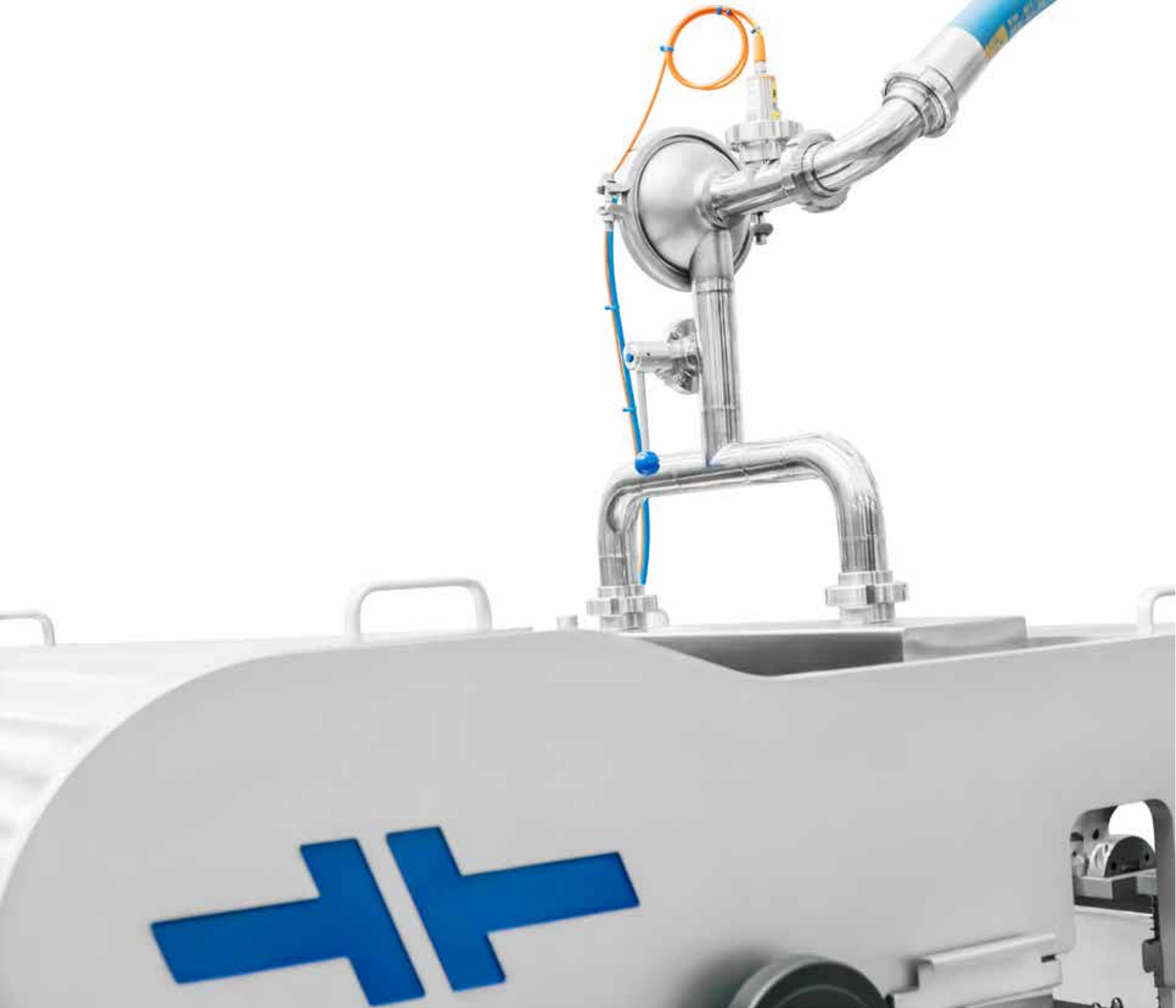


ITALIAN SWEET TECHNOLOGY





# TECHNOLOGY IS OUR PASSION

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Our team combines competences and specialized technology at your service, from the conceptual creation of your project to the simulation of the final line, up to the executive development.

Our clients are our best partners, we offer them a lot more than innovative systems.

Our client's needs are the basis of each project, equipment or service.  
We always start from our client's requests to give them the best solution.

***“The hyper specialization in process lines allows us  
to offer our customers the most advanced production technology”***



# TURNKEY SOLUTIONS

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We engineer and manufacture turnkey industrial Cake Lines.

Our equipment is designed and built following our client's needs and requests for a tailor made solution.  
With a TT Italy Cake Line you will produce tastier, softer and lighter products.

All new technologies and developments of our R&D+I department are transferred directly to our clients, offering a state of the art production line. Better and more efficient equipment will result in a tastier and modern final product.

Our team will offer complete support throughout the entire process, from design to start up.

