

#24



ALL THE REASONS FOR AN INTEGRATED EGG SYSTEM

PASTIFICIO DONNA ITRIYA



ROTARY COOKERS AND COOLERS



PASTIFICIO EIER GEIGER GBR





Egg dosing system:

Why it is important to have a reliable and innovative system

Storci's great experience allows the creation of egg storage and dosing systems according to the different needs of pasta factories. We offer three types of systems: manual, semi-automatic and automatic management.

Today, our technical director, Mr Alberto Serventi tells us about an innovative semi-automatic system designed for one of our customers, Grandi Pastai Italiani S.p.A. of Correggio (Reggio Emilia). "As part of the pasta factory project," explains Serventi, "we installed here a system that allows different types of egg to be received and dosed on three pasta production lines, even simultaneously.

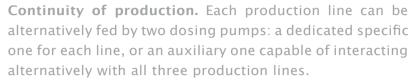
Eggs used for the production can come from external tanks, mobile internal tanks or from two fixed internal tanks that allow the mixing of egg with tomato or spinach powder".

These internal tanks are placed in a dedicated refrigerated cell, which also houses the entire dosing unit, which is made up in detail of: a matrix of "mix proof" type valves for managing the liquid flow; batteries of peristaltic pumps that guarantee a precise and constant dosage of egg; process tanks sensors and detection systems. Inside this cell we additionally find the receiving group from external tanks which, by means of lobe pumps, allows the product to be sent to the internal tanks for the various mixing or to directly feed the lines.

Sanitary safety is guaranteed by a CIP washing system which automatically manages all the washing phases at different temperatures, with soda-based and sterilizing solutions, ensuring the sanitization of the system in a completely automatic way after each production cycle.

The plant includes the tanks for water, soda and sterilizing solutions, the steam circuit necessary to heat the soda solution and the delivery pumps for the washing liquids.

Which are the advantages of the system?



This configuration makes it possible not to interrupt the production on a line by switching to the use of the second feed pump; at the same time the previously used egg circuit can be washed.

Waste reduction. When you want to finish the production, through a pipe emptying system, it is possible to finish dosing all the eggs still present in the production circuit, recovering them completely and preventing from being discarded.

This can be considered as a significant economic savings.



Ease of use. The management of the system, both in the production and washing phases, is controlled by a central PC and an intuitive synoptic diagram. The only manual operations to be performed consist in the connections of the flexible piping to put the various dosing and washing circuits in communication.

Safety. The safety of the system is guaranteed by several types of control which act simultaneously to verify and prevent any involuntary errors by the operator. Before executing any command, the program checks the closure of all the hatches of the tanks via safety microswitch and the current position of the involved valves. The correctness of each connection made with the flexible piping is constantly checked by software using special sensors. Furthermore, thanks to the use of "mix-proof" valves, it is possible to manage the flows of egg and washing liquids in the various circuits of the system,

ensuring that they never come into contact.

Disinfection. The technical choices adopted ensure the accessibility of the sanitizing fluids to all the elements of the circuit that have come into contact with the product.

The plant is then cleaned and sterilized with fully automatic cleaning cycles, leaving the operator free to carry out other activities.

Respect for the environment. The CIP system is able to recognize the washing liquid present in the circuit by means of conductivity probes, allowing the total recovery of the soda and sterilizing solutions, thus avoiding unnecessary waste and ensuring maximum respect for the environment.

Egg plant area at Grandi Pastai Italiani Pasta Factory



A 100% Sicilian wheat pasta. Excellence coming from tradition.



The pasta factory Donna Itriya is headquartered in Casteldaccia (Palermo), in the very district that, in the 20th century, during a glorious period for Sicilian art, welcomed the most relevant pasta manufacturing vocation.

They produce pasta with 100% Sicilian wheat, kneaded with pure water and dried following the most ancient artisanal tradition.

We interviewed Salvo Lo Monaco, partner, and general manager, who told us about all the aspects of this four-star Italian company.

Mr Lo Monaco, could you please tell us how the idea of your factory was born? Which are your distinctive key points and values, beyond the strict bond to your land?

The "Donna Itriya Project" comes from the impulse of a close-knit group of entrepreneurs and professionals of the Sicilian panorama who have in common a sincere passion for our territory.

Our mission is to promote an authentic gastronomic culture which is its expression, giving birth to a product that is the symbol of excellence and distinctiveness, representative of the quality of contemporary gastronomic culture. "Donna Itriya" is a homage to "itriya", born just in this area, to which we juxtapose a woman's profile in our logo, a tribute to our land fertility and home to the most selected wheat.

