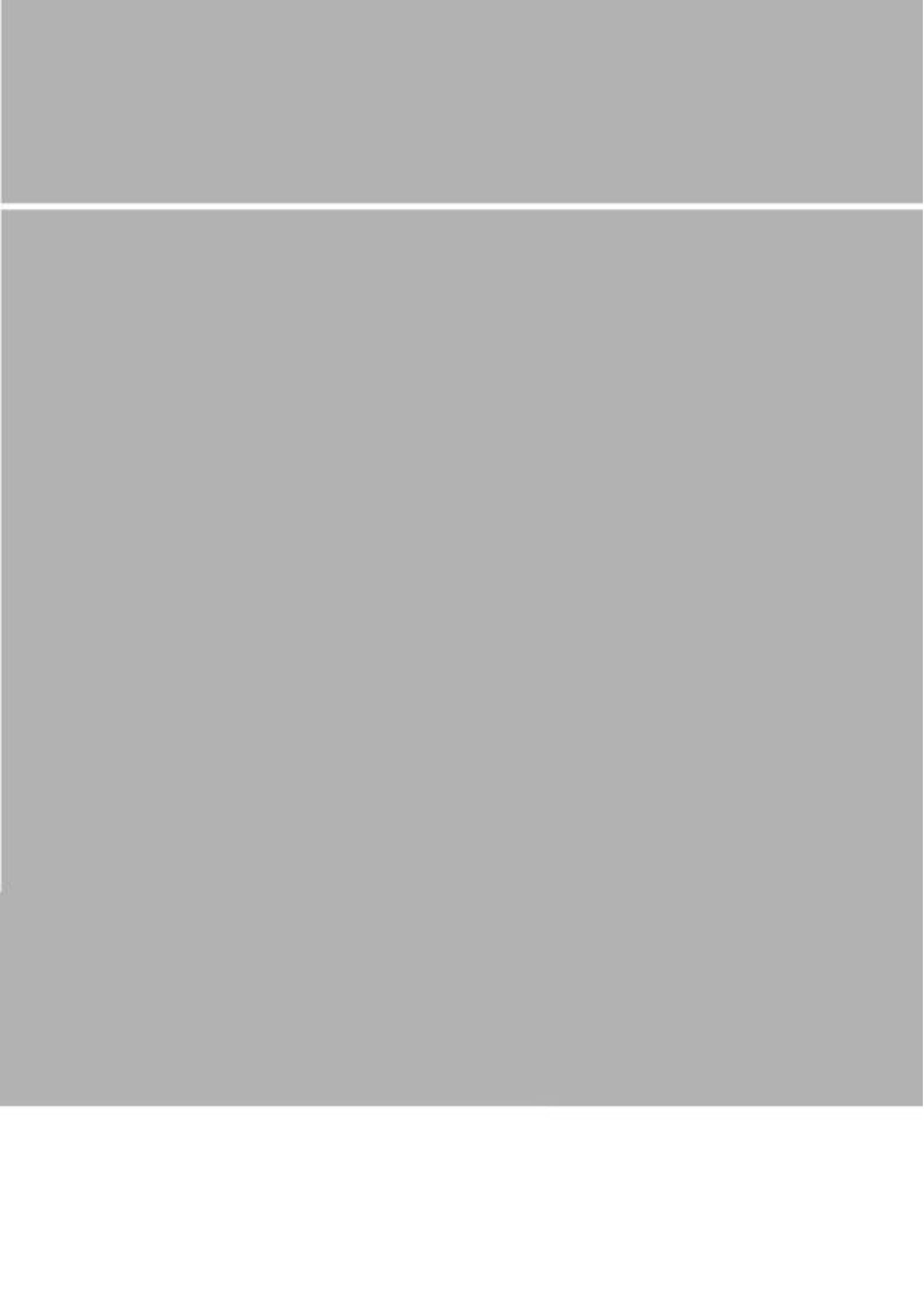


professional equipment

for the catering and food industry

Wilma

LA SCIENZA DELLE GRANDI CUCINE



La scienza delle grandi cucine

30 anni di innovazioni esclusive per la Ristorazione Collettiva da parte di un'Azienda per cui è normale precorrere i tempi



30 years of exclusive innovations in the catering field, thanks to a Company used to forerun times

La crescente importanza assunta dalla ristorazione collettiva negli ultimi decenni — un fenomeno che interessa ormai vasti strati della popolazione e un sempre maggior numero di Aziende ed Enti sia pubblici che privati — ha portato a focalizzare con chiarezza le problematiche peculiari delle grandi cucine e le direttrici tecnologiche e di ricerca su cui operare per fornire soluzioni adeguate e sempre più soddisfacenti:

- elevazione degli standard qualitativi sotto l'aspetto igienico, nutrizionale e organolettico;
- aumento della produttività, con minori costi gestionali e di manodopera;
- contenimento dei consumi;
- razionalizzazione dell'operatività e dell'ambiente di lavoro.

In realtà già nel 1960, e proprio con questa filosofia e questi intenti innovativi, nasce a Parma la NILMA, sviluppando su precise direttrici tutta l'esperienza tecnica acquisita dal suo fondatore, Pietro Nobili, nel settore degli impianti per l'industria alimentare.

In the last decades, catering has become more and more important; it now concerns lots of people as well as a higher number of state-run organisations and private companies.

This has clearly pointed out the peculiar problems of large kitchens and emphasized the technological and research guiding principles to work on, in order to identify and make suitable and satisfactory solutions:

- the raising of the qualitative standards, by respecting both the hygienic, nutritional and organoleptic aspects;
- the productivity increase together with labour and operating expenses savings;
- the control of expenditure;
- the rationalisation of work and working environment.

In 1960, in the city of Parma, was established the firm Nilma.

The company embraces this philosophy, based on the above mentioned innovating aims and takes advantages of the technical experience in the food industry machines

In quegli anni la ristorazione collettiva è in Italia ancora agli inizi, ma Nobili ne intuisce le grandi possibilità di sviluppo; e insieme alla fiducia vi è la consapevolezza che questo sviluppo dipende in massima parte proprio dalle soluzioni che solo una tecnologia altamente specializzata può offrire.

È una tecnologia che, proprio perché nata da una profonda esperienza nell'industria alimentare, si fonda innanzi tutto sulla conoscenza del prodotto da trattare, sulle sue caratteristiche, sulle problematiche che pone. Per questo le soluzioni sono quasi sempre innovative.

Un vero primato mondiale è la nascita delle grandi lavaverdure Atir che, insieme alle molte altre macchine specialistiche per la preparazione, introducono nelle grandi cucine soluzioni e vantaggi prima disponibili solo industrialmente. Anche a livello internazionale sono macchine e concetti totalmente nuovi che, grazie a un'automazione estremamente finalizzata, consentono risultati superiori da un punto di vista igienico, e risparmi notevoli di tempo, manodopera e consumi energetici: un elemento questo che diventa quasi prioritario dagli anni '70.

Altri numerosi primati vengono ottenuti dalla Nilma con le sue apparecchiature per la cottura, un settore che la forte tradizione culinaria, specialmente in Italia, ha per lungo tempo tenuto lontano da innovazioni, e che invece una tecnologia specifica — se opportunamente impiegata — può migliorare sotto molteplici aspetti.

In questo senso l'impegno della Nilma si è fin dall'inizio incentrato sulla creazione di apparecchiature speciali che, pur sfruttando gli stessi principi fisici e le stesse fonti energetiche e di calore impiegate dalla cucina tradizionale, ne sappiano superare i limiti per raggiungere risultati qualitativi in linea con la tradizione culinaria italiana e soprattutto con le esigenze della moderna dietologia.

È il caso dei forni a termoconvezione, che la Nilma introduce per prima sul mercato italiano nel 1970: l'antico forno viene radicalmente trasformato e migliorato col sistema della ventilazione forzata.

Altrettanto avviene con il Vaphoor e il Quick-Steam, che per primi in Italia consentono alle grandi cucine di trarre vantaggio dal sistema di cottura a vapore, abbinando ai superiori risultati qualitativi e nutrizionali tipici di questo metodo di cottura, quella rapidità e semplicità d'esecuzione che caratterizzano ogni apparecchiatura speciale della Nilma.



of Mr. Pietro Nobili, its promoter. In the sixties, central production catering was in its early stages and Mr. Nobili realized this would be a developing market for specialized catering equipment. He was very confident and knew that this development was largely depending on the solutions highly specialized technology could offer.

This technology, being originated from a deep experience in the food industry, first of all bases on the knowledge of the product, of its characteristics and of the problems it creates. For these reasons, solutions are always innovative.

The real world primacy is given by the Atir vegetable washers, which, together with other specialized equipment for food processing, bring caterers solutions and advantages belonging before to the food industry only.

These are machines manufactured with very new concepts and, thanks to their high degree of automation, permit the user better hygienic results faster, with great labour and consumptions savings. All above becomes a primary factor from the seventies onwards.



Many other records are reached by Nilma with prime cooking equipment. A sector that traditionally had not been innovative, due to the strong Italian culinary tradition, but, with the specific properly used technology, it could have been improved under many different aspects.

Therefore, Nilma's speciality is the creation of sophisticated equipments which, even if exploiting the same physical principles and the same energetic sources as the traditional kitchen, are able to overcome its limits. A way to reach high quality results, in accordance with the Italian culinary tradition and with the modern dietology.

This is the case of the convection ovens, which were brought in the Italian market for the first time by Nilma, in 1970: the old concept of oven was radically transformed and improved by means of the forced ventilation system. The same happened with Vaphoor and Quick Steam, which were the very first in Italy allowing the commercial kitchens to get advantages from the steam cooking system: i.e. the best nutritional and quality results (typical of this cooking method), obtained with a very simple and quick execution. These peculiarities distinguish all Nilma's special equipment.



Fra questi apparecchi il più rivoluzionario, anche da un punto di vista strutturale con il totale abbandono del classico «pentolone», è senza dubbio il cuocipasta Dough.o.Mat che per primo al mondo, portando sul piano tecnologico certe necessità di cottura mutuata dalla cucina più tradizionale, consente di rispettare come mai prima era stato possibile, le qualità nutritive e organolettiche di pasta, gnocchi, riso, etc.

