



---

**INNOVATION  
AND TECHNOLOGY**  
FOR MOZZARELLA AND  
SPREADABLE CHEESE



FROM  
TRADITION TO  
**TECHNOLOGICAL  
INNOVATION**



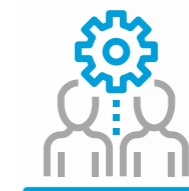
MilkyLAB has been a leader in designing and producing machines and automatic systems to produce mozzarella, pizza cheese and cheeses since 1980. Thanks to the experience and know-how acquired over the years, MilkyLAB guarantees customers the best assistance and maximum professionalism in the choice of the right technologies for the different manufacturing plants.



MilkyLAB is a company that grows in the future and that wants to feed the world with Italian tradition.



MORE THAN  
**40 YEARS**  
OF EXPERIENCE



**MADE IN ITALY**  
PRODUCTION



MORE THAN  
**300** ACTIVE  
CUSTOMERS



WORLDWIDE  
EXCELLENCE  
MADE IN ITALY



Through our technologies we transmit the historical knowledge of Italian cheese-makers.



MilkyLAB's objective has always been to export the Italian mozzarella tradition worldwide. We are currently present in over 60 countries and thanks to our technologies we transmit historical knowledge of Italian cheese-makers. MilkyLAB directly installs

the systems at the customers, providing training and assistance in order to obtain the best production performance. Today our international network has more than 40 local partners located in the main areas of the world.



IN MORE THAN  
**60 COUNTRIES**  
WORLD-WIDE



MORE THAN **40**  
LOCAL PARTNERS



INSTALLATION  
TRAINING AND  
**ASSISTANCE**

# INNOVATION, RESEARCH AND TRAINING



The MilkyLAB philosophy is to always explore and insist on finding the right high quality standard solution. Thus in doing so today our Research and Development department has designed exclusive and particularly innovative solutions to satisfy the different requirements of our customers.

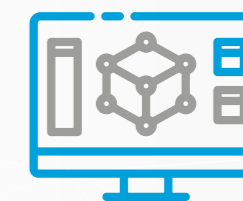
Research and innovation in MilkyLAB, are also expressed through the availability of a Trial & Training Center®, a high-tech research and training centre, useful to experience firsthand, experiment and learn how to produce the most important dairy products.



**QUALITY  
OF MATERIAL  
GUARANTEED**



**TRIAL &  
TRAINING  
CENTER®**



**DESIGN  
PERSONALISED  
PLANTS**

# PRODUCTION LINES



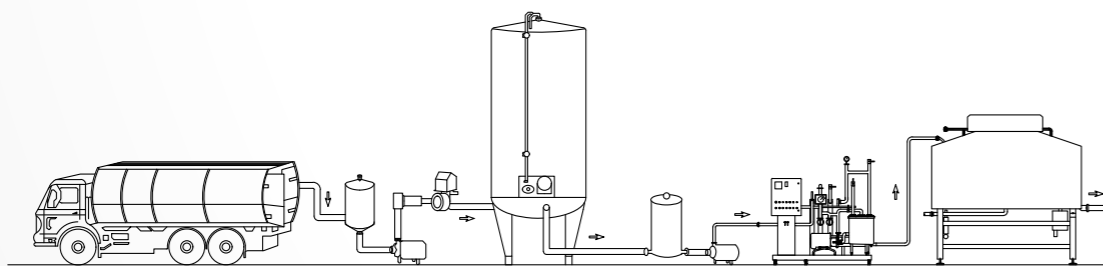
Our strength is our ability to adapt quickly to market demands.



