

STORCICOM

N.04

ANZIO STORCI SPEAKS OF HIS INGENUOUS ACHIEVEMENT: THE COUSCOUSLINE 500

A LINE EQUIPPED WITH A SYSTEM THAT HAS THE CAPACITY TO PRODUCE COUSCOUS OF EXCEPTIONALLY HIGH QUALITY

Anzio Storci, President of Storci S.p.a., and its founder in 1991, provides, in cooperation with the company Fava S.p.a., an indispensable reference point for couscous lines. His attention and commitment to a product with such distinct characteristics have led to the development of systems that are highly technological, but without foregoing the value of tradition.

What characteristics should couscous have to be considered high quality?

When cooked it should increase by 2.5 times its volume and the granules should remain whole and firm. It should not have the taste of pasta inasmuch as the grains of semolina should stick together but not form a mass.

What are the most innovative features of the Couscousline, those that have made it so successful?

The mixing of the water and semolina with our Premix; the rotating self-cleaning sieve; steam pre-cooking with the product totally enveloped by steam and conveyed by a self-cleaning belt; drying of the product and checking of grain size thereby eliminating the need to re-mill over-large grains; robust construction in monoblocks so as to reduce transportation and assembling costs. Plus, the machine does not require frequent cleaning.

How compatible is Storci technology with tradition?

The compatibility resides in processing the raw materials with the gentleness of hand-made production.

How important is it for the product to maintain its nutritional properties and to what extent does Storci technology aid this?

It is of fundamental importance for the nutritional properties of the product to be kept intact and our technology guarantees total respect for the raw materials.



PRESS 160.1-460 TV CAPACITY 1000 KG/H

A ROARING SUCCESS FOR THE NEW LINE OF TOTAL VACUUM PRESSES

A 200% increase in installations over 12 months expresses much more eloquently than words the success that the presses of the new TV series are enjoying on the world market. Fruit of Storci's tireless quest to optimize product quality, the company's guiding principle in the design and manufacturing of its machines, combined with the additional need to limit dimensions and costs without detriment to performance, the TV presses have spectacularly exceeded all preset goals. Total vacuum technology presents considerable advantages in terms of the color of the pasta, a characteristic particularly appreciated by customers who use mixtures of semolina and flour. The TV series completes the Storci FAST and BELTMIX press range, giving our clientele the possibility to choose the technology most suited to their needs.

STORCI AND AFELTRA, A WINNING COMBINATION

STORCI, A WORLD LEADER IN THE PRODUCTION OF DRIED PASTA SYSTEMS UPHOLDS THE TRADITION

The Pastificio Afeltra exemplifies a tradition for quality that has its roots firmly planted in the long industrial history of Gragnano: it is one of the oldest pasta factories, and has been in its original location, in the area of the city centre known as "macaroni street", ever since 1848. Its surrounding context is undoubtedly of central importance: in 2005 a request for Protected Designation of Origin (PDO) was made for "Gragnano pasta" on the strength of the "secrets" of its specialty production and the very special micro-climatic conditions that have made the creation of a superior quality pasta possible. To provide an extra boost to a situation that was already extremely positive in its own right were the production systems manufactured by the company Storci: two semi-automatic lines for the production of long-cut, short-cut and specialty pasta. As the factory manager, Ms. Giovanna Inghilterra affirms: "Storci has enabled us to preserve our winning combination of tradition and innovation, to maintain the specialty characteristics of our product intact while catering for industrial requirements. It has supplied us with highly innovative pasta making systems that do not interfere with our specialty pasta processes; such a choice was by no means chance". She continues: "Storci's fame and reputation are well-consolidated today and we are delighted with the results achieved thanks to the technological solution tailored to the needs of our pasta factory". A production capacity of 50 q of pasta per day and 19 pasta types produced as standard – among which fusilli lunghi bucato (long tubular spirals), linguine, paccheri (sachets), conchiglioni (shells), eliche giganti (giant twirls), ziti corti (short hollow tubes) and penne lisce (smooth quills), all specialties of the "Gragnano" catalogue – represent the superior quality that this company has accustomed us to expect.