E altrettanto innovativi risultano la brasiera automatica Salsamat e il Mix-Matic, la pentola ribaltabile con mescolatore, che introducono finalmente nella ristorazione collettiva una varietà e una flessibilità di produzione un tempo impensabile, riducendo inoltre l'intervento umano, più utilmente impiegabile per altri scopi.



In tutt'altro settore, quello dell'abbattimento rapido della temperatura dei cibi appena cotti per evitare la proliferazione batterica, la Nilma anticipa persino la normativa italiana, e con il Quick Frost offre una soluzione anche a quei problemi di razionalizzazione organizzativa che si fanno sentire ogni giorno di più nella grande risto-

The most innovative machine, also under a structural point of view, is no doubt the Dough-o-Mat pasta cooker, that, by replacing the traditional «boiling pan», technologically answers the most traditional cooking needs, with the maximum respect of the nutritional and organoleptic qualities of pasta, «gnocchi», rice, etc.

As innovative are also the automatic braising pan Salsamat and the tilting boiling pan with mixing Mix Matic, that finally introduce into catering an unimaginable variety and flexibility of production and, at the same time, reduce the intervention of the operator, who can apply himself to other tasks.

Talking about quick chilling, Nilma even anticipates the Italian law and with Quick-Frost creates a piece of equipment able to cool down temperature of just-cooked foodstuffs so quick to avoid the bacteria proliferation. Quick-Frost offers a solution to those problems of organisation of a kitchen, such as the high labour cost and the reduction of operating costs.





razione, specie a fronte dell'elevato costo del lavoro e della necessità di conseguire significative economie di scala nei costi di gestione.

La conoscenza approfondita dei problemi connessi con la grande ristorazione, unita a una continua attenzione per le nuove soluzioni offerte dall'informatica, hanno inoltre indotto la Nilma ad affrontare anche nuovi aspetti dell'alimentazione. Con Rist.O.Gest ha infatti realizzato uno speciale programma di gestione computerizzata destinato alla ristorazione ospedaliera, in grado di semplificare e razionalizzare al massimo questo delicato servizio, con vantaggi per il degente e il personale sanitario, e con notevoli risparmi economici.

È questa una direzione nuova che la Nilma — ancora una volta per prima — ha intrapreso, cosciente del fatto che oggi le problematiche della ristorazione possono essere risolte, più che dalle singole macchine, da sistemi che nascono per sinergia da queste macchine, e solo così portano alla reale creazione di una «nuova cucina».

Da 30 anni insomma, per la Nilma è normale precorrere i tempi. Questo anche perché la Nilma si è imposta fin dall'inizio una strategia aziendale *marketing-oriented*, mirante cioè a produrre attrezzature e sistemi che siano realmente una soluzione efficiente ai problemi del consumatore.

Dove per consumatore si devono intendere tutti i diversi utilizzatori di una grande cucina: chi la gestisce, con le sue esigenze di produttività e di economie; chi vi opera, con le sue giuste richieste di sicurezza e di un ambiente di lavoro «vivibile»; chi pranza ogni giorno in mensa, e ha diritto a un'alimentazione sana e variata, che non gli faccia rimpiangere quella di casa sua.

La qualità della vita in fin dei conti dipende anche da un buon piatto di spaghetti al dente e da un secondo con contorno, che soddisfino veramente senza appesantire. E la tecnologia Nilma si fonda anche su questa semplice filosofia, cogliendo solo i lati positivi dell'industrializzazione per riportarli a misura d'uomo.

Besides, the deep knowledge of the problems related to catering, together with the continuous attention to nowadays computer solutions, have led Nilma to face new aspects of catering. In fact, with Rist.O.Gest Nilma has realized a special program for the computerized management of the catering in the hospitals. This program is able to simplify and get this very delicate service rational, granting advantages both for patients and personnel, with high savings.

This is a new way Nilma, once again as first, has gone in, knowing that catering problems can be solved by systems which are in synergy with the machines, better than by the single machines only. This to create a «new kitchen».

As a matter of fact, Nilma has been forerunning times for 30 years and this also because Nilma has adopted, from the beginning, a marketing-oriented strategy, aiming at the production of special appliances which can really be an efficient solution to the customers' problems. In this case, talking about a catering centre, the customers are: the managers, with their need of productivity at the most competitive and moderate costs; the operators, with their reasonable requests of safe and pleasant environment; the regular clientele that every day needs a wholesome and varied meal, appetizing and dietetically balanced dishes, without any regret for the home cooking.

Finally, the quality of life can also depend on a good dish that fully satisfies those who have to come back to job, without making them feel «heavy».

Nilma's technology is based on this simple philosophy too, and it incorporates only the positive sides of mechanization, bringing them back to a human level.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

NILMA SpA - Via E. Zaccagni 24/A - 43100 Parma - Tel. 0521/785241 - Fax 0521/774642 - E-mail: nilma@nilma.it - Home Page: www.nilma.it
La Nilma si riserva il diritto di apportare, senza obbligo di preavviso, tutte le modifiche e i perfezionamenti tecnici che riterrà necessari

TURBOIDREX&TURBOVER

Automatic vegetable washers



WASHING WITH GUARANTEED HYGIENE. GUARANTEED SAVINGS.

TURBOIDREX&TURBOVER benefit from the long experience of Nilma, the first company in the world to produce professional vegetable washers.

Created for restaurants, hotels and small institutions, but also ideal for greengrocers and delicatessens, they feature an exclusive, patented washing system that reduces the bacterial load of fresh vegetables by more than 90%.

But that's not all: Nilma vegetable washers are universal, because they can also wash fruit, meat and fish. In addition, the Turboidrex has a spin dryer that dries vegetables in just

one minute, delivering impressive savings on dressings.

Both appliances use the exclusive, effective, adjustable whirlpool washing system (which can be set to be gentle with lettuce, intensive on carrots). The vegetables are rotated immersed in water for easy removal of all dirt, which passes through the holes in the sides and bottom of the drum to the drain. User-friendly and completely automated, Nilma vegetable washers provide considerable labour savings and low water consumption, making them the ideal partner for every kitchen.

Nilma

LA SCIENZA DELLE GRANDI CUCINE



HIGHLY EFFECTIVE WHIRLPOOL SYSTEM

The vegetables are washed in a drum with holes in the sides and bottom. The pump intake is close to the water inlet, keeping the washing water clean at all times. During washing (which takes just three minutes) the vegetables are immersed in water and rotate in a whirlpool water circulation with various intensity settings to suit the type of vegetables for washing. The whirlpool removes all the dirt, which passes into the counter-drum and on to the drain. This effective, patented washing system does not use filters (useless against bacteria) and minimises water consumption. Bacteriological analyses on fresh vegetables washed using Turbover & Turboidrex have revealed a reduction in bacterial load of more than 90%.



FEATURES

CONSTRUCTION

- Polished AISI 304 steel washing drum with holes in walls and bottom.
- Adjustable-height feet in tough plastic.
- Sturdy lid hinged to the rear of the appliance, which can also be used as a work surface.
- Washing outlet in 18/10 stainless steel which can be removed by hand for counter-drum cleaning.
- Electric washing pump with ventilated motor complete with overload cutout.
- Electronic components and valve accessible from front panel.
- TURBOIDREX: spin dryer with clear plastic lid and removable plastic basket.
- Self-braking motor stops the basket when the lid is opened.

FUNCTIONAL

- Washing speed setting device programmable to suit product delicacy.
- Control panel with washing start/stop button, spin dryer start/stop (Turboidrex), washing regulator knob and drain regulator knob.
- Washing capacity per cycle: leaf vegetables 4 kg - heavy vegetables, fruit, meat 15 kg.
- Washing time: 3 minutes.
- TURBOIDREX: drying capacity: 1 kg approx.
- Drying time: 1 minute approx.

ACCESSORIES

- Automatic level regulator
- Sanitizer dispenser

Technical Data	TURBOIDREX	TURBOVER
Electrical connection	1 kW-230V/1.50-T	0,7 kW-230V/1.50-T
Water inlet ø	3/4"	3/4"
Main drain ø	1" 1/4"	1" 3/4"
Drum capacity (l)	90	90
Basket rotation speed (rpm)	750	-
Weight (kg)	135	52
Dimensions (mm)	1000x600x910 (H)	550x550x910 (H)

TURBOIDREX

Automatic vegetable washer with spin-dryer



TURBOVER

Automatic vegetable washer



APPLIANCE CONSTRUCTED TO
HARMONISED STANDARDS AND
COMPLETE WITH CE MARKING

ISO 9001 certified manufacturer

ATIR

Universal vegetable washers



A PERFECT WHIRLPOOL

The traditional way of washing fruit, vegetables, meat, fish and frozen foods is both time consuming and usually does not guarantee the removal of all unwanted insects and dirt.

The problem of washing large quantities without damaging the structure and quality of vegetables, salads, etc, is easily solved with our ATIR range of machines. We have carefully researched the various problems and have developed a system which uses an adjustable whirl or vortex with constant clear water.

The water penetrates the product in depth and gets rid of all the impurities even from the most irregular of vegetables like spinach.

We offer five models of ATIR to meet the varying demands and customer requirements. We have a machine for each size of undertaking from 100 to above 1000 people. Our specialised technology and engineering ensures good results within a cycle time of 2 to 3 minutes.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

The technical, practical, cost-c

Washing in depth

An essential feature of Atir vegetable washers is their exclusive washing principle: it is not just a water spraying operation but a continuous water whirling motion, which can be regulated as to time, length and intensity, with the products immersed into the water. In fact, only this way can even the most 'difficult' vegetables be thoroughly cleaned without suffering damage.

Always in clean water

The special washing system developed by Nilma allows rinsing in water that is always clean. The rotative water motion pushes the dirt and soil towards the sides and bottom of the drum and gradually dispatches them into the drain area. Fresh water comes in only from the upper part of the drum, which is dirt free. In addition, clean water flows in on a continuous rate from the mains inlet. This solution eliminates the need for filters — which retain only substantial dirt particles and, consequently, filters need cleaning after use.

Total automation

No manual intervention is required to carry out vegetable washing with Atir machines. The operator need only select the type of rinsing according to the product to be handled. The Atir will operate automatically and with a uniformity that will ensure a very satisfactory result.