***Our food technologist will help you improve your products or develop new ones.***





# AUTOMATIC PROCESS CONTROL IN A SIMPLE PACKAGE!

Unprecedented results can only be achieved with maximum control of all steps in the process:

**MIXING  
AERATION  
EMULSIFICATION  
TRANSFER  
DEPOSIT  
INJECTION  
SANITIZATION**

We efficiently control:

- Pressure,
- Temperature,
- Density,
- Shear,
- C.I.P.

Effortlessly managing the forces acting during the creation of your product.





## VOLUMETRIC PISTON DEPOSITOR

TT Italy's Volumetric Piston Depositor performs a highly accurate dosing of the batter, either in baking trays, paper cups or directly on the conveyor belt.

Our tailor-made solutions cater to all productivity volumes and formats.

The machine guarantees a constant control of the batter temperature and volume, even in delicate aerated products. Machine comes C.I.P. ready.







## VOLUMETRIC PISTON INJECTOR

TT Italy's Volumetric Piston Injector is designed to accurately inject liquid, viscous or aerated fillings into your products while in the trays.

Our tailor-made solutions cater to all productivity volumes and formats.

The machine guarantees a constant control of the filling temperature and volume, even in delicate aerated products.

The machine comes C.I.P. ready





## SLIDING VOLUMETRIC PISTON INJECTOR

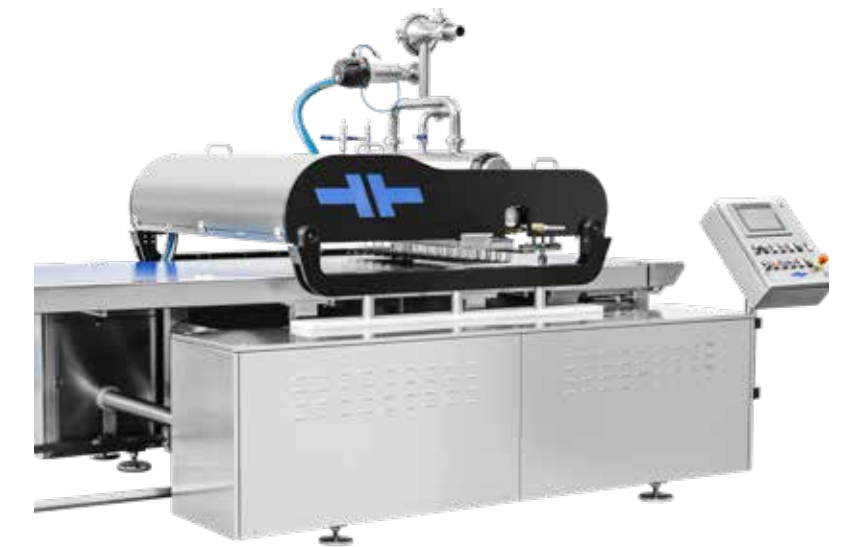
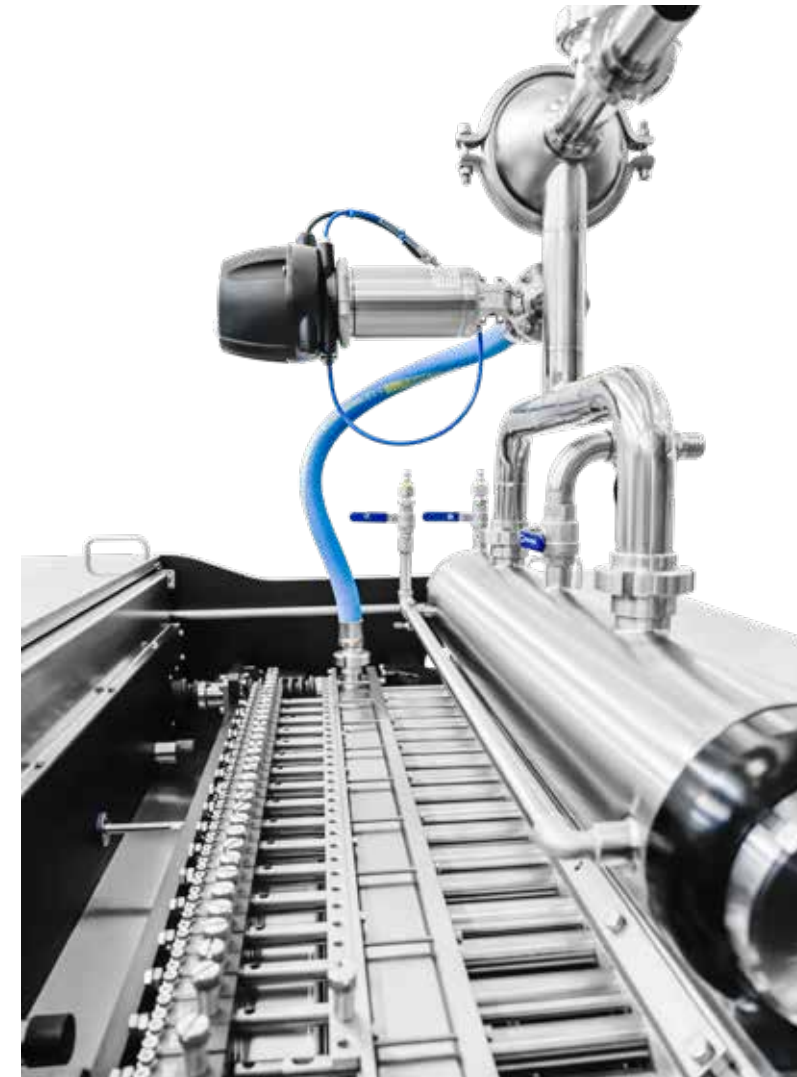
TT Italy's Sliding Volumetric Piston Injector is designed to accurately inject liquid, viscous or aerated fillings into your products while moving on the conveyor belt.