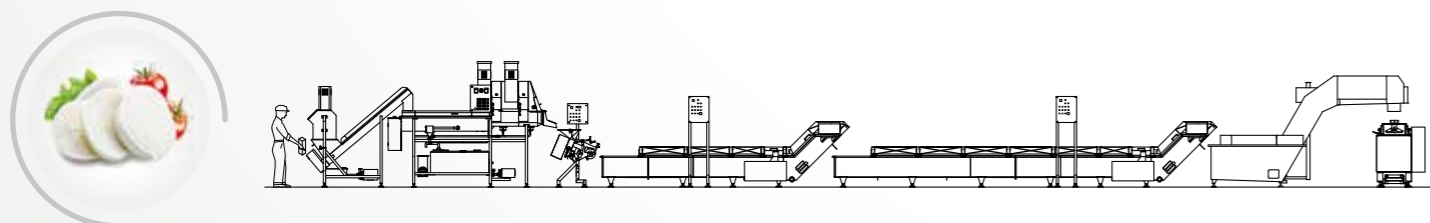
Today MilkyLAB makes all solutions available for the different production choices, which are characterized by the availability of raw materials or specific market requirements. Currently through the MilkyLAB lines you

can produce: spherical mozzarella, pizza cheese, analogue mozzarella, string cheese, spreadable cheese, ricotta, semi and hard cheeses.