Simplicity of use

Atir machines are easy to operate:

- A - loading the machine
 - B - pre-setting the washing time and speed
 - C - removing the washed product from the drum.
- In tilting models, discharging the product into the suitable trolley.

Labour saving

How much? A lot! when one considers the time spent in washing vegetables in the sink. And even more, if one considers the automatic cycle time of Atir washing at 3 minutes - time which can be better utilized doing other jobs.



Outstanding features of Atir washing

Electricity

Even the most powerful model — Atir I tilting — requires only 1.8 Kw power from the mains, and needs no more than 3 minutes even for the most difficult product.

Maintenance

Atir machines are designed — like all Nilma machines — for durability and an excellent performance.

They are built to last requiring little or no maintenance and can be easily cleaned after use. They have no filters to be cleaned and are designed so that maintenance costs will be negligible.

Versatility

Because of the exclusive washing system and the method of regulating the flow and time cycle, Atir is ideal to wash a wide range of food: from grapes to spinach, from fresh vegetables to frozen ones, plus poultry, meat and fish, and the maximum length of the washing cycle will be at all times within 3 minutes.

A custom-built line

From the lower requirements of small establishments to the larger centres, The Atir with its five models, offers the appropriate solution, especially when you consider the working efficiency of the machines, their small proportions making it no problem to find a place for one in any kitchen.

Featuring: ATIR I and II tilting

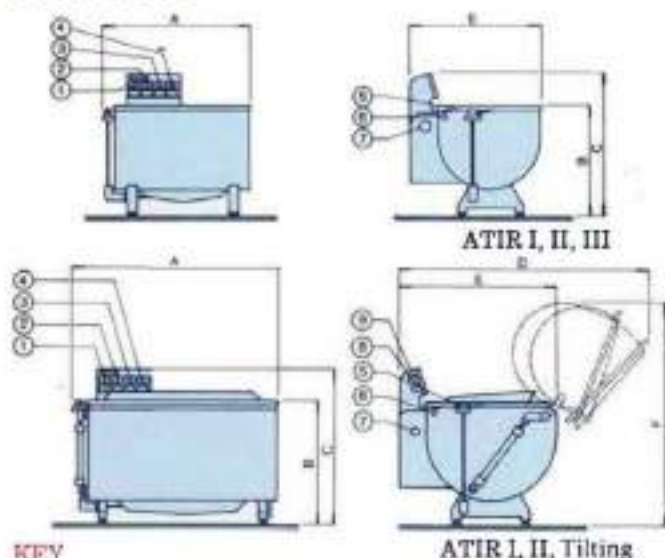
For the large catering centres requiring higher operating efficiency, Nilma has designed two versions of tilting drum washers of the larger models. At the end of the washing cycle, the kitchen staff will operate the drum tilting control, and the washed product will be automatically and quickly discharged into the suitable trolley.

The trolleys have been specially designed to accommodate a whole load of one washing cycle



ATIR

Universal vegetable washers



- KEY**
- 1) Main switch and mode selector
 - 2) Timer
 - 3) Power indicator
 - 4) Start light
 - 5) Discharge control
 - 6) Water inlet control
 - 7) Washing control push button
 - 8) Tilting start
 - 9) Up and down-stroke control.

CONSTRUCTION

- Drum made of stainless steel 18/10 with overflow pipe and drain.
- Legs made of polished aluminium alloy, adjustable in height.
- Washing drum made of stainless steel with perforated walls and bottom.
- Motor driven pump case and control board made of resin.
- Quick opening hydraulic valves for drain, washing regulation and water inlet made of stainless steel.
- Water nozzle made of stainless steel 18/10.
- Washing motor-driven pump placed on the machine rear side.
- Washing drum rim with unloading hopper and drum tilting through hydraulic piston controlled by an independent gear, for models Atir I and II tilting.

THE ACCESSORIES

Automatic level regulator sanitizer dosing device, to be used in combination with level regulator.
Trolleys for vegetable transportation, made of 18/10 stainless steel with four castors and removable basket made of white plasticized steel.

Dimensions:
920x520x685 mm (ATIR I - I TILTING - II TILTING)
600x500x570 mm (ATIR II - III)



THE FEATURES

OPERATION

- Regulator of the washing flow controlled by a suitable lever with graduated scale.
- Soil and impurities draining device controlled by a suitable lever with graduated scale.
- The washing drum and its rim are easily removable for cleaning.
- Low voltage (24 V) control board, with stainless steel panel, including: washing time programmer, mode selector: manual - stop - automatic - operation light - power light. Protection degree: IPX5.
- Device for the automatic unloading of the product, consisting of a push-button and an up/down selector placed on control board side, for models ATIR I and ATIR II tilting.

	ATIR I	ATIR II	ATIR III	ATIR I Tilting	ATIR II Tilting
Cold water	1" 1/4	2"	1"	1" 1/4	2"
Water drain	2"	2"	2" 1/2	2"	2"
Drum capacity (litre)	850	300	180	600	300
Electr. connection	230/240 Volts 50Hz - 0				
Inst. power kW	1.45	1.45	0.47	1.45	1.45
Weight, kgs.	174	123	93	232	180
Load capacity:					
- light veg., kgs.	18	9	5	14	9
- heavy veg., kgs.	70	35	20	70	35
Washing time, min.	2-3	2-3	2-3	2-3	2-3

DIMENSIONS

	ATIR I	ATIR II	ATIR III	ATIR I Tilting	ATIR II Tilting
A	1474	1114	898	1570	1138
B	940	815	788	918	825
C	1098	1020	888	1128	1025
D				1898	1720
E	1100	990	820	1280	1090
F				1710	1480

This copyright may not be reproduced either in full or in part - May 2004



DESIGNED AND MANUFACTURED TO CE STANDARD

ISO 9001 certified manufacturer

Wilma

LA SCIENZA DELLE GRANDI CUCINE

ATIRMATIC

Continuous Vegetable Washer



**THE VERY BEST FRESHLY PREPARED PRODUCE
WITH FAST AND EFFICIENT OPERATION**

All large catering establishments and food industries need to process large quantities of fresh vegetables. This operation has to be very quick and efficient. Nilma has developed a continuous vegetable washing machine which is a technological breakthrough in vegetable washing.

With a unique washing system, extremely high automation and excellent results (bacteriological tested), ATIRMATIC is the perfect answer, processing large quantities, giving high quality results all with considerable labour savings.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

The continuous whirl of clean water is ex



THE UNIQUE WASHING SYSTEM

The unique way washing carried out by Atirmatic is based on a continuous whirl of clean water passing over product (the whirl intensity can be regulated according to the individual product). The vegetables move in a helical motion caused by the whirl of clean water, making them move forward and eliminating impurities in the process.

The small particles of dirt and soil are dragged by the whirl and conveyed through the holes in the washing drum to a counter-drum. In the counter-drum the water is calm, this allows the particles to settle and from there they run directly into the drain.

The design of the Atirmatic ensures the washing process is always in the clean water area. After the washing process the produce is rinsed

with new water from the mains supply on the unloading belt.

With the Atirmatic patented washing system the need for pre-washing vessels and filters is eliminated.



A UNIQUE SOLUTION

Automatic cutting and washing line for leaf vegetables consisting of Atirmatic and Stripper II, with a production capacity of 400 Kgs/h. The sorting, cutting and washing operations are executed "in line" without handling between phases, with considerable labour savings.

Exclusive to the Nilma washing system



THE ACCESSORIES

Dosing pump for disinfectant liquids, located inside the Atirmatic, with regulator for the disinfectant.



Vegetable transportation trolley made of 18/10 stainless steel, complete with removable basket in white plastic coated steel (stainless steel on request) and 4 castors. Dimensions: 600x500x605 mm



Vegetable sorting table, with white food-grade polizene cutting board 20 mm thick, vegetable holding side panel, waste hole and waste collection basket. Dimensions: 1300x755x1150 mm

HYGIENE ENSURED FROM THE BACTERIOLOGICAL POINT OF VIEW

The Atirmatic can be equipped with a dosing pump for the usage of disinfectant liquids during the washing process. In this way, the perfect and quick cleaning ensured by the exclusive water whirl is complete also from the bacterial point of view with elimination of all possible risks, in particular during the processing of raw vegetables, in accordance with the HACCP standards (analysis of the risks and check of the critical points).

THE VERSATILE USAGE

With Atirmatic excellent results are achieved on all kinds of vegetables, fruits, fish and other food products. Atirmatic is a real universal washer, completely automatic and programmable according to the most varied requirements.

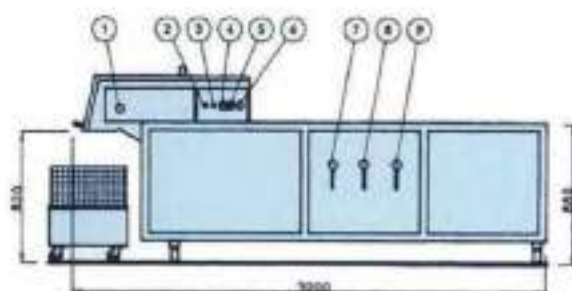
THE TIME SAVING

The Atirmatic has no handling times, because all operations are executed on a continuous basis. In one hour the Atirmatic does the work of five people automatically. The cleaning of the machine is simplicity itself in fact, the conveyor belt, the bottom grating, the upper rims of the washing drum can be manually taken away in a few seconds without the use of tools, allowing access for cleaning the internal parts of the machine.

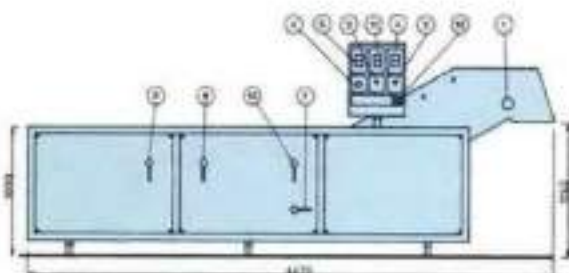
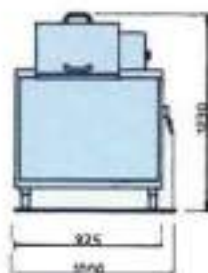


ATIRMATIC

Continuous Vegetable Washer



Atirmatic



Atirmatic 700



KEY

- 1) Belt unlocking knob
- 2) Power indicator light
- 3) Main start/stop selector
- 4) Belt start/stop push-button
- 5) Washing start/stop push-button
- 6) Emergency stop push-button
- 7) Water drain adjuster
- 8) 2nd washing adjuster
- 9) 1st washing adjuster
- 10) 3rd washing adjuster
- 11) Paddle start/stop push-button
- 12) Main switch

THE FEATURES

CONSTRUCTION

Totally 18/10 stainless steel.