The machine is engineered to respond to every client's requirement, both in product tracking and dosing control, with vertical and horizontal motion.

Our tailor-made solutions cater to all productivity volumes and formats.

The machine guarantees a constant control of the filling temperature and volume, even in delicate aerated products. Equipped with aligning and phasing systems to guarantee an accurate filling.

The machine comes C.I.P. ready.





# TOPPING MACHINE



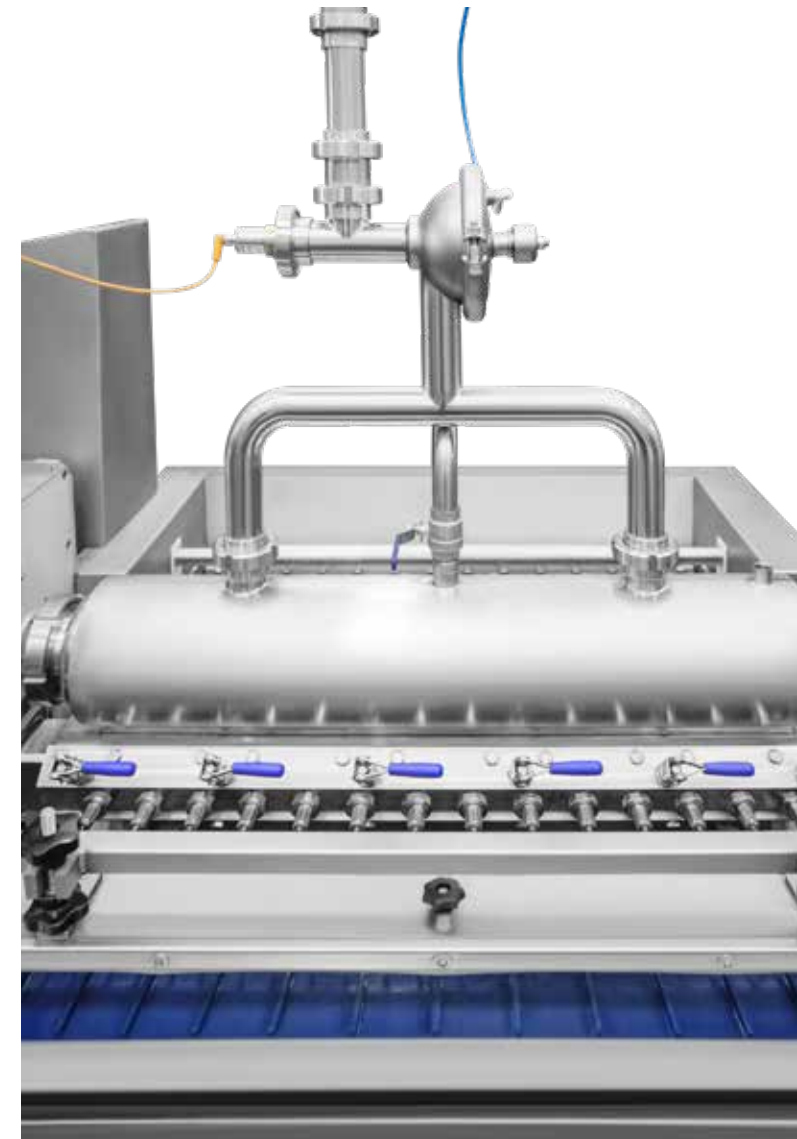
TT Italy's Topping Machine is designed to accurately dose toppings onto your product, while it is moving on the conveyor belt. Our tailor-made solutions cater to all productivity volumes and formats. It is engineered for ideal dosing of jams, chocolate and liquid products. Equipped with aligning and phasing systems to guarantee an accurate filling. Machine comes C.I.P. ready.







## HORIZONTAL VOLUMETRIC PISTON INJECTOR



TT Italy's Horizontal Volumetric Piston Injector is designed to accurately inject liquid, viscous or aerated fillings into your product from the side.

