

ITALIAN SWEET TECHNOLOGY





# PERFORMANCE AND TECHNOLOGY YOU CAN TRUST

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We engineer machines to deliver sweetness:  
tasty, tender, soft, airy cakes.  
We guarantee it!



# TT ITALY TURBO MIXERS

*The right choice for your products*

Turbo Mixers are designed to emulsify and aerate cream and liquid batter, lowering a product's specific gravity by injecting pressurized air, providing your line with batter and cream at its best: the peak performance of your ingredients and the desired volume, consistently.

**COOL WHIPPER**, our Turbo Mixer, is born of avant-garde technology developed by our engineers, which guarantees constant results, by assuring a fully automatic mixing process and continuous air injection directly into the turbo's head, with no need of operators.

It combines innovative engineering features, such as the monoblock structure in stainless steel for sturdiness and hygiene, and a dedicated temperature control provided by the Dual Cooling System of the rotor and stator.

All our machines are designed for performance, carefully manufactured in-house and tailored around your needs and ambitions.



The TT Italy mixing system is composed of Pre-mixer, Buffer Tank and Turbo Mixer.



AUTOMATIC  
QUALITY  
CONTROL



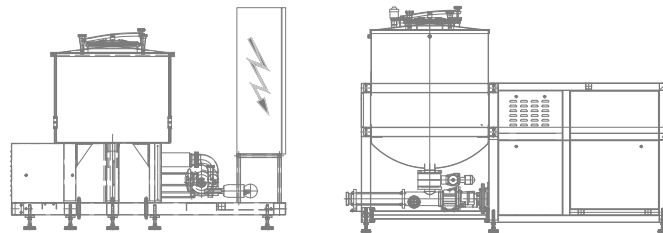


# PRE-MIXERS

The Pre-Mixer carries out the first step of the mixing process: ensuring all ingredients are mixed in a slurry and ready to be emulsified.

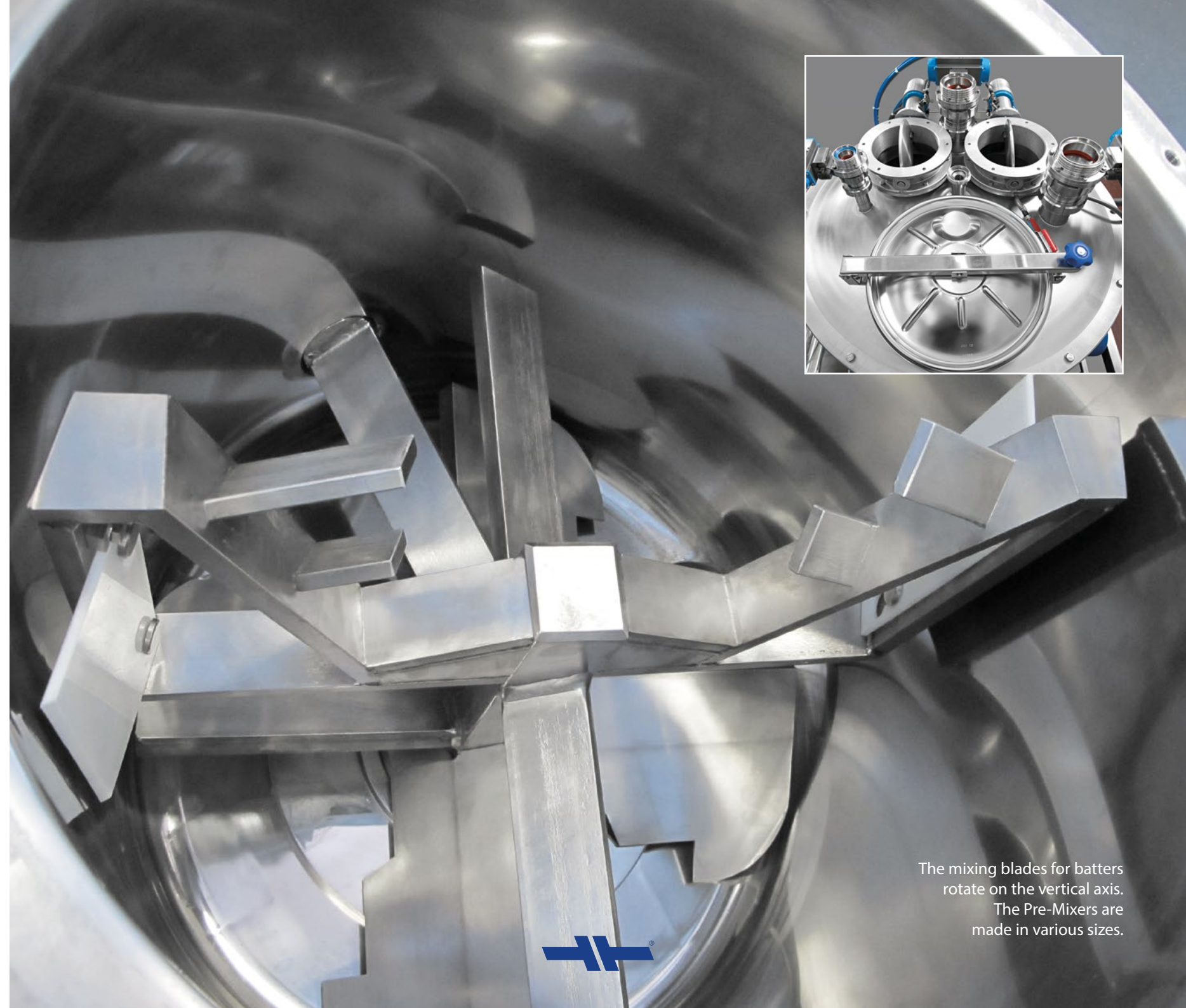
TT Italy offers two dedicated mixing systems, one for batters and one specialized for creams. After this phase, the product is transferred to the Buffer Tank through the action of a screw pump.