Holding frame made of 18/10 tubular stainless steel supported by legs adjustable in height.

Washing drum equipped with water nozzles and perforated bottom grating.

Product unloading belt, side edges and bottom grating manually removable for cleaning.

Rinse sprayers fed with water from the mains, equipped with solenoid valve controlled by the unloading belt operation.

Counter-drum divided in two sections. 1st and 2nd washing, with drain pipe. For the ATIRMATIC 700 there are three washing sections.

Quick opening hydraulic valves for drain, washing regulation and water inlet, all made of stainless steel.

OPERATION

Automatic control of water level in the washing drum.

1st and 2nd washing phases with independent regulation of water flux. For the Atirmatic 700 there are three washing phases.

Product unloading belt operated by a geared motor.

Low-voltage control board (24 V). Protection degree IPX4.

TECHNICAL DATA

	Atirmatic	Atirmatic 700
Electric connection:	230/400V 3ph 50Hz +E	230/400V 3ph 50Hz +E
Power:	4 kW	7.35 kW
Cold water pipe:	1"	1" 1/2
Water drain pipe:	2"	2" 1/2
Basin capacity:	500 l	1500 l
Net weight:	400 kgs	800 kgs
Hourly production: light vegetables (approx.)	400 kgs	700 kgs
heavy vegetables (approx.)	800 kgs	1500 kgs



DESIGNED AND MANUFACTURED
TO CE STANDARD

ISO 9001 certified manufacturer

Nilma

LA SCIENZA DELLE GRANDI CUCINE

IDROVER

Salad and vegetable dryers



QUANDO LA FRESCHEZZA VUOL DIRE RISPARMIO

NILMA knows that time is valuable. For ceterers it is very important to dry within a few seconds any kind of vegetables, by keeping unaltered the natural freshness and without damaging the most delicate leaves. Besides, only if vegetables are completely dry, it is possible to save salad dressings. These are the aims that NILMA wanted to reach with IDROVER machines. IDROVER handles vegetables in a delicate way, while the machine itself is sturdy, being made of

stainless steel. It is easy to operate and safe, being equipped with an automatic lid locking device – as per european standards – and with a self-braking motor. The machine is available in two models: one for high capacities and the other smaller and cheaper. Nilma knows the problems referred to time and consumptions and this is why it happens so often that Nilma quick solves them.

Nilma
LA SCIENZA DELLE GRANDI CUCINE

IDROVER

Salad and vegetable dryers



IDROVER 40

- Outer case made of satin finished stainless steel 18/10.
- Shock-proof alimentary plastic cover equipped with safety micro-switch.
- Aluminium alloy feet with holes for floor fixing.
- Removable basket made of polished stainless steel 18/10.
- Self-braking motor 0.37kW - 230/400V 3Ph 50Hz equipped with motor load protector. Protection degree IP 54.
- Water drain 2".
- Weight of the machine: 56 Kg.
- Wall control board equipped with start/stop push button, tension light and 4' timer.



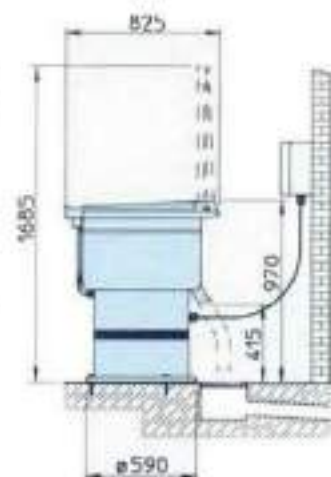
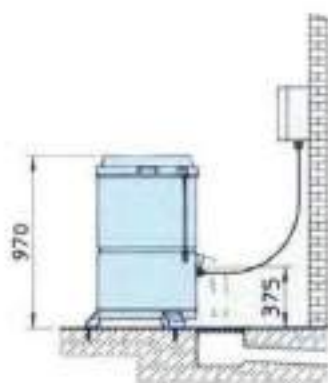
IDROVER 50

- Outer case made of satin finished stainless steel 18/10.
- Shock-proof alimentary plastic hinged cover.
- Lid safety locking-device with timed automatic opening/closing.
- Aluminium alloy base with holes for floor fixing.
- Self-balanced removable basket made of satin finished stainless steel 18/10.
- Counter-basket made of stainless steel 18/10 removable for cleaning.
- Self-braking motor 1.1kW - 230/400V 3Ph 50Hz equipped with motor load protector. Protection degree IP 54.
- Water drain 2".
- Weight of the machine: 100 Kg.
- Wall control board equipped with start/stop push button, lid-locking warning light, tension light, 4' timer.



SPECIFICATIONS

	Idrover 40	Idrover 50
Drying time (min.)	2	2
Drum r.p.m.	700	700
Basket volume lt	40	50
Basket diameter mm	430	470
Basket height mm	320	290



This prospect may not be reproduced either in full or in part - September 2003



DESIGNED AND MANUFACTURED
TO CE STANDARD

ISO 9001 certified manufacturer

Wilma

LA SCIENZA DELLE GRANDI CUCINE

IDROMATIC

Continuous cycle vegetable dryer



>> FINE DELICATE DRYING IN LARGE QUANTITIES

In order to enable processing of large quantities of vegetables while ensuring a longer product shelf life, it is now essential to use innovative processing systems that can guarantee optimal results at each phase, from cleaning to cutting, and from washing to accurate drying. The drying phase in particular is crucial in that it must ensure the product maintains the right humidity level, without spoiling it. With this in mind, Nilma developed **IDROMATIC**, a continuous cycle dryer that is especially meant to dry large amounts of product (up to max. 400 kg/h) in a fully automated way and without spoiling any leaves, not even the most delicate ones. Each working cycle lasts just a few minutes and is carried out through sequential phases (weighing, loading, drying and unloading) with no manual operation needed. Machine cleaning at end of processing is also automatic. Just by setting the machine

computer system, production data are given in real time and drum rotation speed is automatically adjusted. **IDROMATIC** is a compact, reliable machine, made entirely in 18/10 stainless steel, designed to sustain the heavy-duty, continuous operation required in the Fresh Cut produce ("4th range") industry. **IDROMATIC** is therefore considerably labour-saving, ensures high productivity, enables continuous-cycle processing and allows for most perfect drying while preserving product appearance, according to the highest Nilma technology standards.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

IDROMATIC

Continuous cycle vegetable dryer

>> THE FEATURES

CONSTRUCTION

- ▶ Bearing frame, paneling and hopper made of satin-finished stainless steel 18/10.
- ▶ Drum made of AISI 304 stainless steel.
- ▶ Anti-vibrating rubber feet.
- ▶ Product loading and unloading belts made of food-grade plastic, complete with bearing frames with wheels (two of them with brake).
- ▶ Loading cell for the weighing of inlet product.
- ▶ Fully inspectable for cleaning.

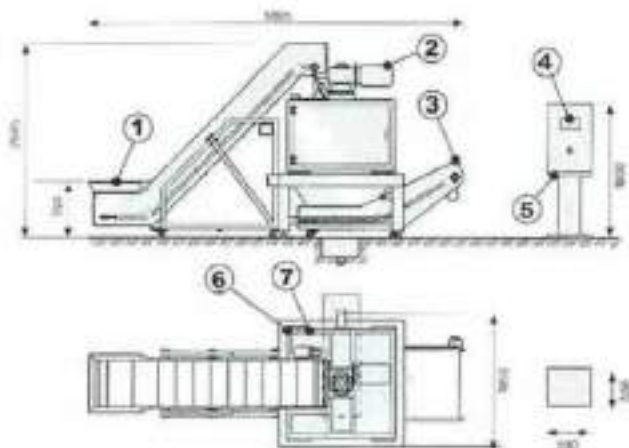
OPERATION

- ▶ Control board equipped with PLC, adjustable according to the kind and quantity of vegetables.
Low voltage (24 V) control board. Protection degree against humidity IEC529: IPX5.
- ▶ Safety devices on conveyor belts and on lids.
- ▶ Automatic air detaching system for remaining leaves.
- ▶ Machine automatic washing device.

TECHNICAL DATA

- ▶ Standard voltage (V): 230/400, 50 Hz, 3-ph +N+E
- ▶ Power (kW): 6
- ▶ r.p.m. rotation: 400
- ▶ Loading capacity (kg): 20
- ▶ Capacity of leaf vegetables (kg/h) 200-400
- ▶ Noise level dB_A 7B

Technical drawings and machine



KEY

- 1) Loading belt with wheels 2) Spin dryer bearing frame 3) Unloading belt with wheels 4) Power and control board
5) Power connection 6) Cold water inlet 7) Compressed air connection

Continuous processing line



Idromatic machine, together with Airmatic, Stripper II and the motorized sorting table, can be in-line assembled to obtain a continuous processing line.



