

Penta Automazioni, 40062 Molinella (Bologna), Italy

30 years of innovations

In 1991 Selvino Simoni, a designer of production plants for bricks and ceramics, founded Penta Automazioni Industriali Srl. Today the leading Italian manufacturer of plants and equipment for handling, aging and packaging of concrete products celebrates its 30th anniversary.

In the beginning the main activity of the company Penta was focused on the manufacture of production, handling and stacking plants for earthenware, concrete, natural stones, paper and aluminum products. Five materials – hence the name of the company, as „Penta“ means „five“ in Ancient Greek.

From the very beginning, Penta offered fully automatic and customized systems, designed and built internally, including the mechanical aspects as well as the electrical and electronics.

Following the economic and technological development of all these different industries, in 1996 Penta narrowed its focus to be predominately active in the concrete, natural stone and terracotta industries.

The engineering skills and the experiences achieved over the years resulted in close collaborations established with the major manufacturers and led to the development of new production concepts and new technological solutions.

A noteworthy milestone was the year 1999 when Penta developed an automated solution to a labour intensive process trending in the industry: Aged pavers from a tumbling drum

had gained popularity. But process automation and the automated selection of the tumbled pavers were a new challenge. To address this need Penta designed the first „CALEIDOS“ aging plant. The “Caleidos” rumbling plant is a fully automatic aging, quality control and repackaging plant, able to handle both single and multi-size pavers. The result provided a means to stack pavers of different sizes on the same pack, in the most convenient and efficient way, made possible with the in-house designed capabilities developed by Penta.

The first step in this revolutionary system was, the “Caleidos” centrifuge. It consists of a high-speed rotating table to align the pavers into one single line and deposit these products onto a slat conveyor to transport them to a detecting and sorting system that recognizes the sizes of each product, sorting out the broken ones, and distributing the good ones on different lanes according to the layer configuration strategy. At the end of the line the “Caleidos” cuber, uses independent fingers to pick up from the lines one or two rows of pavers at a time, stacking them on the sales pallet.

This plants success captured the attention of manufacturers of concrete products all over Europe. In 2000, the plant proved its potential and clearly showed the advantages it brings. First Spain, then Sweden, Germany, Belgium, France and England – step by step the “Caleidos” aging plant conquered the whole of Europe. The solution proved a significant increase in productivity, a considerable reduction in costs and it increased safety by doing a job that used to be done manually. All of this shows why customers were so satisfied.



1991



today

The old headquarters (left) with its façade made of precast panels; and the new headquarters in Molinella, Italy (right), with its façade built of split concrete blocks – a reference to Penta’s main field of business, the concrete products industry.



2003



today

One of the first generations of "Calaidos" cubers (above) and the current edition of Penta's bestseller.

Penta's success is bolstered by taking advantage of the latest technological advancements and applying them to solve problems for the customers by providing customized solutions to meet the individual needs of customer and markets.

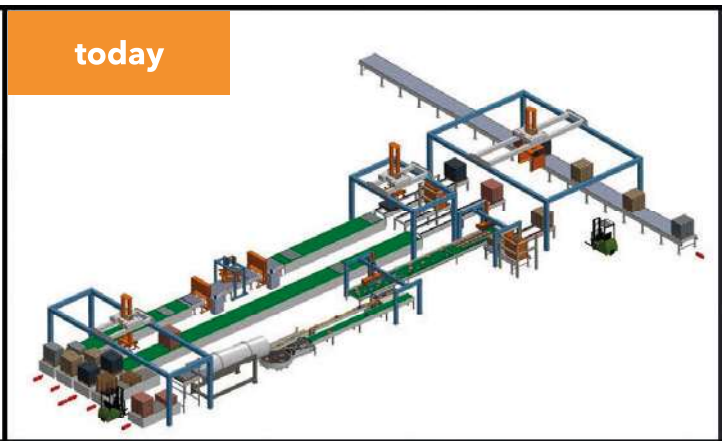
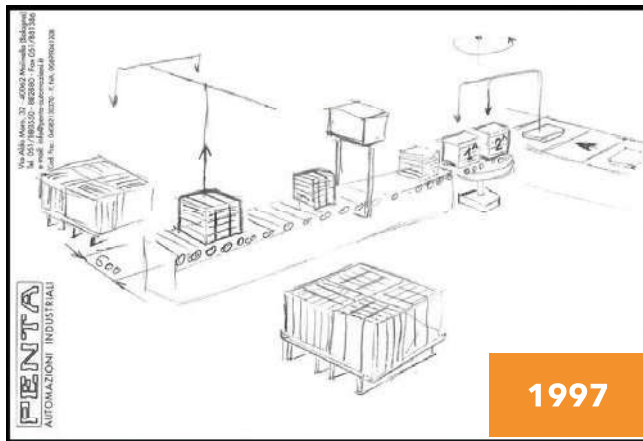
Customers called, Penta answered