ADAPTABILITY  
PROGRAMMABILITY  
ENGINEERING





# PRE-MIXERS FOR LIQUID BATTERS



The mixing blades for batters  
rotate on the vertical axis.  
The Pre-Mixers are  
made in various sizes.





# PRE-MIXERS FOR CREAMS



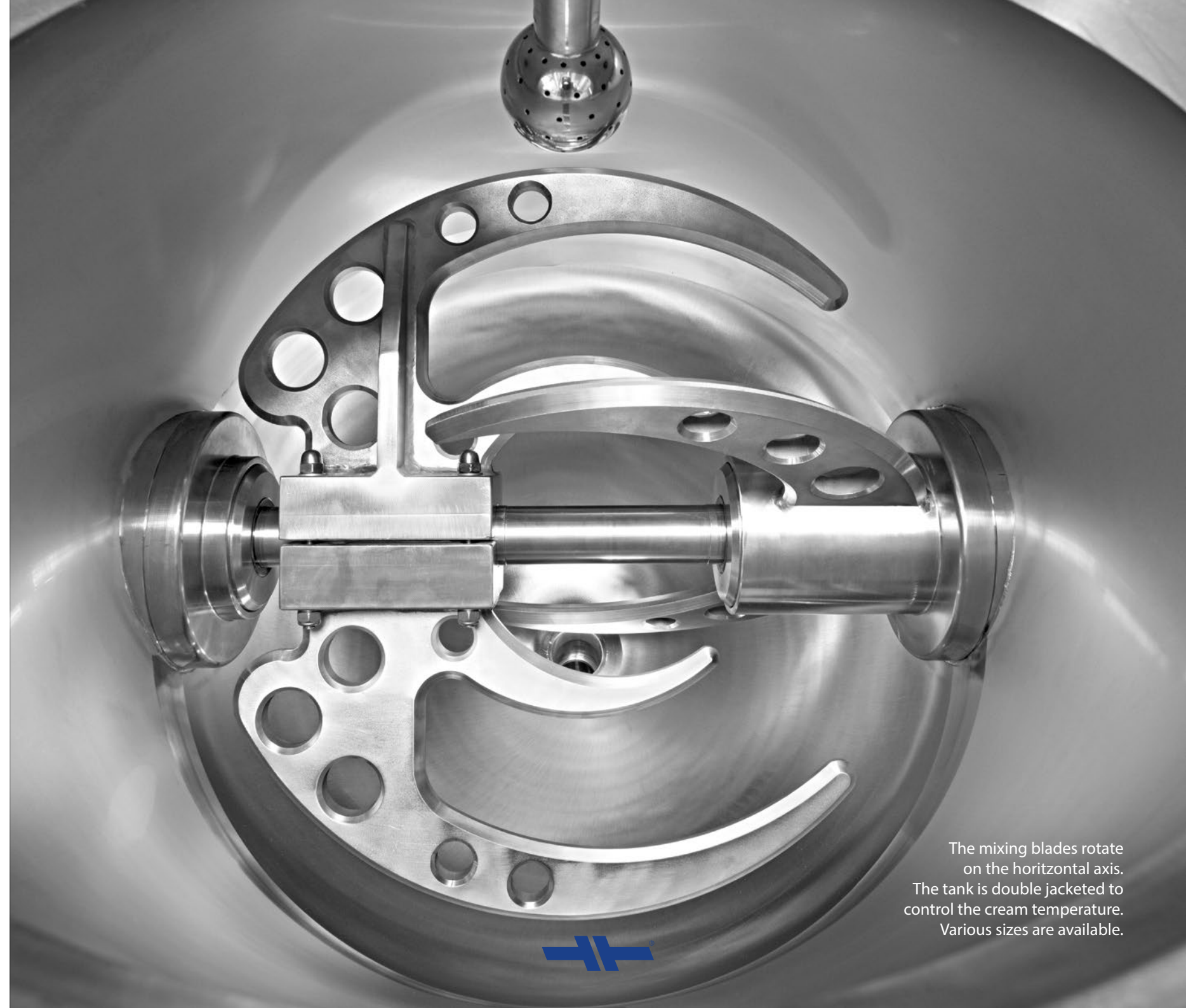
Cream  
Filling



Mousse



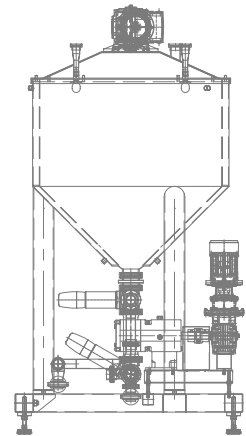
Aerated  
Cream



The mixing blades rotate  
on the horizontal axis.  
The tank is double jacketed to  
control the cream temperature.  
Various sizes are available.

# BUFFER TANK

The Buffer Tank provides the transition between the batch process of the Pre-Mixer and the continuous process of the Turbo Emulsifier, ensuring that the Turbo is constantly fed. The Buffer Tank preserves the product in ideal conditions, keeping it from sedimentation through an internal motorized agitator. The tank can be insulated or double jacketed according to customer need.



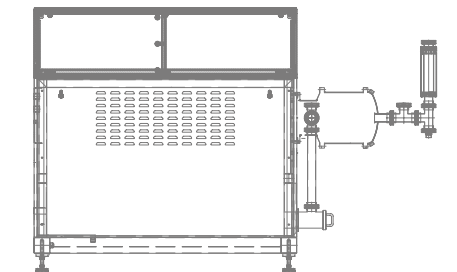
Tailored to client needs, the tank can be stand-alone if required.

DURABILITY  
RELIABILITY  
FLEXIBILITY



# TURBO MIXER

The **WHIPPER** is the heart of the process. The product is pumped from the Buffer Tank, injected with air (and other liquid ingredients if desired) and emulsified efficiently in a temperature controlled environment. The Dual Cooling System, a result of years of research, ensures the ideal temperature for the process, guaranteeing constant results in emulsification and aeration through accurate digital control. The monoblock structure of the head and high-tech fabrication by Electric Discharge Machining, provide unparalleled integrity and durability. Post-production sanitation is important to help you in the task, our machines come with built-in cleaning features and plug-and-play C.I.P. capability.




Different sizes are available according to the use and productivity required.