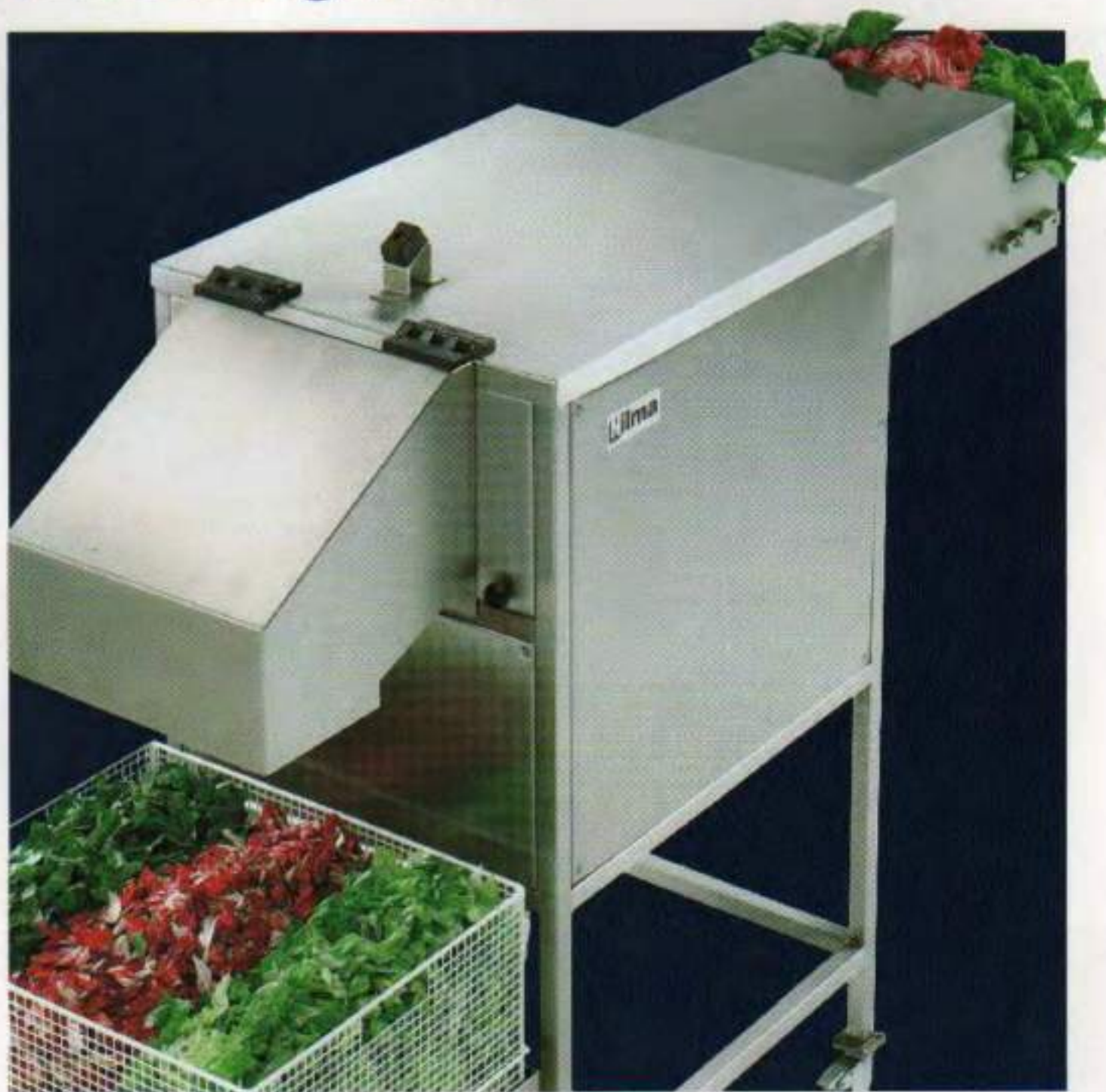
DESIGNED AND
MANUFACTURED
TO CE STANDARDS

ISO 9001 certified manufacturer

Nilma
LA SCIENZA DELLE GRANDI CUCINE

STRIPPER

For leaf vegetables



STRIPS OF FRESHNESS

Leaf vegetables as fresh as just picked and neatly cut as if cut by hand. With the possibility to reach an output of up to 7000 servings/hour with just one operator. This is STRIPPER, NILMA's solution for the requirement of economy, quality and work rationalizing of community kitchens.

STRIPPER ensures:

- a perfect presentation of all kinds of leaf vegetables, thanks to an exclusive cutting system which neither smashes nor bruises the product

- absolute working safety
 - labour saving and time cutting-down through high operation speed and ease of use.
- STRIPPER has proven ideal in commissaries, hospitals, canteens and food processing industries.

Nilma

STRIPPER

For leaf vegetables



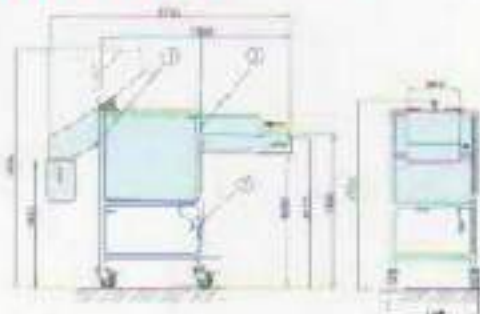
STRIPPER I



1. Feeding hopper lever
2. Wall-mounted control box
3. Emergency stop button
4. Processed product container



STRIPPER II

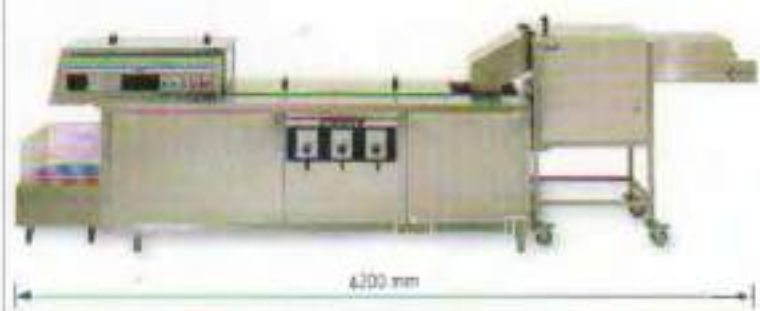


1. Discharge release hand wheel
2. Control box
3. Electric wiring

- Constructed from 18/10 stainless steel, satin-finished.
- Manual product feeding
- Production capacity: 150 to 250 kg/h
- Available cutting heights: 12-18-24-30-36 mm.
- Set of cutting tools removable for cleaning and replacement operations.
- Feeding size: 250x190 mm.
- Low voltage control box equipped with start/stop push buttons and power indicator.
- Safety devices on product feeding, motor case and product collecting basket.
- Installed power: 1.1 kW - 230/400.3.50+E
- Overall dimensions: 750x560x1115 mm.

- Entirely constructed from 18/10 stainless steel, satin-finished.
- Framework mounted on casters with brake.
- Automatic product feeding by belt.
- Food-grade PVC belt with stretcher.
- Production capacity: 700 kg/h
- Available cutting heights: 12-18-24-30-36 mm
- Set of cutting tools removable for cleaning and replacement operations.
- Low voltage control box equipped with start/stop push buttons and power indicator.
- Feeding belt width: 380 mm
- Safety devices on the feeding and discharge sides.
- Installed power: 1.75 kW - 230/400.3.50+E
- Overall dimensions: 1730x640x1330 mm

Salad cutting and washing line including Automatic and Stripper II



DESIGNED AND MANUFACTURED
TO CE STANDARDS

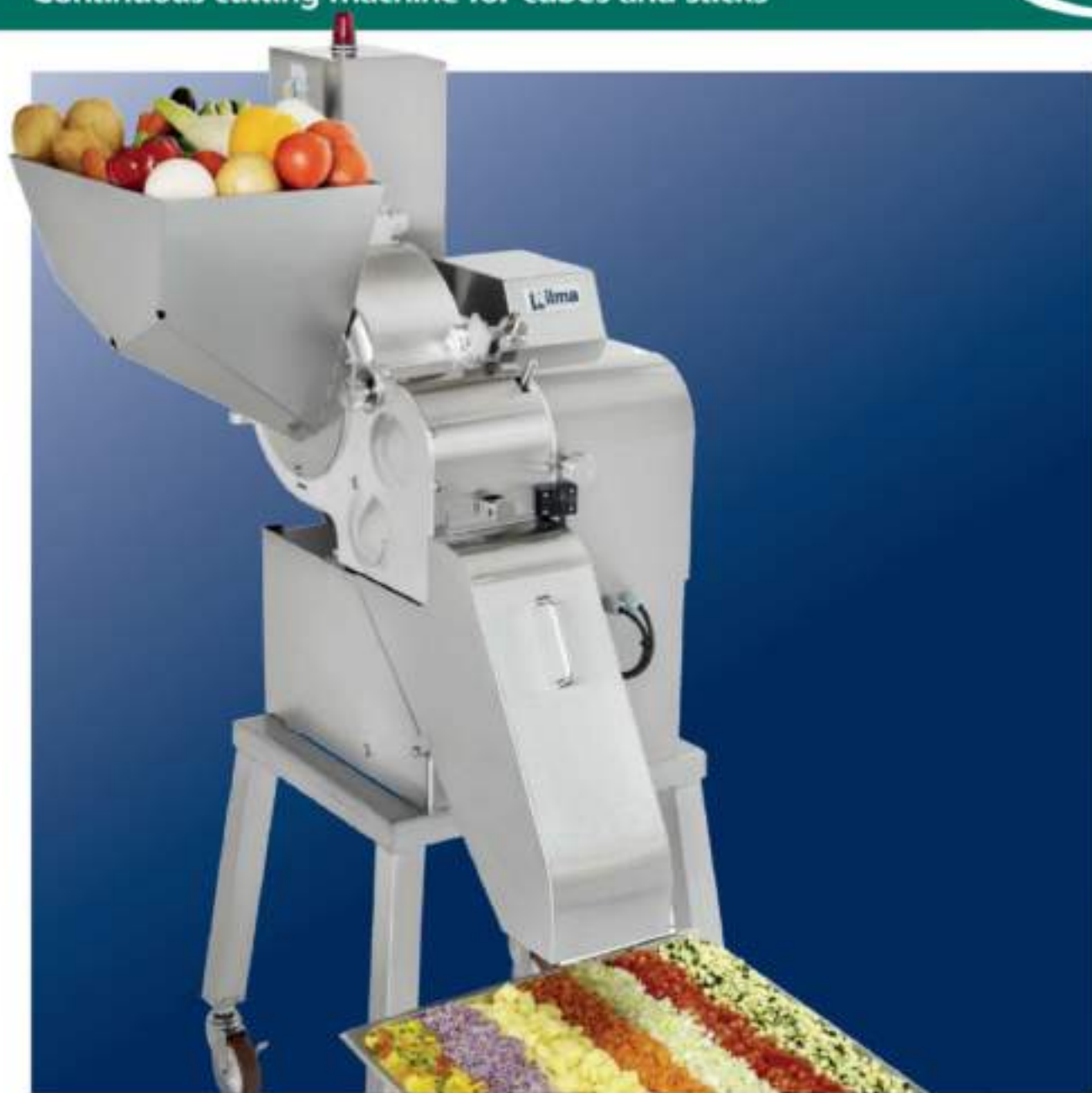
ISO 9001 certified manufacturer

Wilma

LA SCIENZA DELLE GRANDI CUCINE

TCB 203

Continuous cutting machine for cubes and sticks



CUBES AND STICKS: ONE MACHINE

Our **TCB 203** vegetable cutter has been designed to continuously cut into cubes and sticks large quantities of vegetables, tubers, fruit and other food products.

