



MULTYP *T&i*

VALMAR COMBISYSTEM®

ICE-CREAM PRODUCTS

CONFECTIONARY

FOODSERVICE



2nd
EDITION





Multy P TTi

A machine, a laboratory

The innovative series Multy P TTi is born from Valmar's experience: multipurpose combined units able to meet the most demanding and complex requirements of the food sector. Thanks to Multy P TTi the operator does not have to modify his recipes to operating procedures any more, on the contrary it is the machine itself that adapts to any professional requirements to achieve top-level quality standards.

Multy P TTi is a single-unit machine made up of two independently and separately operating tanks. The upper one heats and cooks up to 125°C while the lower one cools and freezes.



A selection from Multy P TTi range of products



DAIRY GELATO

FRUIT GELATO

FRUIT SORBETS

PASTRY CREAM

SEMIFREDDO

GRANITAS

OILY FRUITS-FLAVOURED TOPPING AND SAUCES

SUGARY FRUITS-FLAVOURED TOPPING AND SAUCES

CHOCOLATE-BASED TOPPING AND SAUCES

GANACHE CREAM GANACHES

FRUIT JELLIES

PANNA COTTA

BAVARIAN CREAM

CUSTARD

CARAMEL

CHOUX PASTRY

BECHAMEL SAUCE

JAMS



Multy P TTi Technology



01 SOFTWARE

An input generating software designed to manage efficiency and available technological solutions by means of a PLC matching process automation to the quality of different heating processes necessary to meet customized requirements.

02 PLC

Thanks to this new PLC management system any range of products is broadened through its 66 different programmes. 11 of them are totally customizable.

03 TOUCH & TYPE

The user can choose to operate the machine in Touch mode or in the traditional Type mode. The 4.3" LCD touchscreen has clear and intuitive icons that enable to manage and monitor each operating phase.

04 DOUBLE INVERTER

The new machine series is provided with a double inverter. While the former operates the stirrer of the batch freezing cylinder the latter governs the stirrer in the upper heating tank. Many different products are now possible as rotation speed can be adjusted - even during heating - according to the different products in progress.

05 SCRAPERS®

The scraping effect on the cylinder surface resulting in an extremely high heat rate efficiency as well as a high energy saving is given by the strength of the materials the scrapers are made of, their special inclination on the touch point and the specific high-thrust spring. Scrapers' material is provided with EC marking for use in food handling equipment.

06 SINGLE DISPLAY

Multy P TTi is a machine whose two elements really work completely separately and independently one from the other (heating element above and cooling cylinder below). Thanks to innovative technology the machine is operated and controlled by a single 4.3" LCD real-time display which gives all necessary machine information.

Heating and cooking

The innovative process makes it possible to quickly heat even small mix quantities - up to 20% of maximum capacity - without burning or sticking any product in progress. Fine texture, accuracy in production and no thermal inertia are the results obtained even in case of products made of very delicate ingredients such as pastry cream. During each cycle of the gelato making process just the mix to be batch frozen is heated, as required by the flavour-by-flavour process and resulting in quality improvement and a higher customization of the gelato produced.

Unequaled Multy P TTi

01 TANK



It is a real “technological pot” with a very large bottom surface area thanks to the ratio between diameter and depth. Thermal exchange is optimized without burning or sticking any product inside. The stirrer is provided with a patented counter-stirrer, easily and completely dismountable. Uniform scraping system on the whole cylinder surface, easy to remove and wash.

02 COOKING

Among the machine peculiarities are fast performances, high temperature precision, thermal inertia reduction even in case of dense products. All this can be obtained as the machine is provided with what follows:

- double- and triple- resistance heating devices (for Multy P 12 TTi) electronically governed by PLC. In this way the resistance heating devices can operate individually, alternatively or simultaneously;
- three probes to check temperature precision and reduce thermal inertia;
- uniform heating from 20% to 100% of the tank maximum capacity;
- cooking temperature up to 125°C.