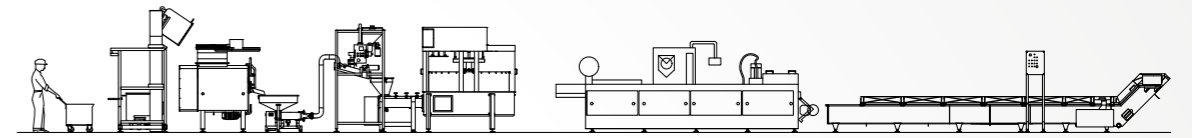
## MILK COAGULATION



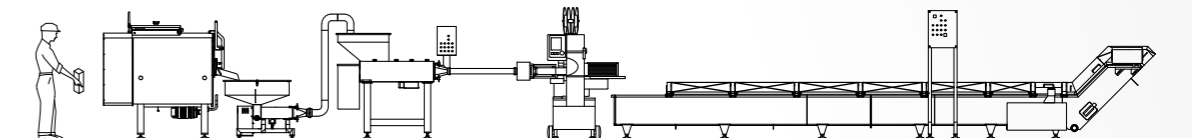
## SPHERICAL MOZZARELLA PRODUCTION LINE



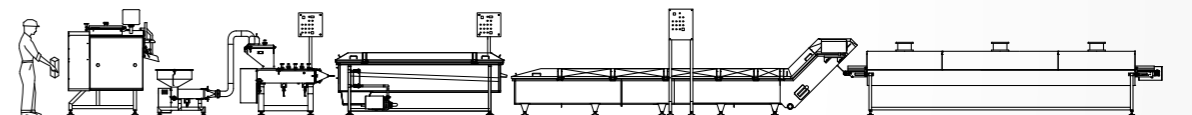
## PIZZA CHEESE PRODUCTION LINE



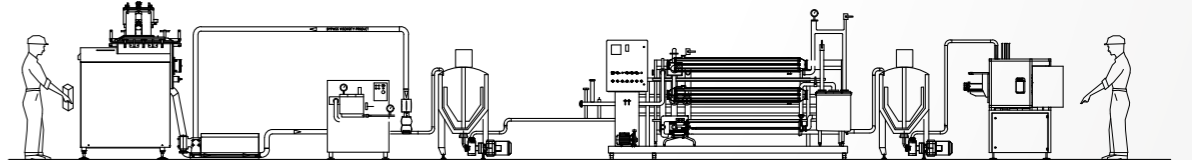
## ANALOGUE MOZZARELLA PRODUCTION LINE



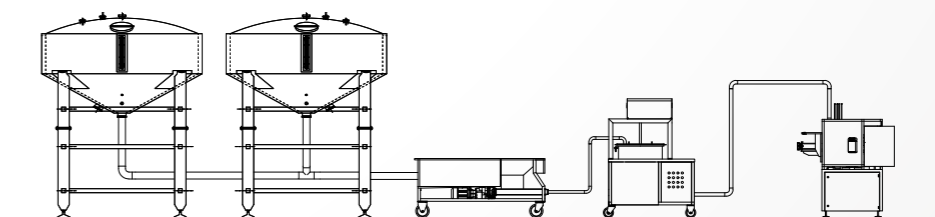
## STRING CHEESE PRODUCTION LINE



## PROCESSED CHEESE PRODUCTION LINE



## RICOTTA PRODUCTION LINE





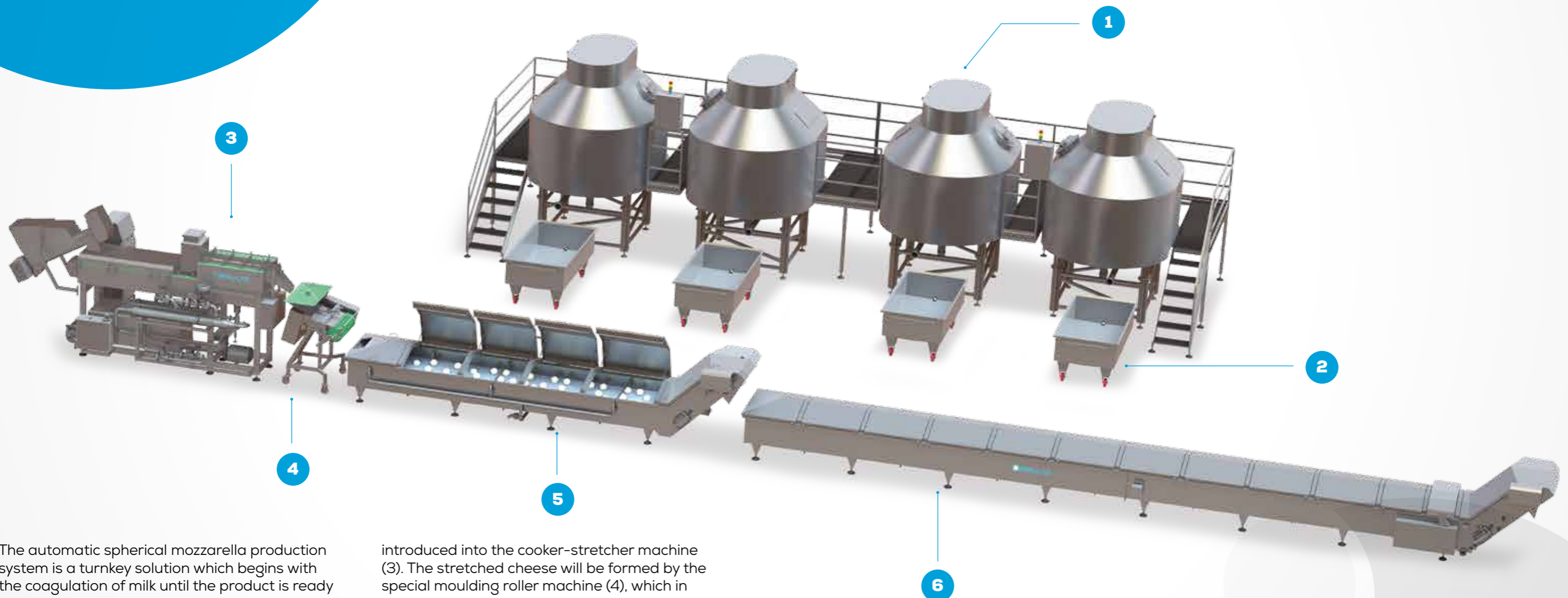
# SPHERICAL MOZZARELLA PRODUCTION LINE



We design personalised plants.  
The result is: mozzarella and traditional cheeses, made worldwide.