The unity of purpose identified by this symbol is the desire to offer exquisite artisan pasta, produced with the semolina of the grains spontaneously growing on the island, kneaded with the patience of



PASTA FACTORY DONNA ITRIYA

our master pasta makers who have loved taking care of this cultural, historical gastronomic richness for generations.

How come did you choose Storci? Which are the advantages of using our production lines? Please tell us about a point of strength that particularly hit you.

From the start, we aimed for excellence at every production stage: consequently, we could only choose Storci as a partner



As we manufacture a product with the artisan method, our goal was clear from the inception: to use remarkable performing machines to satisfy great production capacities and static dryers to comply accurately with the production settings. We achieved our result right from the testing phase. We are already looking toward the future: we are sure that our choice will allow us to increase production volumes while staying focussed on the artisan quality requirements of our products.

You are both businessmen as well as artisans. How can you balance attention for tradition and use of modern technologies?

Donna Itriya is the bearer of a tradition that has been ignored for so long: we have the honour and responsibility to bring back to light the fundamentals of the original Sicilian pastamaking art, aiming for perfecting it by state-of-the-art machinery, able to create a flawless manufacture, still respecting its deep artisanal characteristic. Donna Itriya is the story of the pasta origins in the world, modern revival or craftsmanship with a current entrepreneurial eye.

WATER ROTARY COOKERS AND COOLERS

The only cooker that guarantees the cooking time with patented system

Is cooking 10,000,000 portions of pasta with a specialized system more environmentally friendly than to let individual consumers cook 10,000,000 portions?

Consumers are increasingly demanding ready-to-serve foods, ready to heat up or quick to prepare, rich in taste and with both traditional and new recipes. And the requests for complete "turnkey" plants to produce ready meals are increasing. The answer? Our experience in the pasta and couscous sector and the numerous companies that use Storci systems for ready meals. Rotating cookers and coolers are an important integral part of the lines for ready meals that offer a wide range of processes.

Unique and customized projects. The rotary cookers and coolers, that can be added to the semi-automatic or automatic lines from 600 to 5,000 trays/hour, are the solution with reduced dimensions and more advantages.

Cooking and rehydrating ingredients and products. The "hot-cold" system continuously cooks and cools different foods (pasta, rice, meat, vegetables, etc.) and is particularly designed for pasta-based ready meals. The upstream plants consist in machinery for producing extruded, laminated and filled pasta which can be transformed into ready meals with condiments: shapes, flavors, packs for diversified markets. Downstream there are all the condiment dosing systems, assembly in







trays and packaging. The consumer will have the opportunity to enjoy many recipes for ready meals to be heated or cooked, fresh or frozen for the maximum convenience.

High-tech. High production flexibility, reduced spaces, ease of use and cleaning, high energy efficiency.

Energy Performance. The rotating cooking and cooling systems allow the process of large quantities of ready meals with maximum energy efficiency on a very large catalog of products. They are the heart of complete lines that guarantee excellent performance, high production



flexibility, large production capacities in small spaces and high energy efficiency. The patent that several customers already use all over the world: the cooker is equipped with an easy-to-use water cleaning and recirculation system: the CAR System.

Flexibility and accuracy. R2E "ready to eat" rotary cookers and coolers for ready meals based on filled, short and long pasta, meat, rice, fish and vegetables. The three-principle spiral ensures constant cooking and cooling times, so the product cannot remain inside the tank beyond the pre-set time, but is forced to exit. The three propellers gently transport



the product along the unit towards the exit, guaranteeing an optimal cooking or cooling time.

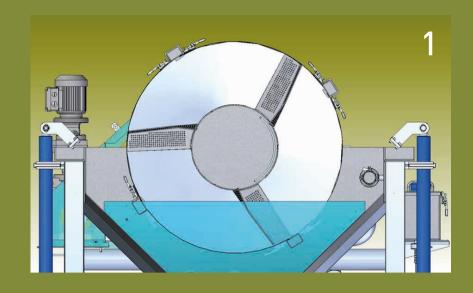
No problem for the salt because special stainless steel is used for the parts in contact with salt water (AISI 316).