TCB 203 is simple and quick to use. It simply needs the product to be loaded into the hopper and, in a matter of seconds, the product will come out perfectly cut into the desired shape and measure. The cutting system uses the principle of centrifugal force to push the product towards the set of knives, without squashing it.

A special device makes it possible to adjust the cutting speed, ensuring a perfect result also for the most delicate and juicy products, to the benefit of a perfect presentation and a longer shelf-life.

TCB 203 allows to obtain, with minimal processing waste, cubes and sticks starting from 3 mm up to 30 mm with a maximum hourly capacity of 1000-1500 Kg.

Every part of **TCB 203** can be readily disassembled to change the knife set or to clean the machine.

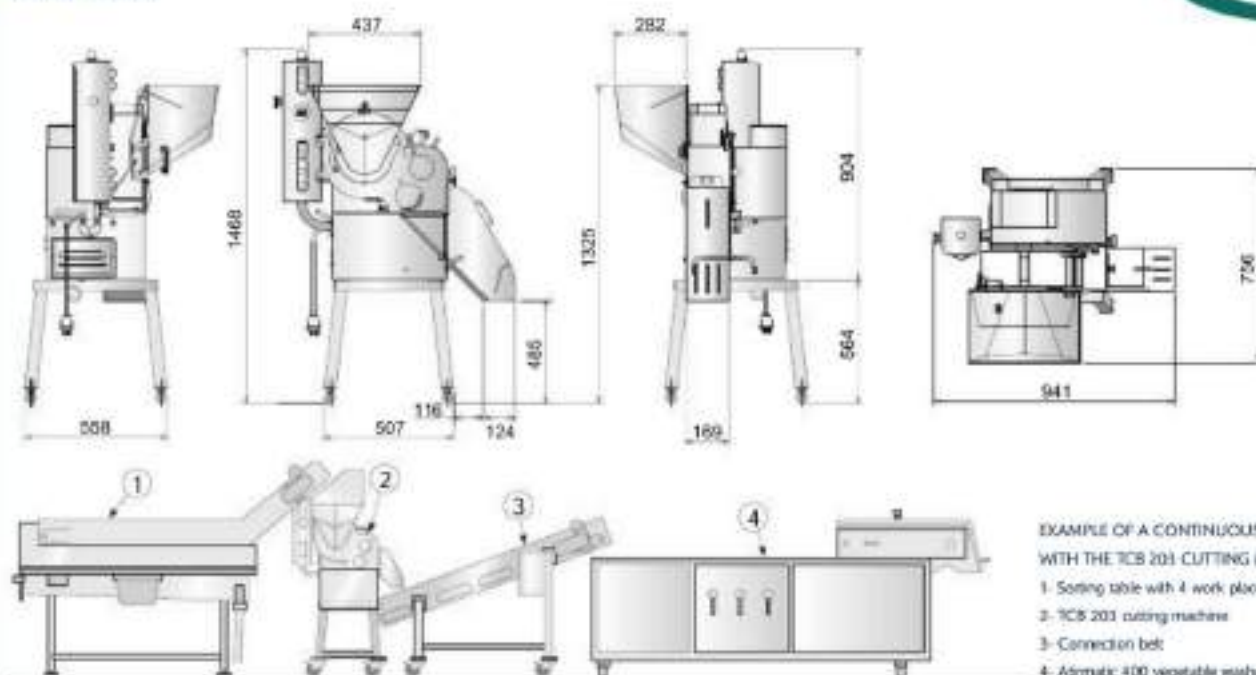
TCB 203 is an innovative cutting machine ideal for large kitchens and food producers, that ensures large production outputs, minimum labour needs, impeccable performance and a long product shelf-life.

Ilma

LA SCIENZA DELLE GRANDI CUCINE



TECHNICAL DRAWINGS TCB 203



EXAMPLE OF A CONTINUOUS LINE WITH THE TCB 203 CUTTING MACHINE

1. Sorting table with 4 work places
2. TCB 203 cutting machine
3. Connection belt
4. Admate 400 vegetable washer

FEATURES

CONSTRUCTION

- Full 18/10 stainless steel construction, anticorrosive alloy parts. Treated stainless steel blades.
- Loading hopper, protective casing, knife group and unloading hopper easy to disassemble for cleaning.
- Machine equipped with four st/st wheels with brake.

FUNCTIONS

- St/st control panel with: main switch, on/off control, power indicator, emergency button, speed adjustment knob, working speed display, malfunction light.
- Safety guards on self-loading hopper, on product outfeed and casing opening.
- Maximum size of product to be processed: 80x80 mm.
- Output rate: 300 to 1500 Kg/h (depending on product and dice size).

Production examples:

Product	Dice size	Output rate
Onions	3 x 3 x 3 mm	300 kg/h
Carrots	10 x 10 x 10 mm	700 kg/h
Zucchini	20 x 20 x 20 mm	1000 kg/h
Potatoes	20 x 30 x 30 mm	1500 kg/h

ACCESSORIES

- Complete sets of blades and blade guides for the following dice sizes: 3x3x3 - 5x5x5 - 7,5x7,5x7,5 - 10x10x10 - 15x15x15 - 20x20x20 mm 20x30x30 mm. Other sizes available on request.

Technical data

Power supply	1 - 230V 50 HZ
Installed power	KW 0.75
Weight	Kg 102
Dimensions	941x756x1468 (h) mm



TVN 202

Continuous cycle cutter with infeed conveyor



>> VEGETABLES... AND MORE

Continuous cutting into slices, sticks, juliennes of every kind of vegetable, fruit, fish or other product has become a necessity for food processing firms and professional kitchens... and when there are large quantities of product to be cut and there can be no compromise on quality results, you need a machine that is versatile, fast and easy to use: cutter **TVN 202** is the best solution.

The product is fed in by an adjustable-speed conveyor and conveyed towards the knife set in a regular, continuous way by a pressing belt located above the inlet; the machine comes with a set of cutting disks to achieve the required thickness and shape.

The regular, clean cut results in impeccable presentation of

vegetables, leaf vegetables, fruit, even if juicy, and guarantees long product shelf-life.

The **TVN 202** cutter can also be effectively used in the fresh-cut sector, in line with the *Atimatic* washer, or for the preparation of seafood salads.

Once again Nilma has designed a technologically advanced machine that will enhance quality and speed up production in food processing firms and large kitchens.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

TVN 202

Continuous cycle cutter
with infeed conveyor

FEATURES

CONSTRUCTION

- Full stainless steel 18/10 construction, parts in anticorrosive material.
- Conveyor belts of food-grade PVC, width 120 mm.
- Length of product outlet door exceeds standard size.
- Discharge hopper equipped with water connection.
- Completely disassemblable for cleaning.

FUNCTIONS

- Control panel with: on/off control, power indicator, emergency stop, control for operation of infeed conveyor in both directions, digital display constantly showing machine operation status, function memorized for subsequent cycles, digital adjustment of cutting thickness, blade rotation display, functioning alarm light.
- Safety guards on infeed conveyor, on product discharge and on mechanical parts casings.
- Output rate: from 200 to 4000 Kg/h (depending on type of cut and type of product).



Dual blade disk



Julienne disk



Standard unit

Accessories

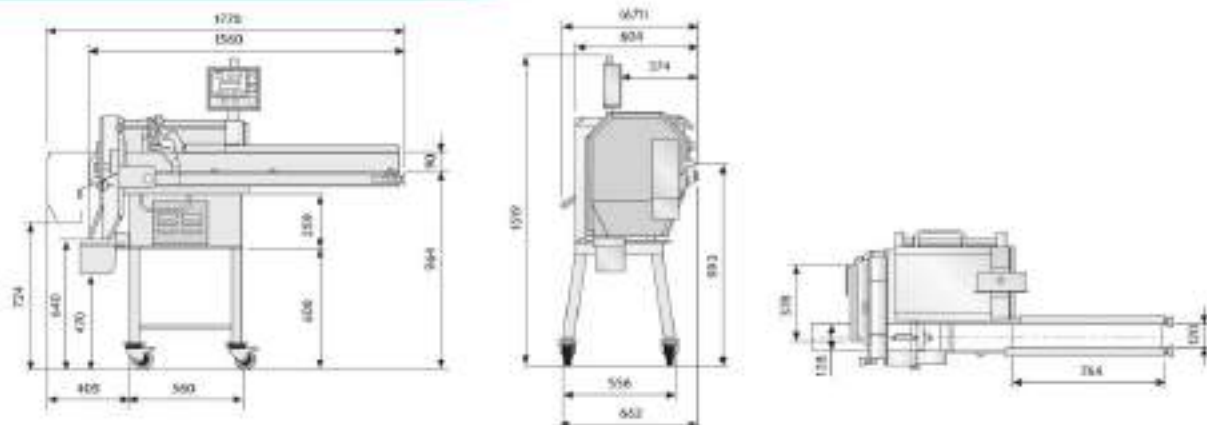
- Standard cutting unit, with two high-resistance treated stainless steel blades. Adjustable cutting thickness:
 - from 0.5 mm to 40 mm (standard knife set using two blades);
 - from 2 to 80 mm (standard knife set using one blade).
- Slicing disk with two blades, with cutting thickness adjustable from 1 to 10 mm.
- Slicing disk with fixed blades from 1 to 15 mm.
- Sick cutting disk 10 x 10 - 2 x 2 - 1,4 x 1,8 mm.
- Four stainless steel wheels: two fixed and two castors with brake.