- 1 Cheese vat machines double "O"
- 2 Drainage truck
- 3 LAB 2500 hot water cooker-stretcher
- 4 LAB 24-40 moulding machine
- 5 Pre-cooling vat
- 6 Cooling vat



The automatic spherical mozzarella production system is a turnkey solution which begins with the coagulation of milk until the product is ready for packaging. The system shown includes 4 double "O" cheese vat machines (1), essential if one chooses to start with milk as a raw material. The functions, in this first phase of the production process, are: milk coagulation and curd maturation. The curd is then discharged into the appropriate drainage trucks (2) and after reaching the right pH of maturation it is

introduced into the cooker-stretcher machine (3). The stretched cheese will be formed by the special moulding roller machine (4), which in cascade introduces the mozzarella into the pre-cooling (5) and cooling (6) vats. The system is completely made in AISI 304/316 stainless steel and is completely arranged for the CIP automatic washing system. The size and features can be personalised based on customer requirements.

# PIZZA CHEESE PRODUCTION LINE



We design personalised plants.  
The result is: mozzarella and traditional cheeses, made worldwide.



- 1 LAB 18 Steam cooker-stretcher
- 2 LAB 24-40C Feeding machine
- 3 LAB 29 Carousel moulding machine
- 4 RF Cooling vat



The automatic pizza cheese production plant is an innovative solution that combines stretching with steam technology and automatic moulding in a complete production process. It is particularly suitable for medium-large productions (up to 3.000 kg/hour). The process begins with the steam cooker (1), through the exclusive steam technology with direct introduction or through 4 bar double jacket. Subsequently, the product, through the augers feeding machine (2), is introduced into the automatic carousel moulding machine

(3), which makes the production process continuous. In the final process phase, feeding occurs via an automatic variable speed cooling vat (4). A considerable saving in time, labour and energy consumption is achieved with the automatic pizza cheese production plant. The system is completely made in AISI 304/316 stainless steel and it is totally arranged for the CIP automatic washing system. The size and features can be personalised based on customer requirements.



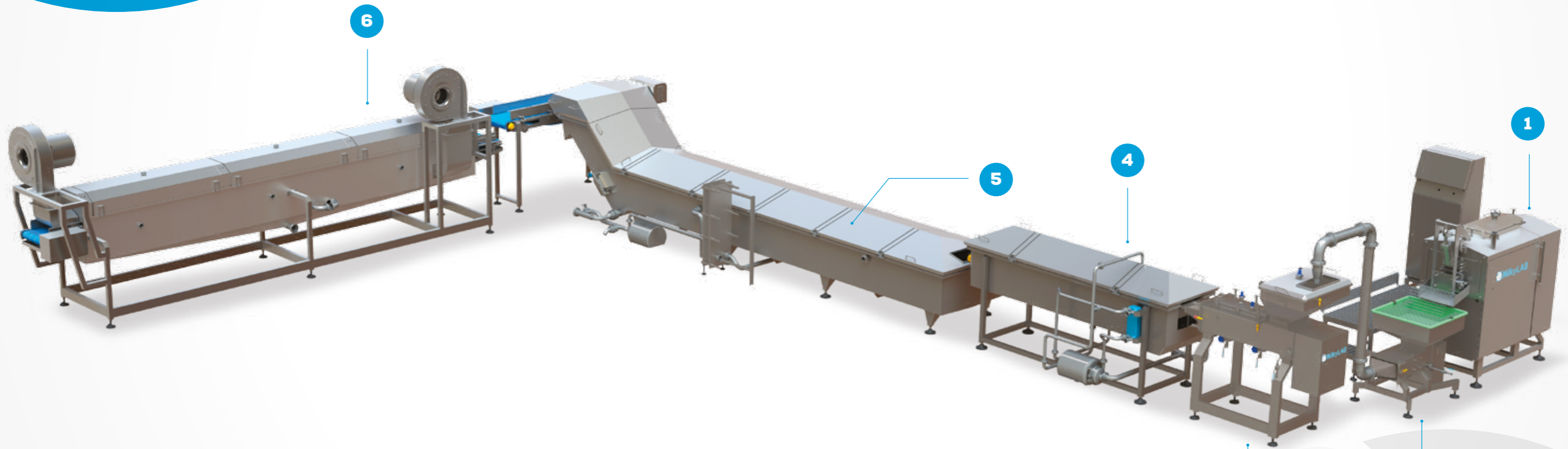
# STRING CHEESE PRODUCTION LINE



We design personalised plants.  
The result is: mozzarella and traditional cheeses, made worldwide.