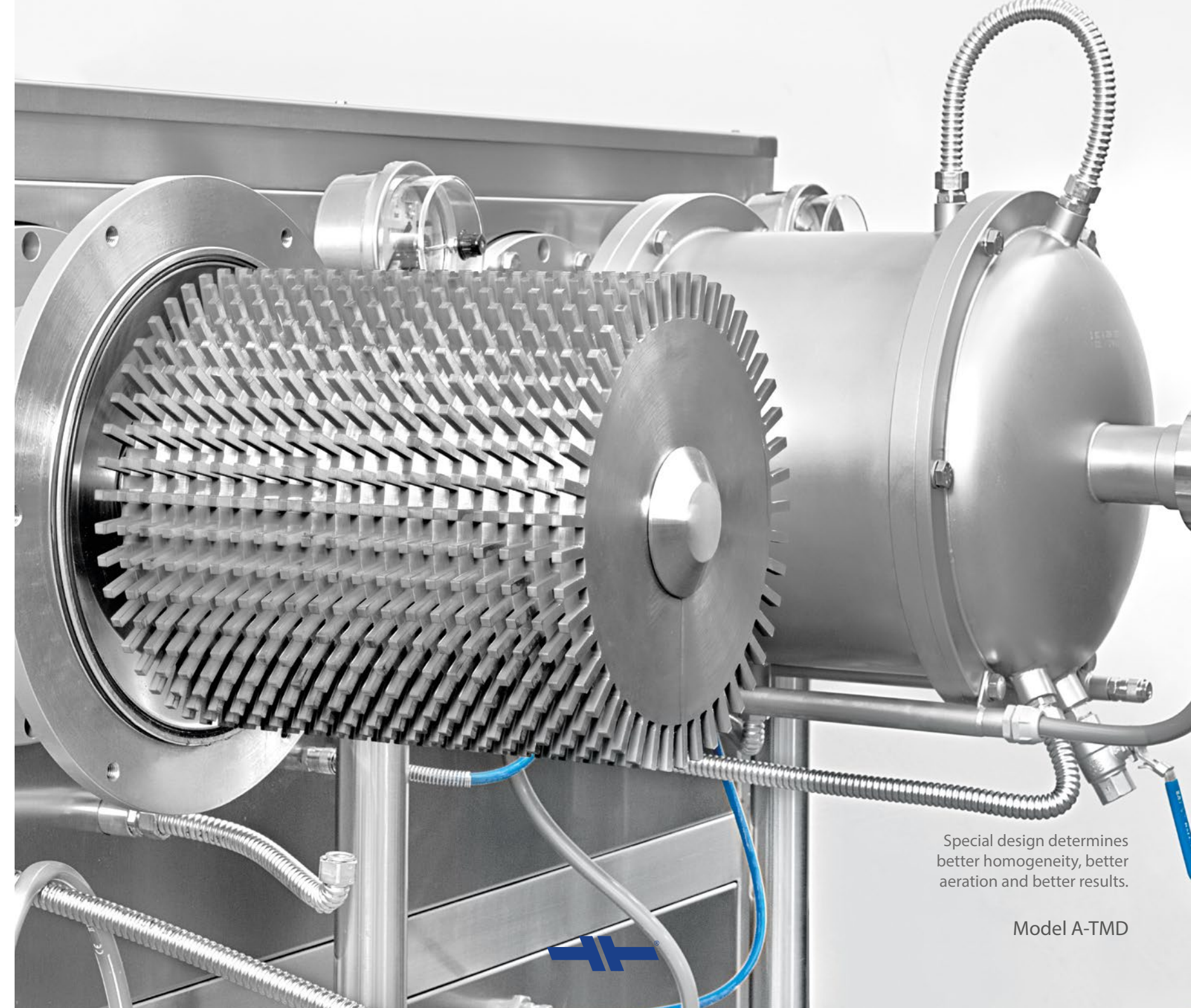
# TURBO MIXER

 WHIPPER's turbo head is composed of a rotor and a stator, each of which is sculpted from a single solid stainless steel block, using advanced CNC technology and Electric Discharge Machining which provides mechanically advanced features and consistent performance year after year.

The result is a smooth-surfaced monoblock structure, eliminating any welded or screwed-in parts, improving heat absorption, avoiding sedimentation of residual product, and reducing future maintenance.