No matter how complex or unique the requests might be, Penta never fails to deliver, studying every detail and responding promptly with tailor-made solutions.

Penta has thereby become one of the best suppliers in the market, manufacturing automatic handling devices and secondary treatment plants for concrete products cooperating with industry leaders worldwide.

At the end of the twentieth century, Penta reaffirmed its commitment to the concrete industry by expanding sales to North America. Innovation with a commitment to quality were the primary elements that pushed Penta to move forward. Penta focused attention to the optimization of existing devices and researching new solutions to enhance productivity and reliability.





Penta handling and packaging line then and today

In 2013 Penta impressed once again

In that year was sold the first scanning bench for analyzing the quality of tumbled products. This sophisticated system allowed not only to verify if an aged product has been broken during the aging process and where, but the customers could also select products based on their aging effect. Each product has its own characteristics and Penta's scanning system allowed customers to palletize only those products that met pre-set standards.

This innovative scanning system also makes it possible to recognize face up or face down (textured face) and, through the implementation of tailor-made devices, to flip over upside down products and stack them on the sales pallet with the good face on top.

Customer could then be confident of always supplying only 100 % quality products, ready to be placed on the construction site, production of about 1,500 square feet/hour with single-size products and over 1,000 sq. ft/hour with multi-size products, all managed by a single operator.

In times where skilled labour becomes more expensive and more difficult to find, the „Caleidos“ plant fills a growing demand with utilizing its innovative processes.

Penta didn't stop there

In the same years Eng. Gianluca Vignoli joined the management of Penta: formerly a designer in the environmental field, his figure became part of a company renewal project, granting continuity and internationalization to the company. These were the years when Penta built the first production plant in Brazil, the largest and most innovative in the state, part of an ambitious urbanization project.

At the same time, Penta signed a new collaboration contract with Concrete Plant Technologies, Inc., owned by Harry VanDusen who still represents Penta in North America. C.P.T., Inc. under the leadership of VanDusen boasts 30 years of experience in the market and this is what Penta was looking for: a dynamic person who cares about the satisfaction of the customers. This collaboration has paid off, and year after year Penta has become a point of reference also overseas.

The increase in business and the constant growth of the interest of the American market drove Penta, at the end of 2018, to found PENTA US, Inc., headquartered in New York City, as distributor of Penta Automazioni Industriali Srl machinery in the North American territories.



A sorting gripper in 2005 and the current model 16 years later

CONCRETE PRODUCTS & CAST STONE

In 2019 the new warehouse and the new distribution service were inaugurated in the neighbourhood of Portland to supply spare parts to assure timely delivery throughout the Continent.

A new collaboration was also signed with a local company that for more than 15 years has produced mechanical parts for machinery for the concrete industry. This partnership makes it possible to manufacture spare parts in the US that have been designed by Penta.

The expansion of Penta's sales network was not only directed towards the "New Continent" but also towards new countries where Penta had not focused its resources before.

Another target, another goal

Despite the hard times the world is facing now, Penta is never slowing down. On the contrary, the company is increasing the range of services and products in order to develop innovative and highly personalized solutions, meeting enthusiastically every new challenge to get the highest satisfaction from the customers and to create a safe and stimulating work environment where the qualities and skills of each employee are valued as a means of growing together every day.

Today Penta celebrates 30 years of activity, proud of what has been done and ready to face the future. Happy birthday Penta! The best is yet to come! ■

FURTHER INFORMATION



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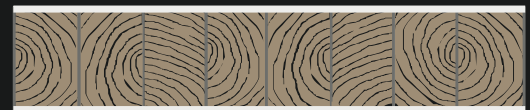


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