- 1 LAB 18 Steam cooker-stretcher
- 2 LAB 24-25C Feeding machine
- 3 LAB 25 - Extruder
- 4 Pre-Cooling and Cutting system
- 5 LS brine vat
- 6 Drying tunnel



Following increases in string cheese requests, MilkyLAB offers the innovative automatic production system.  
The string cheese automatic production system composed of: Steam cooker-stretcher (1) with direct introduction or through 4 bar double jacket and with attached feeding machine (2) towards the automatic moulding machine equipped with an exclusive extrusion system (3). The final product is introduced into the automatic pre-cooling and cutting system (4).

The final phases involve the passage in brine vats (5) and then in the drying tunnel (6). Our customers, by using this system can produce string cheese choosing the desired diameter and variable lengths. The system is completely made in AISI 304/316 stainless steel and it is totally arranged for the CIP automatic washing system. The size and features can be customized based on customer requirements.



# CHEESE VAT

The cheese vat are essential if one chooses to start with milk as a raw material. The primary functions are milk coagulation and curd preparation; these phases of the production process are the basis of a traditional cheese.

The MilkyLAB cheese vats guarantee efficient treatment of the curd, performing a gentle cutting and agitating action.

The gentle and constant product flow reduces the breakage of the curd granules avoiding material deposits at the bottom.

Completely made in AISI 304 stainless steel, with heating/cooling system, it is arranged for the CIP automatic washing system.

The MilkyLAB range is divided into two main versions: cheese vat double "O"; circular cheese vat and with different models it is possible to achieve a production capacity from 1.000 lt. to 18.000 lt. (Custom configurations through optional available, see product sheet.)



# CURD MATURATION

Thanks to the exclusive MilkyLAB technology, the curd maturation becomes an automated and particularly efficient process, achieving considerable labour savings, total elimination of curd waste and greater optimization of useful spaces.

This is possible through an automatic moulding machine, which after having moulded and dosed the curd in 10-20 kg blocks, unloads them directly in special boxes. After, these boxes are stacked in the maturation chamber at a controlled temperature to obtain the optimal pH. At the end of the process the blocks are ejected for the next stretching phase and the boxes, washed in automatic way, are again available for the new cycle. Production capacities can be modulated according to customer requirements. (Custom configurations through optional available, see product sheet.)



# STEAM COOKER-STRETCHER

Thanks to the exclusive feature of the steam process, these cooker-stretcher are suitable for the melting and the stretching of mozzarella, buffalo mozzarella, pizza cheese, analogue mozzarella, processed and spreadable cheeses. This process allows the use of different raw materials: curds, (fresh or frozen), powders (rennet casein, starch), vegetable and animal fat. Lastly, spices and aromas can be used as desired. The advantages are: heating time reduction with related energy savings; higher final product yield and the elimination of fatty water residues.

Completely made in AISI 316 stainless steel, it is equipped with two bidirectional augers and an exclusive double jacket vat that allows the introduction of steam directly, or injected into the double jacket. In addition the machine is equipped with an automatic CIP washing system. With the various models available, the production capacity varies from a minimum of 80 kg/h to a maximum of 3.000 kg/h. (Custom configurations through optional available, see product sheet.)



LAB 18 - 50



LAB 18 - 200



LAB 18 - 100



LAB 18 - 600 / 24-28 C





# HOT WATER COOKER-STRETCHER

The water stretching machines are suitable for the production of mozzarella with variable humidity, using fresh curds from cow or buffalo.

Completely made in AISI 304 stainless steel, the stretching machines are equipped with augers, kneading arms and water introduction temperature control system, to guarantee optimal product elasticity. By adding the Curd cutter, optimal curd size can be obtained before the stretching phase.

