 150 coating plants all over the continent. "We could not stop there," states Ghiazza. "The last insourcing project started this year concerned the processing of stainless steel, which we use for structures in contact with more or less aggressive liquids, such as cleaning tunnels and water-based coating booths. This

decision was again motivated by our need for higherquality surface treatments: if stainless steel is not kept clean and, therefore, kept away from other metals that can contaminate it, it can lose its performance qualities and even rust."

The Eurotherm team

Eurotherm now has two factories: the 3500 m²-wide headquarters, housing all offices and the carpentry and coating departments, and the new building acquired in 2017, where the sheet metal processing, assembly, storage, and shipping operations take place. "82 people work at Eurotherm," indicates Ghiazza. "26 of them deal with our coating processes, while the rest is divided between the technical office and the production departments. Another against-the-tide decision we have taken is to directly hire the operators who make up our seven assembly teams, all composed of experienced, highly specialised, and well-trained people. Finally, I would like to point out that one



The assembly of components.

third of our employees are under the age of twenty: our company has always invested in young people, so much so that in 2019 we hired ten graduates of a vocational school, who became excellent operators within six months. This is a way to guarantee continuity to our organisation, which will remain composed of young, yet experienced people also in future."

Eurotherm and Industry 4.0

The company started to produce automatic coating lines capable of interfacing with their operators and their users' management systems in 2015, when the definition of "Industry 4.0" was not yet known. "We provide the same automation level that we require from the machinery we install on our premises," states Ghiazza, "with the aim of managing a large number of orders in a short time and with little labour thanks to the traceability of the whole production cycle. Given the high amount of data that can

now be obtained from systems 4.0, our goal is now to create systems that can reduce waste production and energy consumption, especially in terms of electricity and gas." The latest cutting-edge coating line solutions developed by the Eurotherm team will be presented at PaintExpo 2020 (Karlsruhe, Germany).

Conclusions

The market has positively welcomed the new production organisation that Eurotherm has built up in the last few years. "Our customers," says Ghiazza, "are positively surprised by the industrial structure we have given to our processes, which are typically performed as craft operations. We are able to meet any customisation request while providing excellent-quality, highly industrialised plants. This is further proof that our against-the-tide decisions can open up development opportunities even in an "artisanal" sector such as that of the production of coating systems."



The sheet metal working department.