The machine is engineered to respond to every client's requirement, both in product tracking and dosing control, with horizontal motion. Our tailor-made solutions cater to all productivity volumes and formats.

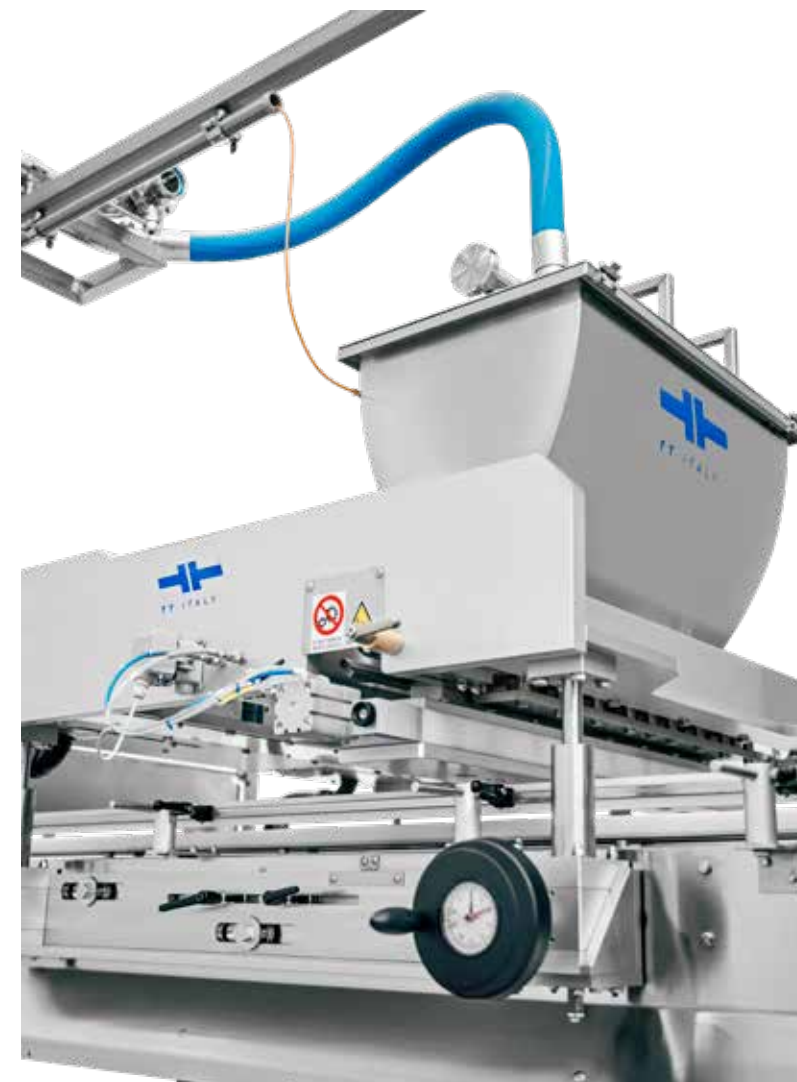
The machine guarantees a constant control of the filling temperature and volume, even in delicate aerated products. The machine comes C.I.P. ready.





## COMPACT LINE

Small footprint, high productivity.  
This semi-automatic solution features all TT Italy's most advanced technologies in order to have an unparalleled control over the production process.  
Compact Line is ideal for start-ups and can be easily converted into a higher productivity industrial solution.

