## **ANTONINI**

# Commitment and constant research for innovative solutions

Antonini maintains high quality standards, remaining flexible in following and meeting customer needs, providing highly specific products. Each lehr is built starting from the understanding of the needs of end users.

ntonini SRL was founded by Fosco Antonini in the 1940s in Ponte a Elsa, in the province of Florence, in the Empoli area, a region which has always been dedicated to the production of glass. It carried out small-scale and artisanal productions linked to local needs. The production methods, that have developed over the years, have then integrated the use of technology with artisanal knowledge. It is in this framework that Antonini was founded as an artisan com-



pany making small tools, moulds and carrying out repair work for the local glass factories.

### THE INTRODUCTION OF AUTOMATION

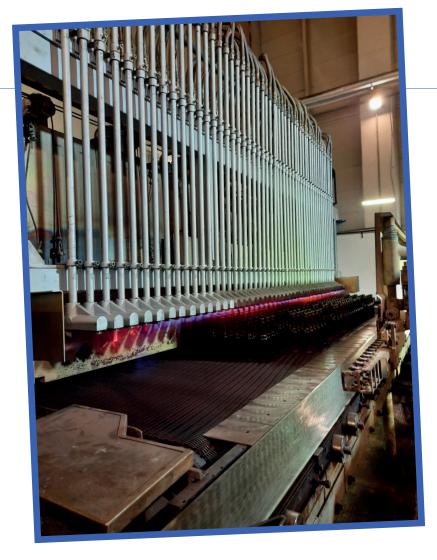
With the advent of series production, over the years 60s, many glass companies introduce automation in production lines, which leads to continuous cycle production. The glass objects being now made in series, by automatic section machines through moulds, which shape the drop of molten glass. Hence the growing demand for annealing furnaces that keeps up to these innovations and leads to the development and use of belt lehrs, on which the items are placed one by one continuously and run through the tunnel to carry out the annealing process.

Antonini begins to specialize in the design and construction of these furnaces for the continuous treatment of hollow glass, keeping the production in its original location. Its commitment and constant research for innovative solutions contribute decisively to the development of annealing lehrs on belt. The furnaces are now made of premium stainless steel and permit an increasingly precise temperature control along the sections. An open table at the exit of the tunnel concludes the last phase of the cooling and allows to accommodate the cold end treatment devices that guarantee the correct finishing and handling of the bottles.

## INSTALLATIONS AT GLOBAL LEVEL

In the 1980s and 1990s a rapid growth of the company leads Antonini to be well known in the global glass market, interacting with all the main players in the sector, becoming one of the market leaders.

To date, about 2,000 Antonini lehrs are installed, up and run-



ning in 88 countries: from Europe to America and Africa, from the Middle East to the Russian Federation, China, India and Southeast Asia.

The constant participation over the years in the most important trade fairs in the sector and in specialized international conferences and seminars, have contributed to the visibility and notoriety of Antonini, which holds a leading role at prestigious sector events across the world, such as the AFGM (ASEAN Federation of Glass Manufacturers), as well as the Conference on Glass Problems.

## CUSTOMIZED PRODUCTS FOR DIVERSIFIED NEEDS

Antonini's customers are numerous and diversified: from large multinational companies to small local producers, from large bottle productions, to artisanal productions up to luxury artistic productions (high-end and luxury).

Each product is customized and is the result of the careful listening ensured by Antonini to its customers, combined with the awareness of market demands.

Antonini maintains high quality standards, remaining flexible in following and meeting customers' needs, and providing highly specific products. Each lehr is built starting from the understanding of the needs of the end users.

Antonini's customers have the possibility to completely configure their product, from mechanical to electrical and electronic parts, to follow the plant needs and the specifications required for each country. Customers are involved right from the first design of the equipment, with the choice of layout and components, through the manufacturing phase, up to the final on-site installation, thanks to the constant dialogue and interaction with the Antonini engineers.

This result is made possible by



Antonini's customer oriented philosophy: the customer is placed at the heart of its activities, and is always involved in every phase of the conception, production, installation and post-plant assistance processes.

Products become the work of craftsmanship, being tailor-made to the specific needs of the end users. At the same time, Antonini makes use of all the industry's leading technologies, producing lehrs that well integrate into increasingly complex systems, as for example the IoT and Industry 4.0 new specifications. Thanks to its decades of experience on the most important markets, it is able to supply all systems meeting different specific standard and certifications.

#### **CONTINUOUS INNOVATION**

This growth and continuous investment in research has allowed Antonini to develop now a new series of products and accessories that complement the

already existing and consolidated range of products (annealing and decorating lehrs, mould preheating kilns, as well as cold-end spray treatments, among the others). As an example, new innovations have been made in the treatment of bottles before entering the lehr, to improve the finish of the mouth, developing a new mouth fire polishing system, already successfully installed in many large plants for the production of beer bottles.

Another Antonini product of excellence, representing an important niche, is the thermal shock equipment, for the production of electrical insulators. This lehr, with a length of up to 70 meters, carries out a complex process which, across various slow and fast heating and cooling steps, guarantees that the products made can withstand the most severe conditions of utilization in the field. A couple of lehrs, which include all the latest technical improvements, have recently been realized for the Chinese market. Market which, with three other large new plants for the manufacture of beer bottles under construction, represent an important developing market for Antonini.

#### STRONG SYNERGIES; ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY

With about 100 effective employees, Antonini represents a solid company model, which counts on strong synergies between all departments. All the staff is internal to the company, from Sales to Engineering, from Purchasing to Administration, right up to the Manufacturing department and the entire team of Supervisors, who ensure installations and prompt on-site assistance, as well as repairs and conversions. Each employee benefits from ad hoc training thanks to targeted refresher courses on products and procedures. This winning business model guarantee strong local roots and ensures to be integrated effectively into the global economy.

The high quality of Antonini's lehrs is ensured by the quality of the components, always of first choice and with European origin. The supply chain is mainly Italian: all the phases are followed in the company headquarters, which has remained the same for almost a century.

The need to respect the fundamental principles of sustainability, both economic and environmental, promoted the major European and international organizations, and the continuous dialogue with customers leads Antonini to invest in research to provide cutting-edge solutions on numerous aspects of its products: important studies have been carried out and implemented to allow maximum energy recovery, with the production of hot air and water to be used in the plant, and to reduce the environmental impact of decorating products fumes. Or even the transition to IE4 motors that guarantee higher efficiency by reducing consumptions.

These aspects constitute today's challenges and frontiers towards which we must move, as well as the new opportunities to be seized to continue develop and optimize our products, making them competitive with regards to new market needs, and respecting the world we want to contribute in building.



#### <u>ANTONINI SRL</u>

Via Medaglie d'Oro della Resistenza, 2 50053 Ponte a Elsa (FI) - Italy Tel.: +39-0571-93221 Fax: +39-0571-931828 E-mail: com@antoninisrl.com

www.antoninisrl.com

