Mandelli-Eping, the power of collaboration Together for the new HS50 machine

A historical business and an integrated approach between engineering and design: this is how to face market challenges

Cultivating relationships and synergies, identifying a common front of intentions and understandings, in this historical period of great complexity and uncertainty all this is particularly important and effective. Even more so if two companies from Piacenza are taking this step. This is the case of Mandelli, a historical company founded in 1932 for the manufacture of Machining Centers, which has decided to establish a fruitful collaboration with Eping to design the concept of the external fairing of the new 5-axis numerical control machine called HS50: "The project – explain Fabrizio Paganini, General Manager, and Massimo Bertuzzi, R&D - stems from the desire of the Allied group led by Mr. Valter Alberici (active in the manufacturing, distribution and stock of fittings, flanges, pipes, wide-ranging bends and special products for the Oil&Gas sector) to relaunch the Mandelli brand with an avant-garde machine with a high technological level capable of conquering large shares of the reference market. With this successful concept Mandelli returns to operate, after years of absence, also in the industry of small and compact machines. It returns to the sector where it has made a great name for itself, as a protagonist, for several seasons. HS50 is a machining center characterized by speed, high productivity, ability to work difficult materials such as titanium and super alloys. We are talking about an extremely compact machine that has been engineered and simulated in all its aspects in order to best respond to the customers' needs and is addressed to niche markets such as aerospace and energy power, but also to the general engineering market. Among the strategic guidelines of the Allied Group, based in Valtidone, emerges the objective of returning the Mandelli name to the top of the engineering industry, while maintaining a Piacenza soul capable of interacting with other companies and institutions".

And in this sense moves the collaboration with Eping, a design studio that creates and develops machines and accessories for industry, logistics, agriculture and construction thanks to an integrated approach between engineering and design. "We met last year - explains Paolo Cignatta, founder and technical director - when Massimo Bertuzzi asked me if we could collaborate with Mandelli in improving the design aspect intended as style research for a new machine that they were planning. They wanted us to create a truly innovative, impactful, captivating concept. We accepted the challenge and managed to achieve the goal. We are a young, dynamic and multidisciplinary team capable of combining different skills to give concrete answers and personalized results on measure of customer needs".

"We study the machines to enhance the characteristics of the brand in question - added Fabio Talesco, designer and planner - we are able to respond to the most varied needs and provide a complete service that goes from the development of the concept design to the complete realization of the project, passing through the phases of three- and two-dimensional modelling, FEM structural analysis and product communication with renders and video animations".

Three are the cornerstones of the concept in question. Starting from innovation, with the study of a new, coherent and uniform style that embraces HS50 by integrating the LED lighting systems that rethink the way of displaying the machine status; to follow the recognizability of the machine that respects Mandelli's sobriety and representative colours while turning towards a more contemporary style; and finally the functionality of the machine, working on the operator-machine interface without neglecting the problems of those who will work closely with the new HS50.

"Furthermore - underlines Fabio Talesco - collaborating with a company of Mandelli's experience has made it possible to work more easily on points of the project such as the accessibility to the pallet area, the compartments for the machine maintenance, the high visibility of the machining area and to develop a product that reduces production costs and at the same time simplifies its realization".

The presentation of the project (downloadable from the website www.eping.it) summarizes the key points on which we worked to catch up with the current market and aim to excel in the future. The key points of the machine on which the designers have paid high attention are the access area to the pallet, the integration

between the front area of the pallet and the side machining area, the "visual separation" between the electrical cabinet area and the machining area and the continuity between the front part and the tool magazine.

Mandelli si determined to continue promoting the development of tomorrow's technology in order to be able to maintain its leading role in a constantly and rapidly changing global market. The new machine designed by the Mandelli technical office was presented in various important trade fairs in the sector. "Three were the landmarks on this mini tour: Chicago, Milan and Paris. We are particularly proud - underlined Paganini and Bertuzzi in conclusion - of how the machine has been welcomed. A relationship of trust has been created between the new Mandelli and Eping that makes us think about the possibility to share other projects to be developed in the future".

Mandelli, 90 years in the spotlight and under the guidance of Valter Alberici's Allied since 2021

In 1932 the ingenious idea of the founder, Renato Mandelli, then the consecration in the 70s

A history of successes, ninety years in the spotlight for the historical brand of Italian mechatronics founded in 1932 by Renato Mandelli. Leafing through the pages of corporate life, some crucial stages in entrepreneurial growth stand out. In 1960 the founder associates his sons Sante, Giancarlo and Umberto in running the company and transforms it into the Mandelli Snc workshop. Giancarlo will lead the company from the early 70s to the early 90s. In 1965 the creation of the first machine tools, Positiv, Medal, Thema and construction of the first nucleus of the current plant. In 1975, two direct sales and service branches were set up in France and Germany, Mandelli GmbH in Wiesbaden and Mandelli France on the outskirts of Paris. In 1985 the new generation of products of the M Line, Mandelli goes public on 18 December 1989 and in the same year Spring, a joint venture with IBM Italia Spa for applied research activities, is established. In 1990, subsidiaries were established in England and the USA. The serious world crisis of 1993 leads Mandelli to insolvency and the company enters receivership. In January 1994, Dr. Giancarlo Mandelli dies of a serious illness. Giancarlo Mandelli after leading the company for over twenty years.

In 1994 Mandelli came out of receivership and was acquired by a group of Italian entrepreneurs. In 2000, with renewed leadership, Mandelli began to develop a new concept of 5-axis horizontal machining center: the Spark line. In 2008 Mandelli acquired an important order for the machining of an important titanium parts, 6 meters long, for the new, futuristic Dreamliner aircraft. The Financial Times of 26 March 2008 dedicated a whole page to this important success. In 2015, the range of the Spark line was completed with a new version, assembled in the renovated plant in via Caorsana, expressly developed for the processing of tough materials, first of all titanium alloys. In 2020 Mandelli enters the world of Industry 4.0 with the iPum@suite4.0 package: predictive maintenance, automatic vibration damping, virtual reality to facilitate maintenance, latest generation man-machine interface and integration of FMS systems in management software are the five pillars of the Mandelli-branded digital revolution. In 2021 Mandelli Sistemi Spa passes from the Riello Group to Valter Alberici, President of Allied International.