PREMIATO PASTIFICIO AFELTRA - GRAGNANO

STORCI FRESH PASTA SYSTEMS

INNOVATIVE TECHNOLOGIES AND SYSTEMS FOR EACH PHASE OF THE FRESH PASTA PRODUCTION PROCESS



PREMIX®



STF-540TV DOUGH SHEETERS AND RCA540-B RAVIOLI MAKER



HT-ST PASTEURIZER

Dosing and pre-mixing of raw materials DosaFlow®

The raw material dosing systems (semolina, flour, egg, water, spinach, tomato) have the following basic characteristics:

- operator interface with **touch-screen panel**, easy to use and manage;
- **recipe archive** with setting of the **raw materials in kg/h or litres/h**;
- **automatic and proportional adjustment**, depending on the recipe used, of each raw material when the total quantity of dough required is varied.

The pairing of **DosaFlow®** and **Premix®** guarantees exceptional results in terms of both quality and hydration uniformity of the dough.

Advantages:

- **uniform hydration of the semolina/flour** - makes it possible to uniformly moisten the surface of each single grain of flour;
- **accessibility and ease-of-cleaning** - cleaning and sanitization of the machine in just 3 minutes, without interrupting production;
- **no product heating and low energy consumption** - 0.9-1.5 Watt per kg of dough, depending on unit model;
- **high production yield, compact and easy to use.**

Beltmix® - Bakmix® Mixing Systems

The **Beltmix®** and **Bakmix®** mixing systems can create all the types of dough required to produce a varied range of pasta shapes. This combines the Premix® with an innovative,

rapid kneading system. It is recommended for mixed soft wheat and/or semolina-based doughs that require more kneading.

Stf–Total Vacuum® Dough Sheeter Units

- **STF-TV dough sheeter units®** combine technological innovation and top-quality construction. The **patented system for the production of dough sheets in a completely air-free environment** combines the positive features of laminated dough sheets and extruded pasta. The units are equipped with a system that allows them to be fully opened and the sides completely removed from the kneading rollers in 1-2 minutes for **easy cleaning and sanitization**.

Advantages:

- **more intense yellow color** similar to that obtained from a press;
- **no heating** of the dough sheet;
- **better elasticity and enhanced quality of cooked pasta.**

Storci shaping units by Tecna for filled pasta

- Single-sheet shaping units for products such as cappelletti and double-sheet units for ravioli of various shapes. Sheet width from 160 to 540 mm. Available also in washdown version.

Specifications for double-sheet ravioli makers:

- rod system for filling distribution with **double injector**, to separate the dosing function and introduction of the filling into the ravioli;
- **automatic feed of sheets** to the mold using conveyor belts;
- double overlapped lamination unit with independent speed and sheet thickness control.

Specifications for single-sheet ravioli makers:

- dosing **rods** with **non-stick** points, equipped with a **compressed air system for soft fillings**;
- unit for creating pinched shapes “on the flat”;
- **special pinched shapes.**

HT-ST pasteurizers

The construction specifications and the use of a special mesh product conveyor belt enable rapid heating of the product **without dripping**. Considerable energy savings compared to pasteurizers with metal mesh conveyor.

Product conveyor made of special non-stick mesh.

Advantages:

- **enhanced efficacy** of the pasteurization treatment and **considerable energy savings**;
- **huge reduction in marks** on the product compared with traditional metal conveyors;
- **ease of sanitization** and **fewer product build-up points**;
- **non-stick properties between the belt and product** markedly superior to traditional conveyors, making it possible to also utilize very moist products and under extreme pasteurization conditions.

HT-ST dryers

After pasteurization, the product is air-dried at a high temperature.

Advantages:

- rapid **reduction of product moisture level**;
- preservation of **pasteurization results**;
- **deactivation of the enzymes** responsible for the semolina losing its bright yellow color.

Coolers

The rapid reduction of the temperature is important for optimization of product shelf-life.

Advantages:

- **low maintenance** - conveyor belts do not require lubrication;
- **flexibility** - product distribution can be differentiated on each level thanks to the independent and variable movement of each belt thanks to an inverter;
- **system to prevent condensation and dripping on the product.**

Lasagna and long-cut pasta stackers

Thanks to the combination of an efficient system of conveying and cutting of the dough sheet, together with a sophisticated system that regulates the various phases, the sheet may be cut cross-wise and length-wise to create a number of **stacked lasagna layers** (including with **plastic film between the layers**) and various types of long-cut pasta (tagliatelle, pappardelle, chitarra) all in the same piece of equipment.