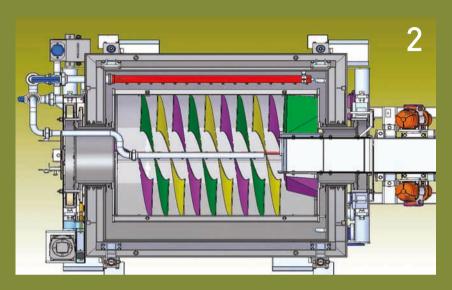
Cleaning at the end of the process: the machine cover is lifted in a few seconds by means of electric screw jacks with a safety self-locking system and the external drum nets are easily removed, for maximum access to washing even with a pressure washer. The automatic temperature control system "Steam control system" guarantees that the desired temperature remains constant.

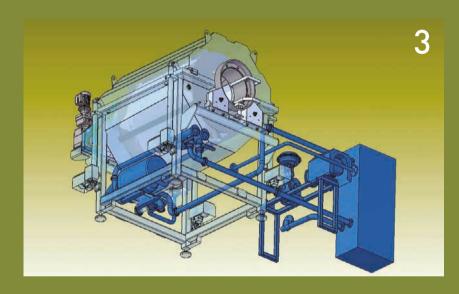
Heating system. In the cooker, the cooking water is heated by a heat exchanger with recirculation pump, valves and pipes, all installed on board the machine. On request, heating can be done by injecting sanitary steam into the cooking tank.

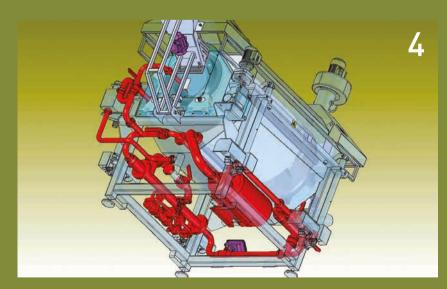
Cooling system. In the cooler, the water is kept at 2°- 4°C by a heat exchanger and glycol water. Exchanger, recirculation pump, valves and pipes are installed on board. The unit is equipped with a water recirculation and internal cleaning system that works simultaneously with production. The system draws water from the drain and passes it through a filter to remove small product particles. The water is then pumped into a spray system with nozzles.

The energy efficiency of an industrial system that cooks and cools is advantageous compared to the sum of energy consumption used for individual cooking and cooling, thus resulting in less pollution for the benefit of the environment.









- 1 Cooking drum
- 2 Sprinkling Nozzles
- 3 Cooling System
- 4 Heating System



Have a look at all the available systems

STORCI ALUMINIUM TRAYS

Strong and lightweight.
Designed to maximize
the air flux effectiveness
on the drying product.



Nowadays it is of the main importance for the food industry machines to comply with very high sanitary standards, particularly during the drying or dehydration process of fresh foods.

Wooden trays, traditionally used for the drying process of dry pasta, have some basic problems such as that, over time, they could release wood particles into the product; moreover, being an organic material, its innate feature is to absorb and release humidity.

To avoid the above-mentioned issues, thanks to the project and

design by our R&D, we have created specific aluminium trays for drying pasta and similar products, that are a valid, alternative technologic solution to wooden trays.

Our trays:

- Can eliminate the presence of wood particles in the product
- Have a perfect mechanic rigidity
- Can be stacked and are compatible with any wood, aluminium, plastic or steel trays
- Are robust, resilient and non-deformable
- Are made in Italy, complying with CE regulations.
- Storci aluminum trays are highly versatile and have been designed to be completely compatible with our dry pasta lines; they are the result of researches carried out with our customers, making our own their requests and suggestions.

Available models for lasagna and standard short pasta: height 30mm and 55mm.

Technical specifications:

- Rounded end corners to prevent blockages when sliding
- The lower profile is shaped so as to facilitate positioning during the automatic stacking phase
- The metal parts inside the tray and in contact with the product have a reduced support surface
- The tray has no openings or holes closed with plastic caps, to avoid harmful residues or loss of moving parts
- Minimal friction of aluminum parts thanks to a special contact element

We offer tailor-made solutions.

Have a look at all the available systems



"The Customer Service is superb. That's why we chose Storci".

Eier Geiger GbR

In Kleinkötz, Germany, a beautiful family-run business has recently added pasta production to its main poultry activity.

We asked Mr Martin Geiger, owner, to tell us something about his company together with some anecdotes connected to the relationships with Storci.

Mr Geiger please tell us briefly how your company was born.

It all started 30 years ago at our dairy farm when I was 12 and bought two chickens.

I sold the eggs going from house to house on my bike.

The number of chickens has steadily increased over the years. In 2002 we already had 1100 chickens and became 15000 in 2012; in the summer of the same year, we suddenly had too many eggs, so we bought a small pasta machine and started a very artisanal production in the basement of our house.