03 INVERTER FOR HEATING AND COOKING



Upper tank stirrer provided with a 5 to 70 Hertz independent inverter (speed variator) to heat and cook high-density products with reduced thermal exchange.

04 LID



Double lid with opening system actuated by servo-assisted hydraulic pistons for easy ingredient introduction even in case of product in progress. The machine has not to be stopped in full compliance with certified EC safety regulations.

05 TAP®



External way wide-diameter tap, working diameter 4 cm for the direct outgoing of products to the cooling cylinder, even the more dense ones, max 15 seconds for 7 kg of high density product.

- Easy and fast to dismount. Appropriate sanitation of any surface in contact with the product.
- EC certified accident prevention and safety measures.
- Completely in 18/10 stainless steel. Long-life and easy sanitation in dishwasher without deterioration.
- Rotation up to 180° to operate the heating tank also independently from the cooling cylinder.
- Servo-assisted gradual opening system: no jerky movement, no squirt.

06 VERSATILITY



- Heating and/or cooking procedures with product outgoing directly from the heating cylinder independently from the batch freezing cylinder.
- Anti-squirt system during pouring and batch freezer operation with a liquid mix.
- Shelf space for hot product output independent from the cooling cylinder.

Cooling

New Valmar COMBISYSTEM® technological improvements have been integrated in the new Multi P cooling and batch freezing systems. The easily customizable software has been implemented by all the cooling procedures that differ from the gelato making process so now confectionary, pastry, ice-cream and foodservice products are cooled according to their specific needs and requirements.

01 VALMAR COMBISYSTEM®



The new system deeply changes artisan batch freezing quality standards. The produced gelato is now creamy and more resistant to melting as overrun is up to 40% of the mix weight. Air incorporation in marketable gelato keeps it more creamy and soft.

02 GELATO OUTPUT



Totally new is the output process governed by the stirrer speed rotation automatic adjustment. Speed varies automatically and progressively and prevents gelato from easily melting during the whole outgoing process. Speed progression is customizable. This is a very practical solution in case of variegated gelato production.

03 INVERTER



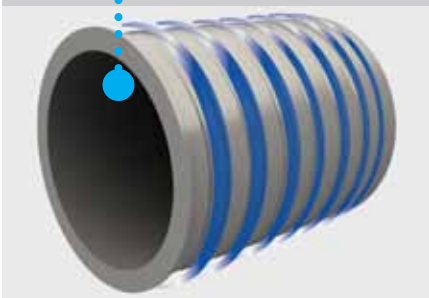
Stirrer rotation inverter, range from 5 up to 70 Hertz. Many different products are now readily available thanks to PLC and inverter as well as to a perfect batch freezing depending on the produced quantities and features of the mix and on the ingredients and their mix formulation. Totally new is the possibility to select the automatic speed adjustment mode of the outgoing gelato, which does not melt during the whole outgoing process.

04**CYLINDER DESIGN**

The cylinder is designed and tested to ensure a perfect combination in terms of chilling performance, freezing and micro-crystallization speed as well as optimized air incorporation.

05**STIRRER®**

Special design helicoidal stirrer with blade variable convergence and high-performance scrapers: these are only few of the features marking out the new stirrer. A perfect batch freezing is the result of a systematic and uniform spreading of gelato on the whole cylinder surface thus avoiding the excessive freezing of gelato on the blades or in the middle of the cylinder.

06**DIRECT EXPANSION SYSTEM**

Refrigerant gas direct expansion system on the batch freezing hollowed spiral cylinder having a progressively variable diameter to optimize the chilling performance on the whole cylinder surface.

07**CHECK OF GELATO CONSISTENCY**

The check of gelato consistency is performed through stirrer torque measurement in N m, gas temperature measurement as well as measurement of gelato inside the cylinder. Thanks to this technological innovation the desired gelato texture is obtained regardless of any recipe.



MULTY P DUAL



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In DUAL model the same batch freezing cylinder is heated e.g. to temper chocolate thanks to the lower cylinder hot gas heating system (100 °C).