Smoothness not only guarantees durability, but also assures that system complies with the highest hygiene standards.

TECHNOLOGY  
SANITATION  
TOUGHNESS



Special design determines  
better homogeneity, better  
aeration and better results.

Model A-TMD

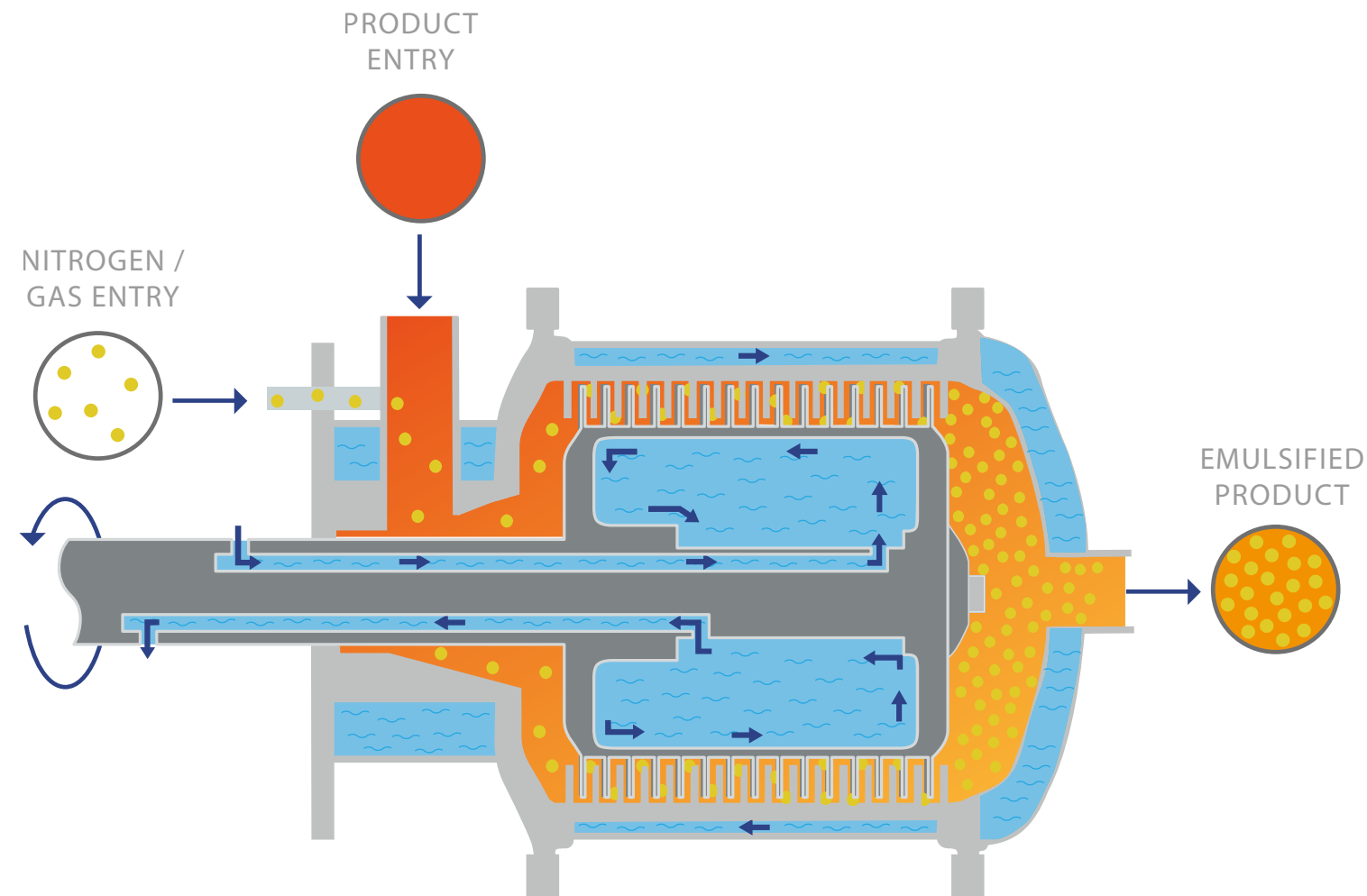




# COOLING SYSTEM'S BENEFITS

In the Turbo Mixer head the rotor spins inside the stator, emulsifying, aerating and generating heat as a result of friction. Uncontrolled heat can affect the constancy of aeration and emulsion; therefore it is fundamental to have a system that tackles the problem at its origin.