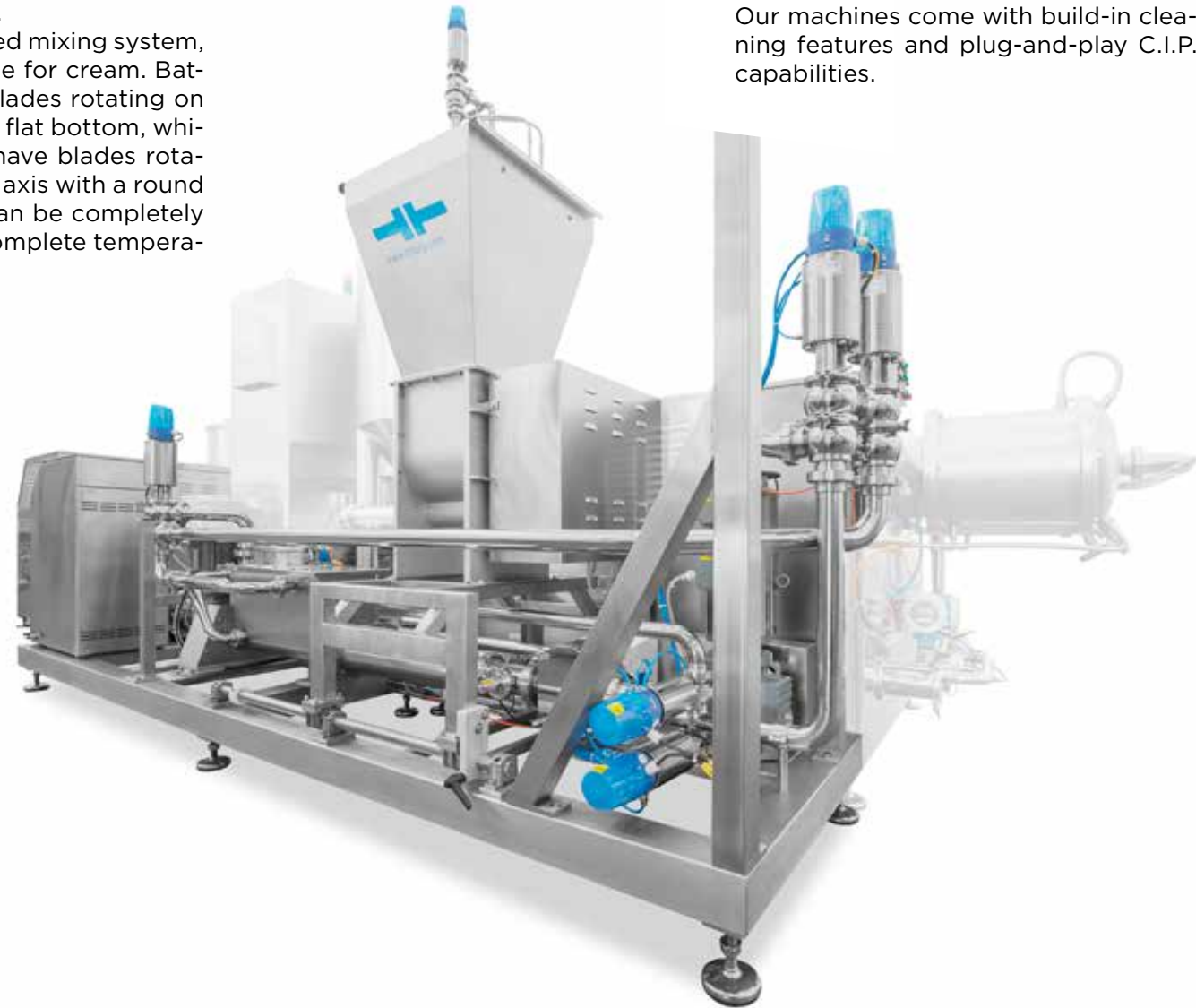




# BATTER & CREAM PREPARATIONS

The pre-mixing equipment can be made in various sizes according to the productivity required.

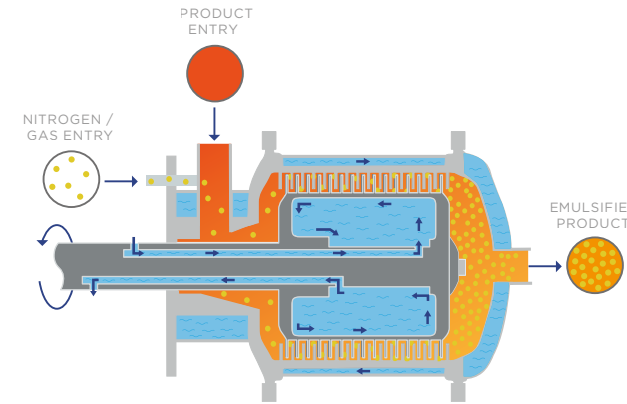
We offer two dedicated mixing system, one for batter and one for cream. Batter Pre-Mixers have blades rotating on the vertical axis and a flat bottom, while cream Pre-Mixers have blades rotating on the horizontal axis with a round bottom. Pre-Mixers can be completely double-jacket for a complete temperature control.




## DRY MIXER

The Dry Mixer answers the need of incorporating chocolate chips and other dry solids into a state-of-the-art aerated batter.

Our machines come with build-in cleaning features and plug-and-play C.I.P. capabilities.



