



From Contract Sleeving to Sublimation through a New Glass Coating Plant: Isa Sleeve's Production Diversification Strategy

Monica Fumagalli **ipcm®**

Shrink sleeve application, painting, and sublimation: these are the three pillars of the development project started by Isa Sleeve, a company specialising in the sleeving of glass or plastic products for the beverage, cosmetics, and pharmaceutical sectors among others, which decided to invest in its first glass coating plant to diversify its production, relying on the design and construction experience of M.I. DUE.

Eye-catching, original packages: this is what you get with sleeving, i.e. the application of heat-shrinkable sleeves (tube films) on glass or plastic bottles and flacons. Completely wrapping containers by taking their exact shape, these plastic labels allow decorating them with customised graphics and therefore making them more attractive to end consumers.

The first application of shrink sleeves can be traced back to 1965, when Japanese company Fuji Carpentry Shop (now Fuji Seal Company) first used this particular technology to protect sake barrels, in whose production it specialised, with a plastic film.

Many years later, one of the first Italian companies to recognise the potential of this decoration technology and apply it in an automated

Specialising in sleeve packaging, Isa Sleeve has recently started to coat glass: pictured are some painted bottles.

© Isa Sleeve



plant was Isa Sleeve Srl, headquartered in Cirimido, in the province of Como. "In the 1990s, we were among the first to invest in an automatic line for the application of these particular films," states Michele Bottaro, its founder and owner. Since then, Isa Sleeve, now specialising in contract sleeving for the beverage sector and, in particular, for the niche field of wine & spirits, has never stopped investing in new, advanced equipment. It currently owns several medium and high-speed automatic lines, equipped with all the technologies available for this type of process: steam, air, and infrared. "After optimising our sleeving operations by introducing automatic functions," explains Bottaro, "last year we realised that the winning strategy would be to diversify our production activities by first integrating a coating line and then, in the very near future, a sublimation plant. In January this year, we started up our first plant for coating glass bottles and flacons, designed in cooperation with M.I. DUE Srl (Besana in Brianza, Monza e Brianza, Italy), a long-standing firm in the surface treatment industry specialising in the construction of systems for painting metals, plastics, glass, zamak, and aluminium."

A customised dress

"Shrink sleeves offer endless possibilities in terms of customisation," says Marco Balconi, the sales and marketing director of Isa Sleeve, "as they allow "dressing" containers with even very elaborate, refined, high impact graphics and making them adhere perfectly to the surfaces of bottles and flacons, including the most irregular and complex-shaped

ones. When Isa Sleeve decided to invest in this sector, this was not well known and fully developed, yet. It purchased an automatic plant, with a unique structure and a high level of automation to carry out this process at an industrial level, relying on the recognition and trust that some national and international companies placed in Mr. Bottaro, then a forward-thinking small entrepreneur.

"Making such a substantial investment meant taking a risk to a certain extent, as this decoration technology was so little known. However, our company's philosophy, then and now, is to always identify the best technical solution to pursue any new project. More recently, we came up with the idea of also offering a glass bottle and flacon coating service using the same approach. We realised this project by installing a new, advanced system that, in turn, is also going to be preparatory for the third project with which our services' diversification will come full circle, relating to sublimation."

High daily output

Developed almost sixty years ago, sleeving now has a wide, well-established market, ranging from beverages to cosmetics, from pharmaceuticals to perfumes and home care products, and so on. "Generally, glassworks receive orders from our customers, they send their products to us and, after shrink sleeve application through one of the processes we make available, we deliver them directly to our customers themselves. We handle a large number of products on a daily basis, which requires a considerable effort in terms of both



The headquarters of Isa Sleeve Srl in Cirimido, in the province of Como.



Products sleeved with the company's automatic system.



logistics management (loading, unloading, identification, and storage) and organisation (document and commercial management). However, thanks to our large number of machines, we are able to guarantee a high productivity rate whatever the volumes our customers ask us to handle.