TT Italy overcomes this issues by supplying, as a standard with all the **WHIPPER** Turbo Emulsifiers, a double temperature control system that keeps the temperature constant, lowering the specific gravity homogenously.

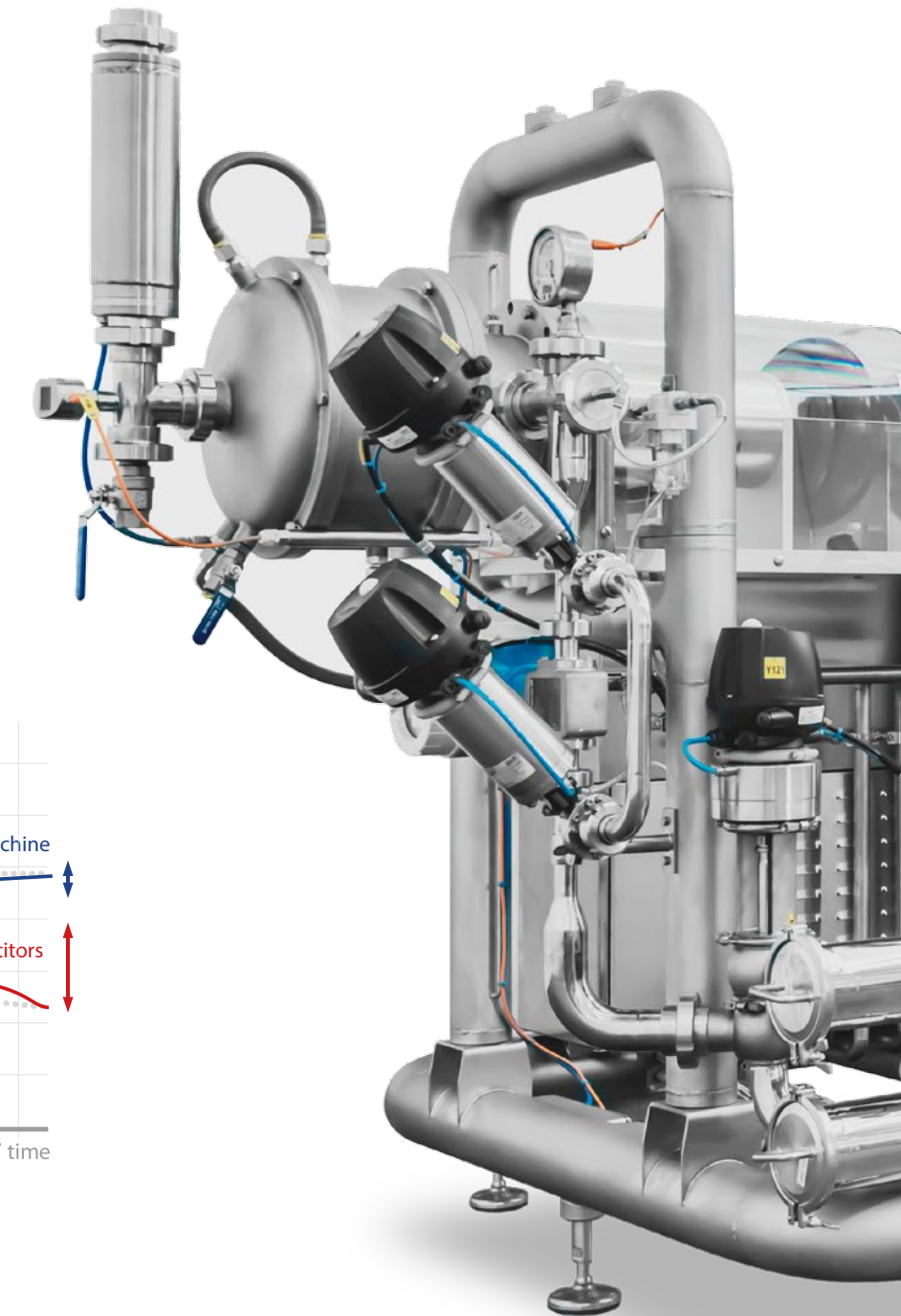


# COMPLETE CONTROL


The **WHIPPER** Digital Control System allows you to control all factors 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.