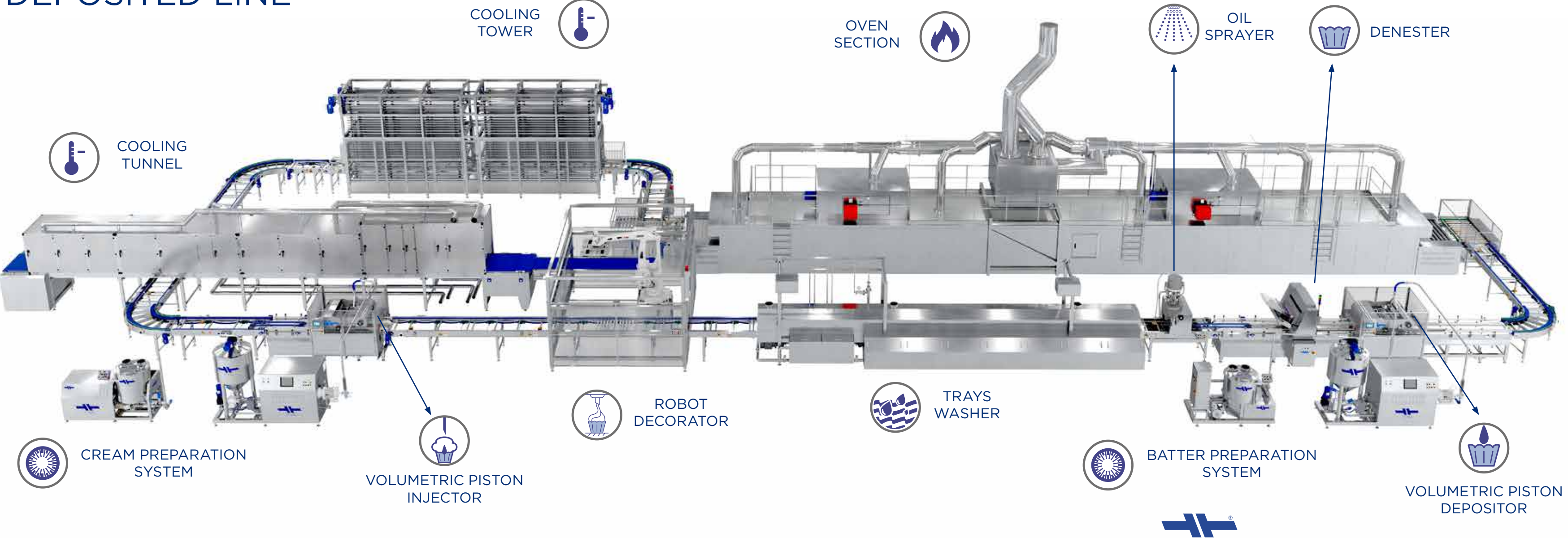
## COMPLETE CONTROL

The  Digital Control System allows you to control all factor of production, with digital precision, assuring the high level of quality and fast return of investment that is your goal. Never before has it been so easy to get consistent results independent of environmental factors or inherent process complexities.

In addition, the system allows for great flexibility in developing future products and adapting to your customer requests.



# CUPCAKE AND DEPOSITED LINE





# PRESSURIZED OIL SPRAYER



Machine designed to accurately grease the product cavities in the baking trays, parametrizable with PLC control. The specific engineering of our machine allows an effective extraction of the cake during the depanning operation, reducing downtime and waste. Greasing agent pressurized loop, with recirculation to the temperature controlled tank. Centrifugal fumes extraction system.



# AUTOMATIC DENESTER



The automatic denester is designed to dispense paper cups of any kind and size. An air-blowing and suction system separates the cups and places them in the desired position, either directly into the trays' cavities or on the conveyor.



The paper cups storage cartridge and the aspiration collector are easily interchangeable for a quick product changeover. The machine is equipped with sensors for trays verification.

# VOLUMETRIC PISTON DEPOSITOR

TT Italy's Volumetric Piston Depositor is designed according to customer's requirements and it is engineered to manage several product formats with an easy tool-less changeover. Combining the Volumetric Piston Depositor with TT Italy's Turbo Mixer ensures a major control over production parameters, resulting in unmatched final product consistency. The Turbo Mixer continuously feeds the Depositor, maintaining the aeration and the density unaltered. TT Italy closed system guarantees no contamination from the surrounding environment in a completely automatic way. Reduction of downtime is further enhanced by our C.I.P. Kit, providing a fast and automatic washing process of the Depositor.





# TRAYS HANDLING SECTION

A system composed of conveyors, transfers and curves is specifically designed to allow the transfer of the trays, from one section of the line to the other, always maintaining the synchronization of speeds and spaces between trays. The system, regulated by a common software, ensures that each machine is consistently fed with the determined number of trays and that the line is reaching the desired productivity hour after hour.



# BAKING SECTION

During the baking section the cake is perfectly baked while controlling the internal moisture of the product. Ovens divided in different baking zones give complete control over the baking process of the final product. Our lines will communicate with the oven via PLC in order to balance and adjust production continuously. This is designed to give our clients complete control and a fully automated production line.



# COOLING TOWER

TT Italy's Cooling Tower carries out the continuous cooling process of cakes in trays. Displacing the trays vertically diminishes the line footprint, especially convenient when dealing with space limitations. Tower size and capacity is engineered according to the line's productivity.



# COOLING TUNNEL

This innovative equipment is intended for cooling your product.

TT Italy's Cooling Tunnel controls the product's humidity and inhibits the presence of bacteria in the circulating air with active UV treatment.

Unlike cooling spirals, the product alignment is maintained, facilitating further operations such as filling injection.