In 2019 we built our feed mill so that we could produce the feed ourselves and process our grain. At this stage, the space at our disposal

consumers see how we raise our chickens, where the feed comes from and how we grow our durum wheat.

You only use excellent durum wheat ground in your mill and your eggs to manufacture your pasta. How much have Storci and its





in the basement was inadequate.

In 2021 our family decided to establish a new pasta production facility. It was important to us to have sustainable, zero-mile farming and let



machinery affected the production of such an exquisite pasta like yours?

On a trip to Italy, we visited several suppliers of pasta machines and

made up our minds when we arrived at Storci, an avant-garde company. On August 1st, 22, Storci skilled staff, along with the help of our family members, installed an Easy Omnia 70. We couldn't wait to produce our first pasta. We could already see the performant processing of the machine parts and got to know the machine itself. After a few fine adjustments, the line was up and started running smoothly, enabling us to produce a good product.

Consequently, I thought that the Storci technician could go home as I believed that after a 12-year experience, I was able to make pasta.

But it wasn't like that because I was surprised to realize how much I was learning from Storci about pasta processing. Thanks to them, I can now manufacture an excellent product that stands out from our competitors. Any shape of pasta is made to perfection. One of Storci's forte? Their Customer Service. It is highly qualified, specialized and, most of all, available.

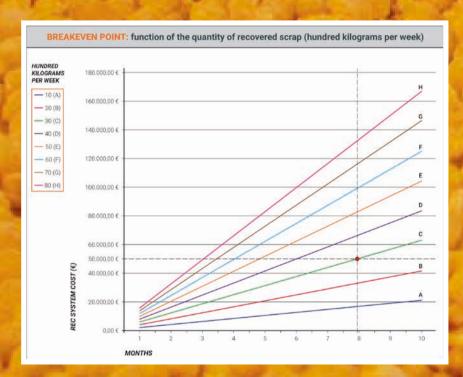
SCRAP RECOVERY UNIT

An investment that pays off

It cleverly and efficiently recovers scraps. Nowadays, more and more pasta making factories, whatever the size, feel the need to properly recover pasta scraps coming from the beginning of the production process, shape change, dough cut-outs ad production stops. Raw material cost, constantly increasing, makes it necessary recover these scraps efficiently.

For this reason, we offer a complete series of recovery systems, ranging from the simplest to the more complex, suitable to be adapted to any need.

Our ad hoc models: EASY REC C/ALL, manual loading for small-medium productions; REC 500 C/A/I for medium productions and for large dimensions scraps; REC 1000, REC 1000 C/A/I, REC 1001 C/A/I, REC 1002 C/A/I and REC 2000/D AUT for large productions.



Thanks to the advice and professionalism of our technicians, we can provide the customer with the solution that best suits his/her needs, guaranteeing the return of the investment in a short time.

Unlike most systems sold nowadays, for which it is necessary to wait years, Storci's RECs allow a return on investment in a few months, depending on the quantity of scraps to be recovered. The graphic represents the break-even point of the investment requested: according to the REC cost and the quantity of scraps to be recovered each week, it is possible to ascertained when the investment will be repaid.

Main characteristics of our system: All scrap recovery systems offered by Storci are created to recover fresh trimmings of pasta



with a humidity of 25–30%, not wet on the surface. They are made of stainless steel and consist of a feeding crumbling tank, unloading into the shredder – directly or by means of the Damper system – and a hopper for loading the fresh product manually or automatically into the tank. The shaft of the tank has sharp paddles with blind conical holes and is pressure fixed (with no bolts) to prevent stagnation of the product, thus allowing an easy cleaning.

C/ALL (standard) and C/A/I (top line)

Scrap shredding system: Storci fans-shredders are equipped with a basket forcing the trimmings to pass through holes, which have a predetermined diameter, so that a well-shred product is obtained.

DAMPER: optimisation of the scrap dosing system

This system allows the recovery unit to be fed with a constant dosage, continuously monitoring the quantity of scrap coming from the tank. This way you can limit the maximum capacity.

The belt or the screw have a reversible motion that allows feeding the shredder as well as diverting a non-suitable product.

Storci is the only one able to supply recovery groups whose capacity in Kg/h of exiting scrap is constant.

Other systems, instead, may vary the capacity. Consequently, the mixing in the kneading basin – where the trimmings are re–entered – does not have constant quality characteristics.

