“Flexibility and availability” is not only the motto of Mebra Plastik Italia but the open approach it has taken to improving sustainability and reducing its carbon footprint by switching its marking to Markem-Imaje’s CJ 9450 EC printers, silver-effect ink and Packaging Intelligence software suite CoLOS®, saving energy, consumables, and waste simultaneously.

Customer
Manufacturer of pipes and profiles in high quality plastic materials

Busto Arsizio, Lombardy, Italy
Founded in 1972
108 employees
Products distributed throughout Italy and 80 countries worldwide

www.mebraplastik.com/en
Since Mebra Plastik Italia’s founding as a family-run business over 50 years ago, the company has excelled in the field of hydraulic and pneumatic tube extrusion. Since then, Mebra has maintained family management, a deep commitment to customers, innovation and high-quality standards whilst also growing exponentially. With production entirely concentrated in the northern Italian town of Busto Arsizio, Mebra Plastik Italia has become an international reference in tube extrusion producing some 40,000 medium and low-pressure plastic pipe products.

Encoding its customized products is extremely important to Mebra. Therefore, ensuring consistently clear, scannable information that can be read by a range of varyingly sensitive automated systems is vital. With production entirely concentrated in the northern Italian town of Busto Arsizio, Mebra Plastik Italia has become an international reference in tube extrusion producing some 40,000 medium and low-pressure plastic pipe products.

With few automation systems in place previously, Mebra’s ability to verify the quality of encoding and optimize its production process was highly limited. Extremely low margins, complex regulations characterized by multiple variables around the world, and a production line that often could not be stopped once running, presented major challenges in optimizing production and sustainability.

Mebra decided to approach Markem-Imaje as it has long been considered as an international reference in extrusion printing. “During my visit to the production facilities of Mebra Plastik, I immediately realized that we could propose a comprehensive optimization solution that permitted considerable flexibility in production and ease in its management; making it possible to foresee, control and reduce certain production cost components,” says Francesco Paglialonga, Account Manager for Italy at Markem-Imaje.

The extruder also has a firm commitment to contribute to protecting the local environment and improving its sustainability KPIs by reducing energy and consumables use, and waste.

Solution
CIJ 9450 EC printers, CoLOS® software suite and silver-effect ink

Together with the customer, Markem-Imaje defined Mebra’s needs and prescribed the optimal solutions set for the company. This consists of MI’s Continuous Inkjet EC, designed specifically for the extrusion sector. It has the ability to print high-quality codes on wires as small as 1.1mm, and on up to 3,000 km of cable, without requiring printhead cleaning.
The consumables were switched to a one-size fits-all silver ink with its ability to adhere to any substrate. The CIJ hardware was implemented in conjunction with CoLOS® Packeting Intelligence software suite, integrated with the production line and ERP systems to digitalize, automate and verify production.

**Benefits**

**Increased efficiency and traceability whilst simultaneously lowering costs, energy and consumables use, and levels of waste**

By implementing MI’s combined hardware, software and consumables extrusion solution, Mebra Plastik was able to reduce its number of printers by 50%, from 30 to 15, whilst maintaining the same levels of production and automating its marking operations. Mebra also reduced its error rate to practically zero and lowered consumables use whilst ensuring traceability, anti-counterfeiting and product quality control management. The introduction of silver-effect ink avoids waste caused in the process of constantly shifting between the use of various color consumables. MI’s silver-effect ink can guarantee the same contrast and the same legibility on light and dark surfaces on all extruded products, regardless of color, and saves time and costs by optimizing inventory and allowing Mebra Plastik to use fewer consumables.

Nicola Marchesin, IT Manager at Mebra Plastik, says: “This has allowed us to be much more efficient, reducing line equipment times and making it possible to implement new solutions such as automated metrics, fewer ink types and less waste, thanks to more ecological containers and less energy consumption.”

CoLOS® software solution was integrated both with the entire fleet of printers and, in synergy with Mebra’s MES, can automatically guarantee the right code on the right tube. Mebra Plastik

Production Manager Marco Boi adds that Markem-Image’s combined solution “has effectively halved the number of printers required for production so far, significantly reducing energy, consumable use, and associated waste.”

(The Mebra/Markem-Imaje partnership is) “the best option especially in terms of the environment in which we live, reducing energy consumption and waste at the same pace, while optimizing production, storage and deliveries”

Nicola Marchesin, IT Manager at Mebra Plastik

**For more case studies:**

www.markem-imaje.com