Our **R&D** laboratory is always available to carry out tests, also using the customer's raw materials, in order to demonstrate the efficacy of the **Storci Fresh Pasta Systems** technology.

AUTOMATIC LASAGNA FOR FOODVALLEY

STORCI GOES OVER THE TRADITIONAL MACHINERY TO A STATE-OF-THE-ART SYSTEM



TRADITIONAL LINE FOR LASAGNE

Storci S.p.A. is improving its engineering, technology and product range even further by offering its services in partnership with customers wishing to either start up the production of pasta-based ready meals, or extend an already existing line. Lasagna is one of the most popular ready meals not only in Italy but also abroad. The traditional linear systems for the production of lasagna have always been severely limited by the high labor requirement necessary for the handling of the pasta sheets to be placed in the trays. Limited production and hygiene problems, generated by the indispensable presence of personnel along the line, are restrictions that are overcome by an automatic handling system for the pasta sheets which, using robots with vision systems and special gripping heads, can reach hourly production capacities of up to 4800 5-layer trays weighing 500 grams each. A fully automated line for the production of pre-cooked lasagna is scheduled to be installed at the Foodvalley pasta factory within the end of the year. This application has been patented by Storci and comprises one or more work stations, each of which has a production capacity of 600 trays per hour. The automation includes the various layers of sauce dispensing, and packaging in trays. This is evidence of Storci's determination to achieve a leading role in this market too, offering innovative technological solutions that are state-of-the-art in terms of operational performance and cost-effectiveness.



ROBOTIZED SYSTEM FOR LASAGNE

BELTMIX®, ADDED VALUE GUARANTEED

AN EXTRAORDINARY SYSTEM THAT IS STREETS AHEAD, ALL THANKS TO STORCI



Among the various technological innovations for dough production, **Beltmix®** is undoubtedly one of the most interesting. Based on the exceptional characteristics of the Premix® mixing system, this technology replaces the traditional blade-type mixing tank.

The raw materials mixed by the **Premix®** are conveyed by a slow-moving belt towards the processing machines (dough sheeters or presses) for the production of smooth pasta (lasagna or tagliatelle) or filled pasta (double-sheet or single-sheet pinched ravioli). The **Beltmix®** system offers the following advantages:

Cleaning and hygiene

The Beltmix®, system enables a 10-fold reduction in cleaning times compared with traditional tanks of equal size and hourly yield.

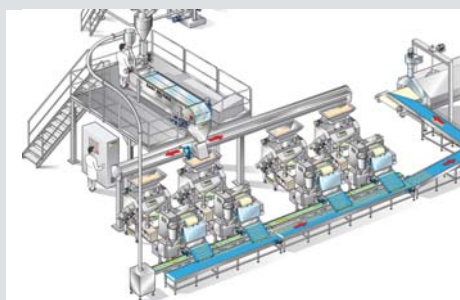
Quality and color

Since the dough is not subjected to any kind of mechanical action, the **Beltmix®** guarantees that the original properties of the raw materials are kept intact and optimizes the color of the finished product which, in absence of oxidation, remains brighter and more intense.

Easy product change-over

It no longer takes hours to change over from normal dough to colored dough! Thanks to **Beltmix®**, the pasta type can be varied in no time at all (approx. 5 minutes) without the risk of mixing the two different kinds of pasta.

The **Beltmix®** system is used in various pasta factories - including that of Italfood S.r.l. in Ala (Trento) - for the automatic feeding of the filled pasta production line, which comprises several pinched pasta shaping units. According to one of the **Italfood** managers, "the system has the cutting edge on traditional blade-type mixing systems. The production lines for pinched shapes must be able to recover the scraps produced by the cutters of the shaping machine." He continues, "Remixing these scraps with the dough produced by the Beltmix®, system guarantees the production of a more elastic dough sheet".