# DRY MIXER

Spawned from TT Italy's Research, Development & Innovation department, this perfect companion to the  answers the need of incorporating chocolate chips and other dry solids into a state-of-the-art aerated batter.

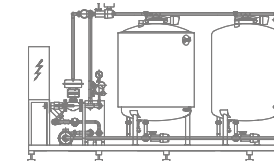
Delivering excellent results in cupcake, muffin, loaf cake and many other applications, the Dry Mixer maintains the volume of your product and gently includes the desired amount of solids. Post-production cleaning is important, to help you with post-production sanitation, our machines come with build-in cleaning features and plug-and-play C.I.P. capabilities.



# 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.

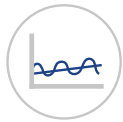
The C.I.P. unit prepares and manages, automatically, the washing and sanitizing solutions, and the cleaning cycles. The C.I.P. unit is the answer to some of the most important needs of our clients: a deep and totally safe cleaning of the equipment in an easy and automatic way.





# THE PROOF OF THE BEST OF TT QUALITY

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## CONSISTENT OUTPUT

Digital control over factors of production yield the ultimate industrial goal: standardized results.



## CONSISTENT AERATION

By precisely controlling the temperature in the aeration chamber, the **WHIPPER** yields perfect volume hour after hour.



## SUPERIOR MIXING

The high pin density and minute distance between rotor and stator in the **WHIPPER** yield better results at lower speeds, decreasing the mechanical stress on the product without sacrificing smoothness.



## LOW MAINTENANCE

Every machine is engineered to withstand years of production, with the lowest maintenance requirements in the industry.



## FLEXIBILITY

TT Italy's system are customizable to the client's needs, even in the event of limitations of available space.



## FAST PAY-BACK

Volume control and efficient use of ingredients, together with longer product shelf life and less need of technical intervention, mean the machine has a shorter payback period.



## BETTER RESULTS

Improved ingredient efficiency and reduced specific gravity translated to more volume and faster ROI.



## DUAL COOLING SYSTEM AS STANDARD

This key feature is a fundamental for consistent and reliable results.



## RELIABILITY

The pins of the **WHIPPER**, carved with EDM from the stainless steel monoblock body, will not deform nor detach.



## HYGENIC STANDARDS

Inside the turbo head the pins are part of the body: there is no soldering that can be abraded and host dangerous bacteria.



## PHYSICAL ADVANTAGE

The horizontal design allows a low pressure extruding system. The constant aeration preserves the stable quality of the final product.



## QUICK DIAGNOSTICS

The machines can be easily connected to the internet for a fast diagnostic on any anomaly that may occur. Regardless of the physical distance, TT Italy is close to you.



# OPTIONALS

Not simple optional but the answers to your demands

NITROGEN GENERATION UNIT

Nitrogen-filtering machine specially designed to provide a continuous flow of pure nitrogen gas to the turbo-mixer unit. Nitrogen is ideal for use in food processing because being an inert gas it does not sustain life nor contributes to the oxidation of nearby molecules. This machine is especially ideal as a companion to our turbo-mixer because being static and functioning with filtered air it does not require any kind of maintenance after installation.

IN-HEAD AROMA AND COLOR INJECTION

This equipment designed to serve the Turbo Mixer allowing to inject color or aroma directly in the mixing head, greatly reducing waste of these costly ingredients. In addition to savings by reducing waste, this tool ensures the dosing is always at the correct proportion, making your product’s balance of ingredients more reliable, effortlessly. The kit comes with a dedicated tank, which is integrated in the structure of the mixing system.

HEATING UNIT

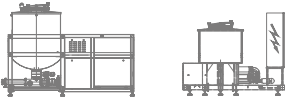
Optional internal component of the Turbo Emulsifier unit. Equipment used in order to avoid the solidification of cream when the system is not in operation. The logic control regulates the by-pass automatically.

