

OCTOBER - 19 - 2020

MANUFACTURINGTECHINSIGHTS.COM



Elettric80 and BEMA



The annual listing of 10 companies that are at the forefront of providing Industrial Robotics solutions and impacting the industry



Elettric80 and BEMA

At the Forefront of Delivering Sustainable, Integrated Industrial Robotics Solutions

lettric80 and BEMA began developing the first smart, sustainable, safe and interconnected factories almost thirty years ago.

Springing from a dream, Elettric80 and BEMA anticipated the Industry 4.0 concept from their home base in Italy, bringing to fruition the vision of the two partners—the companies' president, Enrico Grassi, and vice president, Vittorio Cavirani. "Since the foundation of the two companies, in 1980 and 1992 respectively, we understood what the factories of the future would look like, and we developed increasingly advanced systems and solutions to provide customers with the tools to respond to—and, above all, anticipate—market needs," says Grassi.

The first example of a smart factory was accomplished back in 1992 for Costerplast, in Caldonazzo di Trento (Italy). Since then, Elettric80 and BEMA have specialized in creating integrated and automated intralogistics solutions that improve plant efficiency and sustainability, particularly for manufacturers and distribution centers operating in the food, beverage, and tissue consumer goods industries.

Today, the companies are market leaders in the implementation of these systems. They have completed nearly 300 integrated factories in various parts of the world and installed over 2000 robotic systems, more than 5000 automatic laser-guided vehicles (LGVs/AGVs), and 35 automated high-density warehouses. With the primary objective of being close to its customers, the companies have opened 13 branches worldwide. "We started in 1994 in the United States," specifies their president, "where more than 100 people currently work. Then, we analyzed the market trends and opened other branches in Australia, Brazil, Chile, the United Arab Emirates, France, Great Britain, Mexico, Poland, Russia, Sweden and, in the last two years, also in China and Thailand to meet the needs of regions in constant development. Since 2007 we have also been working globally with Tetra Pak".

Elettric80 and BEMA listen to the needs of customers, analyze and share strategies and objectives with them. They design and guarantee long-lasting, tailor-made solutions that reduce waste, errors, and production inefficiencies, with positive cascading effects that improve the entire supply chain. Their



software platform, SM.I.LE80 (Smart Integrated Logistics) is the conductor that orchestrates the integrated and automated management of the system, greenfield or brownfield alike. SM.I.LE80 communicates with production lines, palletizers, and wrappers, it coordinates goods-handling with LGVs/AGVs as well as warehouse storage, and organizes and optimizes the planning of transports to end customers. According to the specific application needs, through different modules, the software manages intralogistics flows, integrates manual and automatic operations, conveys information to factory management, and supervises the entire solution's performance



in real-time, guaranteeing full product traceability, top-notch efficiency, and safety within the system. "We operate in both greenfield and brownfield plants with modular installations; when working in existing plants, there is no interruption to the overall production cycle, and our software integrates and manages third-party systems," mentions Grassi.

During design, Elettric80 and BEMA use their simulation software, Smart Designer, to identify the most efficient intralogistic solutions capable of responding to all customer needs and guaranteeing enduring results. Smart Designer is an essential tool, modeled

on and integrated with Elettric80 and BEMA logics, for analyzing future operating scenarios of factories and distribution centers. Further, Elettric80 and BEMA monitor and optimize plant performance over time, accompanying their clients with 24/7 digital after-sales services. To date, thanks to the level of technology achieved and a dedicated team of experts, the Italian companies have managed 93% of worldwide customer requests remotely, thus reducing intervention times and maintenance costs, avoiding production stops, and drastically decreasing the number of transfers of technical staff to the customer's site. The results are a long-term guarantee of the implemented solution's reliability, as well as complete efficiency, safety and sustainability of the factory. In one instance, Elettric80 and BEMA's stateof-the-art technologies helped Constellation Brands to achieve fully integrated management of all aspects of logistics, from raw material reception to shipment preparation, all controlled by a single smart system. Constellation Brands is a leading international producer and marketer of beer, wine and spirits: the third largest in the U.S. They have operations in the U.S., Mexico,

66

We think up, design, manufacture, install and maintain over time our systems in an increasingly sustainable way



New Zealand, Italy and Canada and their brand portfolio includes Corona Extra, Corona Light, Modelo Especial, Modelo Negra and Pacifico.

The project carried out with the two companies, a greenfield development in Mexico, was built in response to growing demand from the US market. Constellation had acquired the Nava brewery in 2013 with a capacity of 10 million hectoliters of beer, and in 2014, they sought to expand the brewery and double the output to 20 million hectoliters. Upon completion of construction in 2016, this objective was achieved. Consumer demand has remained steady; between 2017 and

2018, Constellation Brands increased production capacity to 27.5 million hectoliters of beer a year, becoming the premier standalone brewing plant on the planet. In terms of statistics, this means 26,000 pallets shipped every day (18 every minute) and 67,000 pallets of consumables, bottles, cans, finished products and waste moved and stored daily with the use of over 174 laser-guided vehicles, all operating simultaneously.

By scripting numerous such success stories, the companies have truly carved a unique niche in the market. Being a state-of-the-art technological business, genuinely customer-oriented, and recognized worldwide for their level of innovation, Elettric80 and BEMA rely on people. "We invest in our team, fostering continuous training with our internal Academy and offering services aimed at improving the environment and working methods," informs Grassi. In addition to supporting recycling and energy-saving activities, these two companies develop corporate welfare projects to create a positive impact on people and the environment, working in a responsible, sustainable, and transparent manner day after day.