Technical data

Power supply:	230 V single phase
Installed power:	kW 0,95
Weight:	Kg 143
Dimensions:	671x1324x1447 (h) mm
Dimensions of product infeed:	120 x 90 (h) mm



Technical drawings



EXAMPLE OF CONTINUOUS LINE
WITH CUTTER TVN 202

- 1- Sorting table with 4 work stations
- 2- Cutter TVN 202
- 3- Cabinet washer connection belt
- 4- Vegetable washer model Almaris 600



DEVICE MANUFACTURED TO
HARMONIZED STANDARDS,
WITH CE MARKING

ISO 9001 certified manufacturer

Nilma
LA SCIENZA DELLE GRANDI CUCINE

NILMA S.p.A. Via E. Zacconi, 24/A - 43100 Parma - Tel. +39.0521.785241 - Fax +39.0521.774642 - www.nilma.it • nilma@nilma.it

Nilma reserves all rights to make all changes and technical updates it considers necessary, without prior notice.

VEGETABLE CUTTING MACHINES

RG100 • RG200 • RG250 • RG350 • RG400



THE GREATEST VERSATILITY AND PRODUCTIVITY IN A VERY COMPACT SPACE

The **RG Vegetable Cutting Machines** offer the perfect solution to the following problems: reduction of preparation times, a perfect presentation of processed vegetables, the need for a wider and more varied menu, the observance of high hygienic standards.

Thanks to their operating speed, versatility and easy use, the Nilma **RG Vegetable Cutting Machines** can slice, chop, dice and shred not only vegetables and roots, but also fresh and dried fruit, bread and cheese.

All this taking little space and in a very short time. The exclusive feed hoppers make the introduction

of all products extremely simple, allowing a clean and precise cut.

Thanks to the wide range of cutting tools, it is always possible to obtain the required shape and thickness, ensuring a perfect presentation. This also applies to soft products like tomatoes.

All these features make the **RG Vegetable Cutting Machines** an ideal equipment for the kitchens of commissaries, hotels, restaurants and food processing facilities, where the quality of the results is very important, as well as the labour saving, the versatility of use, the reliability and the safe operation.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

FIVE MODELS FOR

To slice, dice, grate, chop, shred, etc. vegetables, fruit, mushrooms, nuts, almonds, dry bread, cheese, all of this with each model!



RG 100

suitable for about 50 to 200 portions



RG 200

suitable for about 200 to 400 portions



RG 250

suitable for about 400 to 600 portions

100 USES



5 feed hopper



6 4-tube insert



7 manually-operated push feed attachment



8 pneumatic push feed attachment



4 product collecting trolley



RG 350

suitable for about 600 to 1000 portions



3 feed hopper

RG 400

suitable for more than 1000 portions and for food processing industries





ACCESSORIES

>> FOR ALL MODELS

- Cutting tools
- Wall-rack for cutting tools. It saves space and prevents blade damages.

>> RG100 and RG200:

- Pipe insert include pestle (pict.1)

>> RG250:

- Floor machine frame (pict.2)

>> RG350:

- Floor machine frame (pict.2)
- Feed hopper, made of 18/10 stainless steel, with safety devices, for continuous cutting of large quantities of round products, such as potatoes, onions, tomatoes, nuts, dry bread (pict.3).
- Product collecting trolley, made of 18/10 stainless steel, with GN 1/1 container, h. 200 mm. (pict.4)

>> RG400:

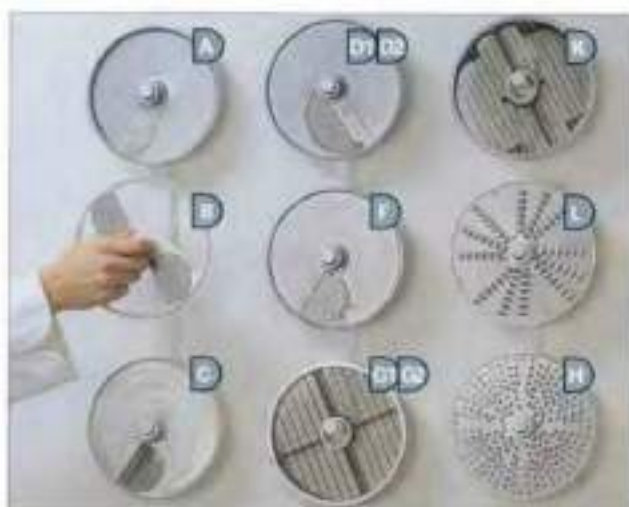
- Product collecting trolley, made of 18/10 stainless steel, with GN 1/1 container, h. 200 mm. (pict.4)
- Feed hopper, made of 18/10 stainless steel, with safety devices, for continuous cutting of large quantities of round products, such as potatoes, onions, tomatoes, nuts, dry bread (pict.5).
- Feed cylinder, made of anticorodal, to be used with the following accessories:
 - 4-tube insert (one tube with \varnothing 45 mm, one tube with \varnothing 63 mm and two tubes with \varnothing 73 mm), for the cutting of carrots, cucumbers, leeks, celery and peppers (pict.6).
 - Manually-operated push feed attachment (max. diameter for product introduction: 200 mm, cylinder volume: 7 l.) for the cutting of cabbage, carrots, lettuce, cheese (picture 7).
 - Pneumatic push feed attachment, made of 18/10 stainless steel, with 3 speeds and pusher with adjustable pressure (pict.8).
 - Electro-compressor for pneumatic insert



VEGETABLE CUTTING MACHINE

RG100 • RG200 • RG250 • RG350 • RG400

>> A WIDE RANGE OF CUTTING TOOLS



wall-rack

A Standard slicer

- slices firm products, such as root vegetables.
- dices in combination with type G1 dicing grid, in the heights 4.5-6-10 mm, and with type G2 dicing grid, in the heights 15 and 20 mm.

B Dicing cutter

- in combination with type G1 dicing grid, from 12.5 x 12.5 mm upwards, dices root vegetables (potatoes also precooked, but hard), cabbage, etc.

C Crimping slicer

- for ripple slicing of root vegetables

D1 Fine cut slicer, two blades

- slices firm and soft products, such as potatoes, onions, cucumbers, mushrooms, etc.
- shreds cabbage

D2 Fine cut slicer, one blade

- slices firm and soft products, also juicy, such as root vegetables, tomatoes, lemons, bananas, mushrooms, etc.
- shreds lettuce.
- in combination with dicing grid from 10 x 10 mm upwards, the 4 mm slicer chops onions.
- the 4, 6 and 10 mm slicers dice in combination with type G1 dicing grids.
- the 14 and 20 mm slicers dice in combination with type G2 dicing grids.

F Julienne cutter

- for julienne cut
- 2.5 x 6 for shredded cabbage.
- 10 x 10 for curved french fry potatoes

G1 Dicing grid

- dices root vegetables, potatoes, cabbage, fruit, etc., in combination with the suitable standard and fine cut slicers.
- N.B.: Type G1 dicing grids cannot be combined with 14, 15 and 20 mm slicers – see dicing grids (G2).*

G2 Dicing grids

- dice root vegetables, potatoes, fruit, etc. in combination with 14 and 20 mm fine cut slicers, and with 15 and 20 mm standard slicers.

H French fry grid

- cuts straight potatoes (french fries), in combination with the 10 mm fine cut slicer.

K Raw food grater

- grates raw potatoes, dry bread, almonds, nuts, etc.
- the 6 or 8 mm are commonly used for grating pizza cheese.
- the 8 mm is used for shredding cabbage.

L Fine grater

- grates raw potatoes, radish, dry bread, hard cheese, etc.

>> CUTTING SIZES (mm)

	A	B	C	D2	D1	F	G1	G2	H	K
RG100	8-10	12.5	4.5	1-1.5-2	3-4-6-10-14	2x2 2x6 4.5x4.5 8x8	2.5x2.5 3x3 6x6 10x10	7.5x7.5 10x10 15x15 20x20		1.5-2-3-4.5-6-8-10
RG200 RG250	6-8-10-20	12.5	4.5	0.5-1 1.5-2	3-4-6-10-14	2x2 4.5x4.5 8x8	2.5x2.5 6x6 10x10	6.25x6.25 7.5x7.5 10x10 12.5x12.5 15x15 20x20	10	1.5-2-3-4.5-6-8-10
RG350 RG400	4.5 6-10 15-20	12.5	4.5	0.5-1 1.5-2-3	4-6-10 14-20	2x2 2.5x6 6x6	2.5x2.5 4.5x4.5 10x10	6.25x6.25 7.5x7.5 10x10 12.5x12.5 15x15 20x20 25x25	10	1.5-2-3-4.5-6-8