"In the last few years, besides constantly updating its company's structure, implementing advanced production technologies, and since this year maintaining a structured sales network, Isa Sleeve has also invested in certifications and approvals. We are ISO-9001:2015 and HACCP certified and we can handle excisable alcohol products directly at our plant."

From the left:

One of the automatic sleeving lines.

The system designed and installed by M.I. DUE for the coating of glass bottles.

The holders on which the bottles are placed.

A full service for the design and application of shrink sleeves

Isa Sleeve's staff can support its customers from the initial design and development phase of sleeves (dimensional and graphic study) through to the manufacturing of finished products, thanks to its collaboration with several partners specialising in manufacturing these particular labels. Balconi indicates: "For the most demanding customers, we can make standard or customised samples available within a few days, by applying sleeves directly on the containers or bottles supplied by the customers themselves to enable immediate assessment of the end result."

One of the company's sleeve application plants, in particular, provides fully automatic process management and operates virtually unmanned. It independently and automatically performs the depalletisation of bottles, their handling during automatic sleeving and the subsequent steam shrinking phase, and finally their palletising and sealing by covering the pallets with thick heat-shrinkable material.

Diversifying production with glass coating

Isa Sleeve approached the world of glass coating with the same philosophy it used to launch its contract sleeving service on the Italian market. "The particular field in which we operate," notes Balconi, "requires the use of plastic, which however has long been the subject of debate from an environmental sustainability perspective. With this



© Isa Sleeve

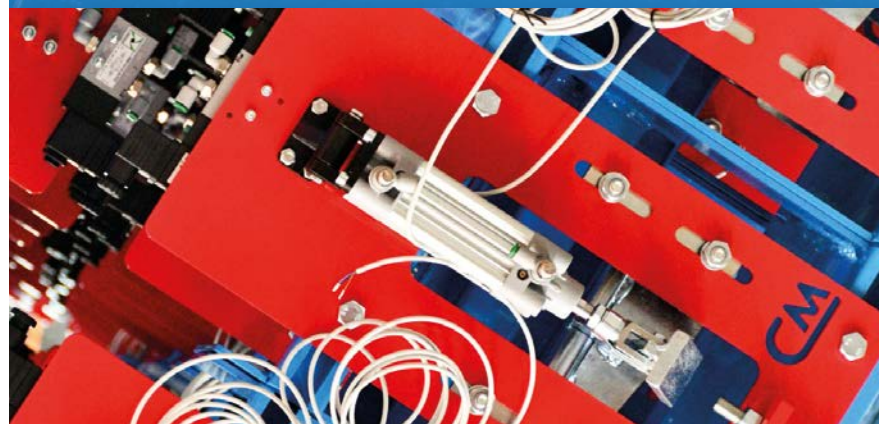


© ipcm

in mind, we began looking for an alternative that went beyond the replacement of plastics, which is not the subject of this interview, but managed to guarantee the continuity and further development of our business. As a result, we have just started up a new plant that is going to be the core our second line of business in 2023 and, at the same time, will also be preparatory to the installation of a sublimation system this year, with which we are going to use to offer a third service." For the design and construction of its coating system, Isa Sleeve relied on M.I. DUE. "Our choice fell on a supplier with long experience in the painting industry," says Bottaro, "as well as significant know-how in the design phase and an uncommon ability to assist its customers at every project stage, from the initial idea to the machine's installation, leaving nothing to chance. There were many reasons to prefer M.I. DUE's project over its competitors' ones, including for example the use of closed chambers and other highly interesting specific concepts."

The coating process

The bottles are loaded onto the line's transport chain and subjected in sequence to blow-off and dusting with rotating brushes; flame hardening to remove any grease and silicone residues left by the glass moulding operations; preparatory activities to obtain perfect conditions for the coating stage; drying with hot air or infrared; cooling; unloading; and repalletising.