TT Italy Cooling Tunnel is the solution to increase the shelf-life of your products, thanks to:

- Powerful cooling capability
- UV treatment of circulating air
- Extraction of excessive humidity
- Constant electronic monitoring of product temperature and humidity
- Automatic washing and drying of the conveyor







## VOLUMETRIC PISTON INJECTOR

TT Italy's Volumetric Piston Injector is designed according to customer's requirements and it is engineered to manage several product formats with an easy tool-less changeover. Combining the Volumetric Piston Injector with TT Italy's Turbo Mixer ensures a major control over production parameters, resulting in unmatched final product consistency. The Turbo Mixer continuously feeds the Injector, maintaining the aeration and the density unaltered.

TT Italy closed system guarantees no contamination from the surrounding environment in a completely automatic way. Reduction of downtime is further enhanced by our C.I.P. Kit, providing a fast and automatic washing process of the Injector.





# DEPANNING SECTION

TT Italy depanners are specifically designed to automatically remove products from the baking trays and place them on a dedicated conveyor, maintaining or reconfiguring the product alignment. Special attention is given in engineering the interchangeable depanning heads, tailored to handle delicate aerated products while preserving their integrity. The depanning mean is selected according to product specificity.



Robotic depanning is chosen for high productivity and particular applications.



# ROBOT



# TRAYS WASHER

This machine efficiently washes and dries the empty trays, ensuring the operation of the line in compliance with the highest hygiene standards.

The machine is specifically designed for water saving operations and energy waste reduction.



# C.I.P. UNIT

The C.I.P. (Cleaning-In-Place) unit is engineered to wash and sanitize production plants (turbo mixers) without the need of disassembling them. The unit can be equipped with different numbers of tanks, and the tank capacity is sized in accordance with the equipment to be cleaned.

The C.I.P. unit prepares and manages, automatically, the washing and sanitizing solutions, and the cleaning cycles. The C.I.P. unit is the answer to some of the most important needs of our clients: a deep and totally safe cleaning of the equipment in an easy and automatic way.







## ROBOT DECORATOR

This decoration system, combined with TT Italy's Turbo Mixer, enables the fully automatic decoration process.

This system protects the decoration from density and consistency fluctuations and external factors.

The application of robotic decorator provides the following benefits:

- precision of the depositing
- smoothness of the decoration
- intensity of the colour

The robot decorator is designed to reduce manpower in decoration and engineered to standardize the process, allowing you to create a recognizable product for your brand's advantage.







## TT LAB

RESEARCH + DEVELOPMENT + INNOVATION

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With over 80 industrial cake lines commissioned,  
TT Group's Food Technology Company leverages profound know-how  
on the global ingredient market providing product R&D services to our customers.  
TT LAB's hyper-specialized team of food technologists boosts your  
products' profitability in line with your specific targets.

Whether starting from your existing product or from a creative idea,  
TT LAB is your one-stop solution!

TT LAB gives you the possibility to test your products and develop your recipes,  
both at our premises and at your plant, with:






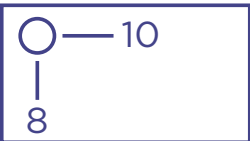





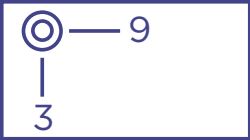


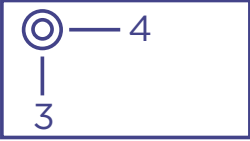
- 2 chemical analysis labs,
- 2 fully equipped testing facilities for practical testing and proof of concept,
- 2 full feature testing units, available for testing at customer facilities,
- 1 training centre.