FLOW METERS

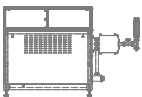
An additional precision measuring equipment, especially useful in costly or highly abrasive products.

# TECHNICAL DATA

PRE-MIXERS FOR  
BATTERS AND CREAMS



TURBO  
MIXERS



PRE-MIXERS FOR BATTERS			
Model	Tank size	Mixing capacity	Productivity
N-PSP-0150	150 lt	≈ 100 lt	≈ 400 lt/h
N-PSP-0250	250 lt	≈ 180 lt	≈ 720 lt/h
N-PSP-0400	400 lt	≈ 300 lt	≈ 1200 lt/h
N-PSP-0600	600 lt	≈ 420 lt	≈ 1600 lt/h
N-PSP-0800	800 lt	≈ 600 lt	≈ 2400 lt/h

PRE-MIXERS FOR CREAMS			
Model	Tank size	Mixing capacity	Productivity
N-PCR-0100	100 lt	≈ 60 lt	≈ 180 lt/h
N-PCR-0200	200 lt	≈ 120 lt	≈ 360 lt/h
N-PCR-0300	300 lt	≈ 200 lt	≈ 600 lt/h
N-PCR-0500	500 lt	≈ 320 lt	≈ 960 lt/h

TURBO MIXERS FOR BATTERS			
Model	N. of pins	Productivity	
		From	To
A-TMX-0006	340 x 6mm	50 lt/h	300 lt/h
A-TMX-0008	960 x 6mm	150 lt/h	1200 lt/h
A-TMX-0010	1440 x 6mm	300 lt/h	1800 lt/h
A-TMX-0012	1960x 6mm	400 lt/h	3000 lt/h
A-TMX-0014	2450 x 6mm	500 lt/h	3800 lt/h

DUAL HELD TURBO MIXERS				
First Head			Second Head	
Model	Productivity	SELECT THE SECOND HEAD	Model	Productivity
A-TMD-06	300 lt/h		A-TMD-06	300 lt/h
A-TMD-08	1200 lt/h		A-TMD-08	1200 lt/h
A-TMD-10	1800 lt/h		A-TMD-10	1800 lt/h
A-TMD-12	3000 lt/h		A-TMD-12	3000 lt/h
A-TMD-14	3800 lt/h		A-TMD-14	3800 lt/h

The second head dimension could be chosen according to the production capacity and/or to the double color production.

TEST MACHINE				
Model	Buffer Tank size	Premixer		Productivity
		Tank size	Mixing cap.	
A-TRD	100 lt	100 lt	60 lt	20-200 lt/h

TEST MACHINE  
A-TRD

This test machine system is dedicated to: Small Laboratories, r&d departments, Products Test Improvement.

Thanks to the construction type, with reduced dimensions of aerator system, A-TRD is the ideal machine for small laboratories and productions with the same performances as the industrial machines.





# 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.

From our headquarters in Friuli and our foreign offices we approach our clients with competence and courtesy, providing lines and machinery to valued customers in over 48 countries around the world.



ENGINEERING



SALES AREA

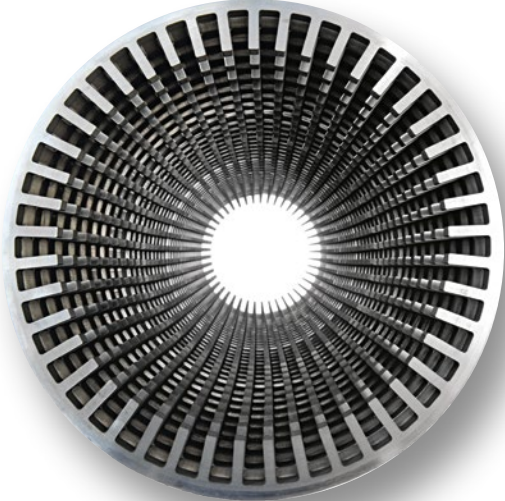


PRODUCTION LINE



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 experience of our specialized staff, continuous research, the quality of Made in Italy, and an infused passion, today, the company is a world leader in the sector - with 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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