DOUGH PREPARATION UNIT



BELTMIX 600 KG/H

A CHAT WITH.... SILVIO VALESÌ

STORCI S.P.A. ALWAYS ABREAST WITH THE TIMES READY MEALS: AN EVOLVING MARKET

"Ready meals offer an opportunity not to be missed". The modern day lifestyle tends to continually reduce the amount of time dedicated to lunch as a moment of socialization to the advantage of other interests. Ready meals are becoming increasingly more widespread thanks to the advantages they provide, such as time saving and convenience. Undoubtedly the general economic trend over the last year has curbed the growth in consumption but this is a tendency that may be slowed down – but certainly not stopped.



SILVIO VALESÌ SALES DIRECTOR

"Storci plans to become a prime mover in this market. The promotion of our ready-to-serve lines is stepping up, not only in Italy – which is still our reference market – but also in other countries such as the United States, France and Great Britain where the consumption of ready meals is part of the normal lifestyle."

Lasagna is the most popular ready meal, not only in Italy but throughout the entire world. For this product, Storci has reconfirmed its flair for innovation by designing a line for ready-to-serve lasagna, totally automated also as regards sauce dispensing and tray packaging. "This confirms the capacity of the company to achieve a leading role, offering innovative solutions that are state-of-the-art".



LINE FOR THE PROD./COOKING OF S/L PASTA 2000 TRAY/HR

INNOVATIVE “PI-LAR” DOUGH SHEET PRODUCTION SYSTEM



In 2009, Storci S.p.A. signed an agreement with Italiana Teknologie for the marketing, sale and production of a dough preparation unit called the PI-LAR, an acronym for Preimpasto, Impasto-Laminazione Automatica Regolabile (Premixing, Mixing-Automatically Adjustable Lamination), introducing a new production process with the capacity to eliminate the kneading unit. The core of the system comprises two counter-rotating rollers that create a new dough sheet and that offer the fundamental advantage of producing the sheet in a single process directly from a normal granular dough, with a series of constructive, functional and operational advantages since this hugely simplifies the pasta factory's in-line processing while allowing considerable variations in effective production to be obtained from the same machine, with minimum variations in the rotation speed of the

two laminating rollers. This exclusive PI-LAR technology guarantees: a reduction in production components of approx. 70%, electricity savings, 50% reduction in cleaning times, minimum maintenance requirements. Additionally, wear and tear are greatly reduced, there are no lubrication points and technical downtime is practically eliminated, allowing substantial savings in management costs. PI-LAR guarantees major advantages: more uniform cooking and increased elasticity of the pasta, high capacity to withhold starch during cooking, thereby avoiding glueyness. The intense colour of the dough sheet is maintained and its texture remains soft and resilient. So with the PI-LAR system, Storci adds a new and precious element to complete its production range and broaden its product lines. The machine will be marketed and sold under the Storci brand name by Italiana Teknologie.



IN PURSUIT OF AMERICA STORCI LAUNCHES ITS READY MEALS IN NORTH AMERICA

After studying the market and its machinery for a good number of years, Storci decided, in 2008, to enter the North-American sector of machines for ready meals. With the arrival of Joe Gervasi (Area Manager North America) and the setting up of a local technical support center at BDM in Kansas City, managed by Donald Hoskins (Service Manager), Storci, a world leader in the construction of extruders for dried and fresh pasta, acquired the know-how specific to the American market. This enabled us to present our new sanitary pasta extruders, a series in the vanguard of technology and quality, with construction characteristics in compliance with USDA standards and with complete washdown capabilities. The first sanitary extruders were delivered to an important multinational company in 2009 and are the largest ever made in the United States for this sector. As Gervasi observes, *“Combining Donald's know-how and mine - developed in over twenty years with the largest American manufacture of lines for ready meals - with that of Storci, has enabled us, virtually from the outset, to achieve a position at the technical and technological top of the market. We had been waiting for modernization of the systems for years. Storci got there first.”*



JOE GERVASI AREA MANAGER NORTH AMERICA



A UNIQUE SYNTHESIS OF EXPERIENCE,
RELIABILITY AND RESEARCH



Laboratorio Qualificato
per la Ricerca Industriale
Art. 9, 1° del decreto legislativo
n. 581 del 9 agosto 2000
Ministero dell'Industria
dell'Università della Ricerca



Ministero della Sanità
Ministero delle Politiche Agricole, Alimentari e Rurali
CERTIFICATO
UNI EN ISO 9001:2008



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