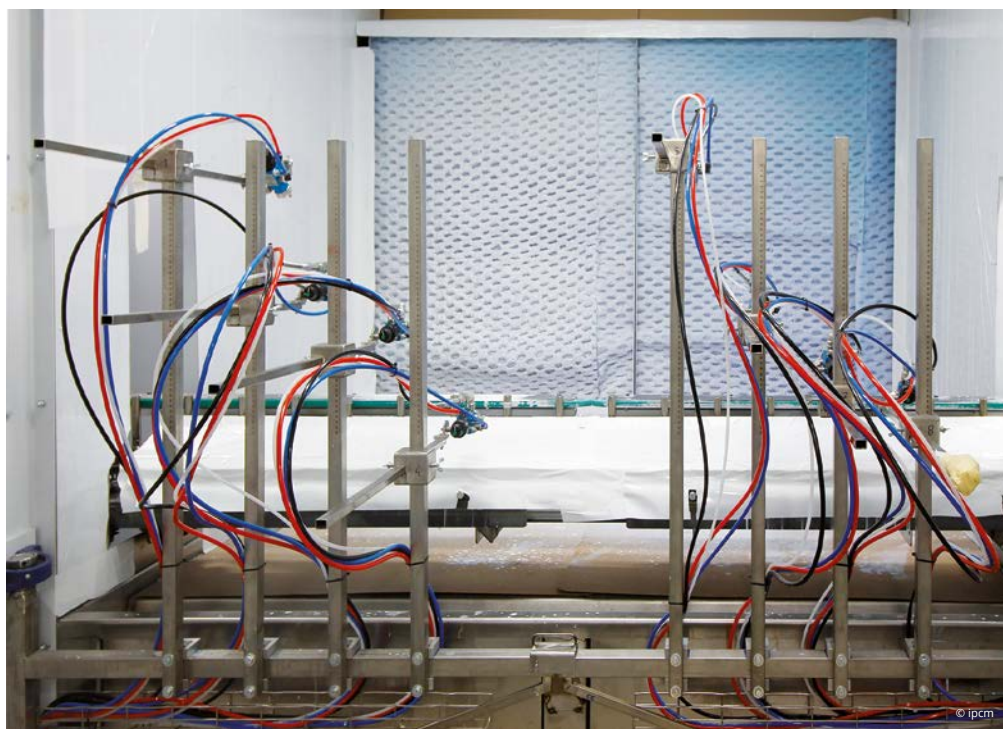
CM AUTOMAZIONE s.r.l.

Via Monte Bianco 20, 20833 Gussano (MB), IT - p. +39.0362.314075 - f. +39.0362.861222 - info@cmautomazione.it





The flame hardening station.



One of two identical coating chambers: pictured is the coloured paint application station.

This cycle takes approximately 40 minutes from the entry into the plant to the exit of a painted bottle. "Within the plant's layout," adds Bottaro, "we asked M.I. DUE to also include an additional chamber for the drying of UV coatings instead of water-based ones, when required."

Coating in preparation to sublimation

The coating plant is also going to be used for some of the processes required by sublimation, enabling to offer a high-end service through this special decoration technique that, unlike sleeving, also enables to graphically decorate the bottles' undersides.

This is an innovative printing technology, sustainable in terms of recyclability and of high quality in terms of graphic rendering. Isa Sleeve aims at achieving a high production capacity to achieve a greater diffusion of this service/product thanks to a lower industrial processing cost.

Isa Sleeve's vision: 3 services with minimised delivery times

"When it comes to contract sleeving," concludes Balconi, "we can now share with our customers a wealth of professional experience, gained over more than twenty-five years and enabling us to establish ongoing, mutually satisfying relationships of cooperation and trust thanks to a perfectly optimised process. We are now focussing on coating to achieve full control of this technology as well. This is going to enable us to reduce the delivery time of our coated products from the five weeks currently guaranteed by the market on average to three weeks. Our main objective is to grow by supplying the market with a better service than our competitors. We believe that a fast processing cycle delivering high quality products can be the winning choice, including the sublimation service that is going to be added later this year. Choosing partners capable of supplying high-performance plants and products, such as M.I. DUE, is key to become a benchmark company in new markets, as Isa Sleeve has already done in the contract sleeving sector." ●