**TT LAB test equipment possesses identical features  
and process capabilities of TT Italy industrial equipment.**



# CUPCAKE & DEPOSITED LINE PRODUCTIVITY

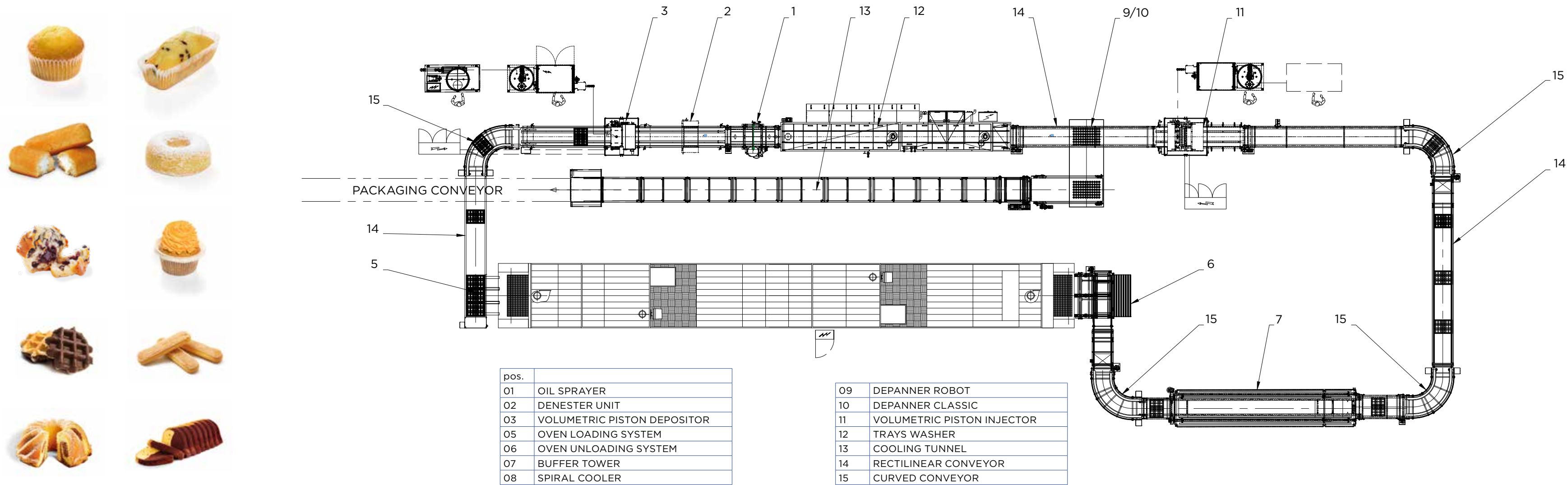
This table gives you an idea of the production cycle for different types of cakes.  
Average baking times were taken into account to calculate productivity of different products.

PRODUCT		BAKING TIME	TRAYS/PRODUCT	OVEN 1.2X20	OVEN 1.8X30	OVEN 2.4X30	OVEN 3.2X40
	CUPCAKE	 18 min		pc/h 14'690	pc/h 32'600	pc/h 44'080	pc/h 77'500
	MUFFIN	 20 min		pc/h 10'500	pc/h 23'300	pc/h 31'500	pc/h 55'440
	LOAF CAKE	 20 min		pc/h 9'000	pc/h 19'980	pc/h 27'000	pc/h 47'520
	CHIFFON CAKE	 30 min		pc/h 2'700	pc/h 6'000	pc/h 8'100	pc/h 14'250
	DONUT CAKE	 35 min		pc/h 1'030	pc/h 2'290	pc/h 3'096	pc/h 5'450

Trays with dimensions 600x800mm



# CUPCAKE & DEPOSITED LINE



# CUSTOM CARE SERVICE

TT Italy guarantees the availability of every spare part of all of its machinery, with timely and fast delivery. TT Italy Care takes after sales service to a new level. TT Italy guarantees the continuous support of all our installations, to keep the best productivity while maximizing efficiency. With TT Italy Care you can plan the maintenance of our equipment and you will have dedicated support 24/7.

*Some of the advantages of TT Italy Care:*



REMOTE  
ASSISTANCE  
*via internet*



AFTER-SALES  
SERVICE  
*with dedicated staff*



SPARE PARTS  
*always in stock*



FAST SPARE  
PART DELIVERY  
*via express courier*



MAINTENANCE  
*service planning*

# A GLOBAL MARKETPLACE

The best solution is achieved by examining problems through multiple perspectives. We do not use hierarchical systems to improve our decision-making and planning processes. Innovation comes from the high skills of each individual, playing their role in a highly collaborative context. Thanks to the expertise of our specialized staff, continuous research, the quality of our made in Italy and an infuse passion, today the company is a world leader in the sector – with a presence in 51 countries.





• ENGINEERING •



• SALES AREA •

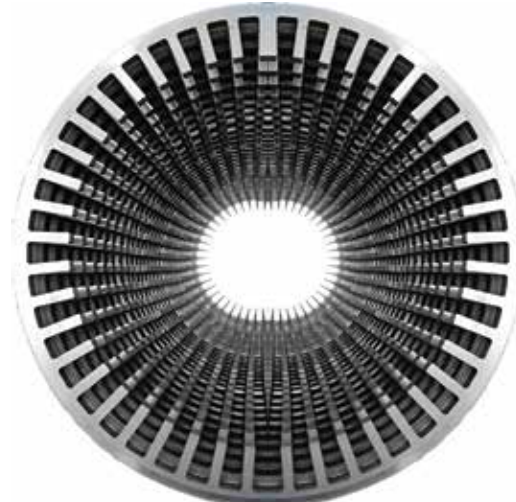


• PRODUCTION LINE •



TT Italy was founded in 2003 by two hard working and innovation-inspired Italian entrepreneurs. This thriving enterprise deals with solutions for the high tech bakery. It is specialized in the production of avant-garde equipment for sponge cake snacks, batter, and since September 2015, TT Italy also provides new technologies in the savory area.

ITALIAN SWEET TECHNOLOGY



Thanks to the expertise of our specialized staff, continuous research, the quality of our made in Italy and an infuse passion, today the company is a world leader in the sector - with a presence in 51 countries - with 87% of sponge cake lines installed around the world between 2014-2015 with the TT Italy brand.









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