With the various models available, the production capacity varies from a minimum of 50 kg/h to a maximum of 3.000 kg/h. (Custom configurations through optional available, see product sheet.)



LAB 12



LAB 11 bis



LAB 11 mini



LAB 2500



# MOULDING MACHINES

MilkyLAB moulding machines are suitable for moulding mozzarella cheeses as well as being particularly versatile thanks to their many accessories. With the high technology used and the different models available, production can reach up to 3.000 kg/h. All our models are equipped with an electrically heated double jacket that allows ideal temperatures to be maintained for optimal moulding.

For the production of spherical mozzarella or special shapes, is recommended the use of moulding roller machine with predetermined weights.

In case of cylindrical or rectangular blocks, the solution indicated is with automatic or semi-automatic carousel moulding machine. The CIP automatic washing version is available on all models.

(Custom configurations through optional available, see product sheet.)



LAB 24 - 40



LAB 26



LAB 21 P



LAB 24



LAB 29 - 2000





# COMPACT MACHINES

The Compact line combines stretching-moulding machines all-in-one, using steam or hot water technology.

The two models are particularly suitable for small - medium productions of analogue mozzarella, string cheese, pizza cheese, and processed cheeses.

The machine is equipped with an incorporated electrical steam generator (Italian Patent) that can produce the necessary quantity of steam during the stretching phase, allowing considerable energy savings and an increased final product yield.

The Compact models are completely made in AISI 304/316 stainless steel.

(Custom configurations through optional available, see product sheet.)



COMPACT

# SPREADABLE CHEESE PRODUCTION LINE

The processed and spreadable cheeses production line is characterized by steam cookers. The product stretching is performed either by steam injection, direct into the product or in the double jacket. Through this technology different raw materials can be used: cheeses, powders (rennet casein and starch) as well as vegetable and animal fat. Lastly, spices and aromas can be used as desired.

The automatic product loading and weighing system facilitates production optimizing time and consumption. In addition, the different models can be customized with an automatic CIP washing system and pump transport system to packaging.

Production capacities range from a minimum of 100 kg/h to a maximum of 3.000 kg/h.

(Custom configurations through optional available, see product sheet.)



PRO 40



COOKER-STRETCHER 250



LAB 18 - 100





# COOLING SOLUTIONS

Through MilkyLAB solutions the cooling phase is characterized by two distinct processes: Immersion cooling in water/brine or through the exclusive and innovative "SYNCRO" air cooling process.

Immersion cooling is particularly suitable for mozzarella cheeses, especially for spherical shape. The line, with automatic product feed, includes an extraction belt and a CIP washing system that guarantees high sanitisation standards.

The "SYNCRO" choice is particularly suitable for those who want to produce mozzarella blocks, with high hourly production, totally eliminating the consumption of water or brine, possible contamination risks and product shape imperfections. All this is made possible by the innovative refrigerated chamber with air cooling, where special boxes are stacked containing cheese, eventually packed.

(Custom configurations through optional available, see product sheet.)



SYNCRO



RF



# RICOTTA CHEESE

The automatic MilkyLAB solution, for ricotta production, permits the processing of large quantities of whey or milk with considerable savings in labour and energy. The process begins inside cylindrical flocculators with a conical bottom, which unload the ricotta mixed with whey in special vats or on drainage conveyors. This is where the ricotta is drained from the whey and then transported to the smoothing machine for homogenizing and ready for packaging. The smoothing machine also allows the ricotta to be flavoured with spices, aromas, as well as guaranteeing greater preservation. (Custom configurations through optional available, see product sheet.)







Via Raimondo della Costa 670/A - 41122 Modena (Italy)  
Tel. +39 059 26.07.23 - Fax +39 059 25.38.09  
info@milkylab.it - [www.milkylab.it](http://www.milkylab.it)



Exclusive Agent  
Mobile: +66 952823935  
Mail: [ozzago@ozzago.com](mailto:ozzago@ozzago.com)  
[www.ozzago.com](http://www.ozzago.com)