66 programmes for easy and fast operation

The range of Multy P TTi combined units has 66 programmes, some of them dedicated to heating/cooking processes and some of them to cooling/batch freezing processes. They are all controlled by a user-friendly software interacting with the operator through a 4.3 inches LCD display.

66 PROGRAMMES

11 GELATO MIX HEATING PROGRAMMES

11 GELATO BATCH FREEZING PROGRAMMES

11 BASIC PASTRY PRODUCTS PROGRAMMES

4 SAUCES/TOPPING/GANACHE CREAM PROGRAMMES

2 GRANITAS PROGRAMMES

7 GELATO, CUSTARDS AND SAUCES CONTROLLED OUTPUT PROGRAMMES

3 SPECIFIC FOOD SERVICE PROCESSING PROGRAMMES

1 AUTOMATIC WASHING PROGRAMME

2 MIXING/STIRRING SPECIFIC PROGRAMMES FOR EACH TANK

8 COOLING PROGRAMMES

6 FREE PROGRAMMES

Any pre-set programme guarantees high quality standards over time. Moreover any machine function is customizable thanks to the 6 free programmes. No more limits to your creativity!

Production rates

Valmar has chosen to indicate the production rates of its batch freezers using two units of measurements - mix weight and weight of produced gelato, overrun included - that clearly identifies the actual production rates of every single model without confusing weight and volume.

Produced quantities shown by weight and volume

MODEL	GELATO								CREMOLATA AND GRANITAS		CUSTARDS AND SAUCES	
	Production per cycle				Production per hour				Production per cycle (kg)		Production per cycle (kg)	
	Mix added (kg)		Gelato produced (litres)		Mix added (kg)		Gelato produced (litres)					
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
MULTY P 7 TTi	1.5	7.5	2	10.5	9	45	12	60	2	7	3	10
MULTY P 7 TTi + DUAL	1.5	7.5	2	10.5	9	45	12	60	2	7	3	10
MULTY P 12 TTi	2	12.5	3	17	12	75	18	100	3	10	5	14



DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)			Weight, water condenser included (kg)		Stirrer motor speed (lower and upper)	Upper cylinder dimensions (mm)		Lower cylinder dimensions (mm)	
	W Width	D Depth	H Height	Net	Gross		Ø Diameter	D Depth	Ø Diameter	D Depth
MULTY P 7 TTi	613	709+241	1401+100	323	347	9	267	250	317	195
MULTY P 7 TTi + DUAL	613	709+241	1401+100	323	347	9	267	420	317	195
MULTY P 12 TTi	613	709+241	1401+100	344	368	9	267	540	317	195

RETRACTABLE WASHING NOZZLE



INDEPENDENT OUTPUT



OUTPUT CHUTE



TECHNICAL FEATURES

MODEL	Power supply*			Rated power	Water average consumption per cycle****	Condensing unit		
	Volt	Hz	Ph					
MULTY P 7 TTi	400	50	3	11	17	Water	Air **	Mixed air + water ***
MULTY P 7 TTi + DUAL	400	50	3	11.7	17	Water	Air **	Mixed air + water ***
MULTY P 12 TTi	400	50	3	15.34	21	Water	Air **	Mixed air + water ***

* Other voltages and frequency available with additional charge.

** Built-in air condensing unit available with additional charge.

N.B. weights and dimensions of machines equipped with optional equipment are different from those in the table.

*** Built-in mixed air + water condensing unit available with additional charge.

N.B. weights and dimensions of machines equipped with optional equipment are different from those in the table.

**** Water consumption can vary according to water and gelato temperature at the end of the batch freezing process.

Any model is available with remote compressor + air condenser with additional charge.

N.B. weights and dimensions of machines equipped with optional equipment are different from those in the table.

NOTE

Capacities can change according to the ingredients used, temperature or product consistency at the end of the batch freezing process.

All specifications mentioned must be considered approximate. Valmar reserves the right to modify, without notice, all parts deemed necessary.

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