VEGETABLE CUTTING MACHINES

RG100 • RG200 • RG250 • RG350 • RG400

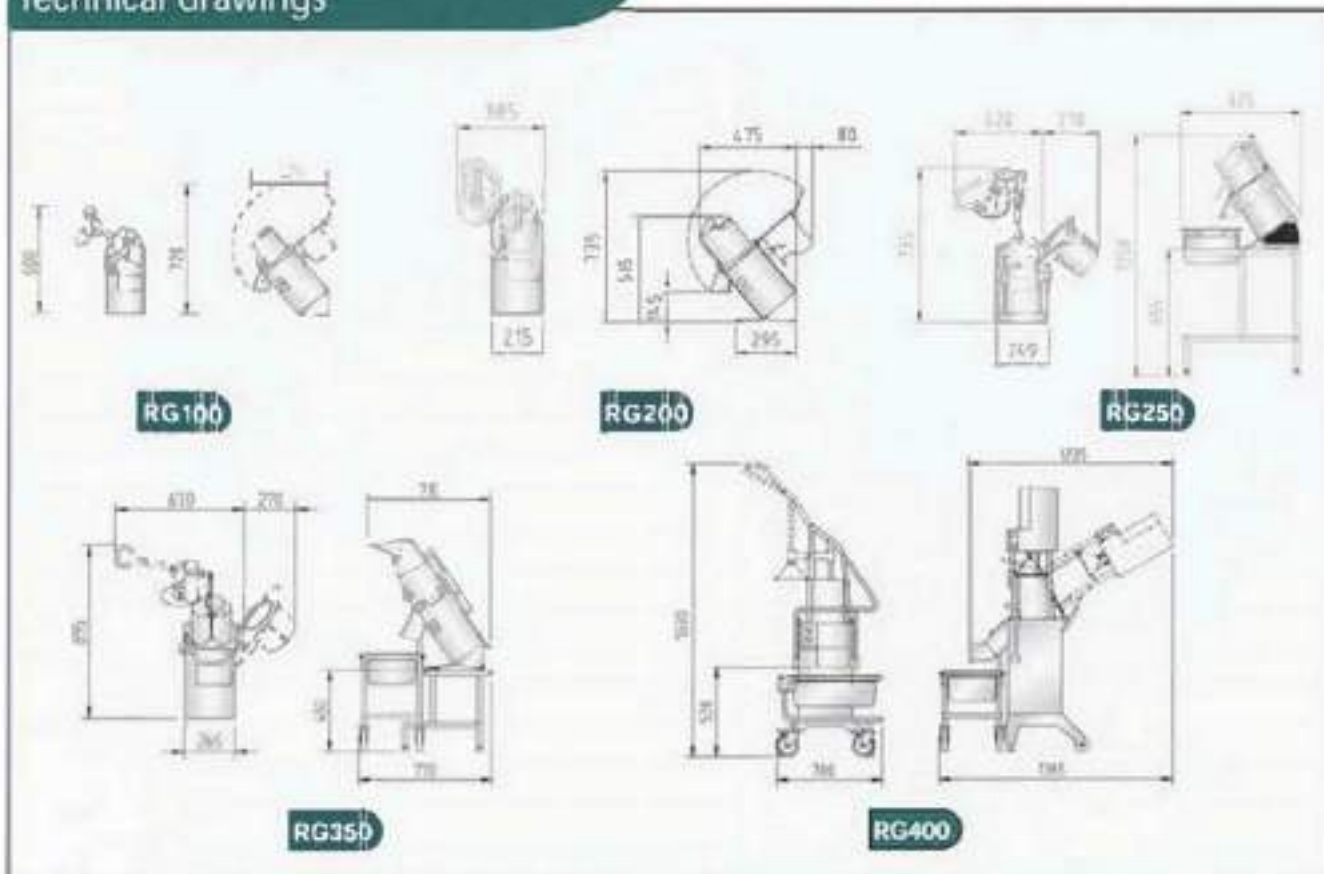
THE FEATURES

- Housing made of anodized aluminium with mechanical parts made of 18/10 stainless steel.
- Safety devices.
- Transmission: geared motor.
- Cutting tools made of aluminium alloy, with blades made of treated stainless steel.
- Double speed for the RG 400 model.

TECHNICAL DATA

	RG 100	RG 200	RG 250	RG 350	RG 400
Electric connection	230 V 1ph 50Hz	230 V 1ph 50Hz	230 V 1ph 50Hz	400-230V 3ph 50Hz	230 V-3ph 50Hz 400 V-3ph 50Hz
Power	0,21 kW	0,37 kW	0,37 kW	0,75 kW	0,9/1,5 kW
Weight	16 kg	18,5 kg	21 kg	32 kg	55 kg
Hourly capacity	300 kg	400 kg	480 kg	720 kg	2400 kg

Technical drawings



PIONEER

Fast potato & carrot peeler



WORKING QUICKLY AND ACCURATELY WITH MINIMUM WASTE

These three basic features are incorporated in Pioneer, the peeler that allows you to finely peel your potatoes and carrots in only two minutes, and with a minimum amount of waste. The special design of the carborundum-lined disk and baffles ensures a uniform distribution of the peeling action over the entire surface of the product, resulting in less waste. A timer is included, to set peeling times and avoid unnecessary overpeeling of the product. Skins

are instantly disposed of by a water jet and collected in a stainless steel filter to prevent floor drain from jamming. At the end of work, the peeling disk and filter are easily removed and cleaned for improved hygiene: an important aspect which, combined with fast operation and reliability, makes

Pioneer an indispensable peeling unit for modern bulk food processing.

Wilma

LA SCIENZA DELLE GRANDI CUCINE

PIONEER

Fast potato & carrot peeler

ACCESSORIES:

SORTING TABLE

Designed to accommodate two operators, to allow large product capacity and easier trimming. Manufactured in 18/10 stainless steel, it is equipped with: product tank, chopping board made of food-grade plastic with drop hole, waste bin, mixing tap and over-flow pipe.



The version of the Pioneer intended for use in combination with the sorting table is higher than the standard's, to enable the product dumping into the table tank. The potato peeler can be positioned on either left or right side of the table.



SKIN COLLECTION FILTER

It is an optional accessory designed to prevent floor drain from jamming with potato peeling waste.

It is made of 18/10 stainless steel and it consists of a small vat with a removable perforated sheet grate installed just underneath the Pioneer drain pipe.

MODELS AND DESIGN FEATURES

Frame and peeling chamber made of 18/10 stainless steel.

Feet and peeling disk in anticorrosional aluminium. Hard plastic lid hinged to the machine equipped with safety lock.

The peeling disk can be removed for cleaning without using any tool or device.

Approved safety devices on the lid and product discharge.

The motion is transmitted to the peeling disk by a geared motor with gears in oil bath.

The gears motor is protected against power overload.



Control box including: start/stop push-button, product discharge push-button, timer for peeling time setting, power led.

Low voltage (24 V) controls.

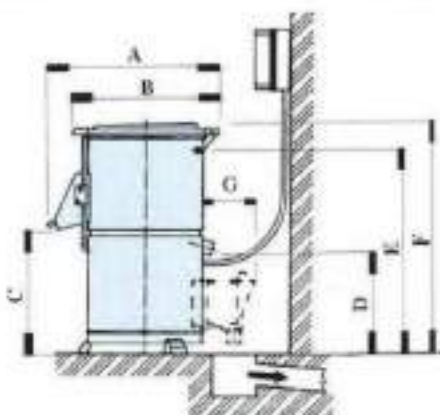
Protection degree IP 54.

OPERATING FEATURES

Model	K8	K15	K30
Loading capacity Kg	8	15	30
Peeling time, minutes	2-3	2-3	2-3
Water inlet, \varnothing mm	3/4"	3/4"	3/4"
Drain, \varnothing mm	2"	2"	2"
Motor power kW	0.55	0.55	1.1
Power connection V	230/400 50Hz +E	230/400 50Hz +E	230/400 50Hz +E
Weight of machine Kg	51	65	87

DIMENSIONS

A mm.	550	610	700
B mm.	525	575	660
C mm.	565	570	575
D mm.	440	440	430
E mm.	830	890	945
F mm.	950	1020	1080
G mm.	220	220	240
H mm.	1190	1260	1320
I mm.	2180	2235	2340



This pamphlet may not be reproduced without the full or in part - September 2003



DESIGNED AND MANUFACTURED
TO CE STANDARDS

ISO 9001 certified manufacturer

Nilma

LA SCIENZA DELLE GRANDI CUCINE

NILMA SpA - Via E. Zaccaroni 24/A - 43100 Parma - ITALY - Tel. +39 0521 785241 - Fax +39 0521 273050 - E-mail: export@nilma.it - Home Page: www.nilma.it
Manufactured by NILMA s.p.a. - Italy - The factory reserves the right to make all the necessary alterations and technical improvements without notice

PIONEER SYSTEM

Automatic line for potato peeling



A COMPLETE PEELING SYSTEM FOR HIGH OUTPUT REQUIREMENTS

The "PIONEER INTEGRATED SYSTEM" features a high productivity combined with a considerable ease of handling: one peeling assembly allows processing big amounts of potatoes reducing fatigue, down time and space requirements, resulting in a quick, rational work flow. The work sequence starts at the feeding hopper: the potatoes are lifted up by a special elevator and conveyed to the peeler. Then they are automatically peeled and washed, until dumped into the finishing vat for the final operation. During the last phase, the

potatoes are placed on a special chute and collected in a suitable trolley. The "Pioneer Integrated System" is available in two versions, i.e. with one or two potato peeling machines, for an output of 600 and 1200 kg/hour of finished product, respectively. An effective quick preparation system which results in labour saving, and a more economical management of the catering business.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

Each and every potato with

Pioneer integrated system

The single and double Pioneer integrated systems differ in productivity as well as in a number of construction specifications. The double system features two potato peelers, a potato bi-directional diverting device, an automatic air-operated device for door opening and closing on the potato peelers, a six eight-station finishing vat and a conveyor for the finished product discharge.

The mono-directional integrated system is equipped with an air-operated device for door opening and closing on the potato peeler. The finishing vat features four working stations, whilst the product is discharged into the trolley via a special chute.

Mono-directional elevator

The elevator starts operating after each peeling cycle: the peeling time and batch of potatoes to be processed can be easily programmed on the control board located on lifting column.

The feeding hopper, with a capacity of approx. 200 Kgs of product, is equipped with a pre-washing system.

The hopper is coupled to the endless screw elevator, which lifts up the potatoes. Finally, a special diverting device feeds the PIONEER K/30 potato peeler.

Bi-directional elevator

The feeding screw elevator draws the potatoes from the hopper (200 Kgs capacity), and feeds two potato peelers through a special flow divider: this air-operated device alternatively diverts the potatoes flow to either of the peelers. The batch of product to be processed and the suitable peeling times can be selected from the control board located on the lifting column.

Pioneer K/30 double

The combination of two PIONEER K/30-A potato peelers allows handling 60 Kgs of potatoes in alternate cycles.

The double system ensures a perfect peeling, with minimum product waste. The two programmable machines automatically discharge the product into the finishing vat thanks to a door opening/closing device. This device is controlled by a number of pneumatic pistons fixed to the peelers outlets. The opening/closing times are controlled by the programmer included in the control box.

Six-eight station finishing vat

The finishing vat consists of two large sections for the potato collection, two cutting boards with openings and underlying waste bins, and a central conveyor to discharge the finished product into special trolleys.

This section, designed to easily accommodate six-eight operators, enables a trouble-free, accurate finishing operation. Besides, an additional push-button for the peeling cycle start/stop is provided at operator's reach.

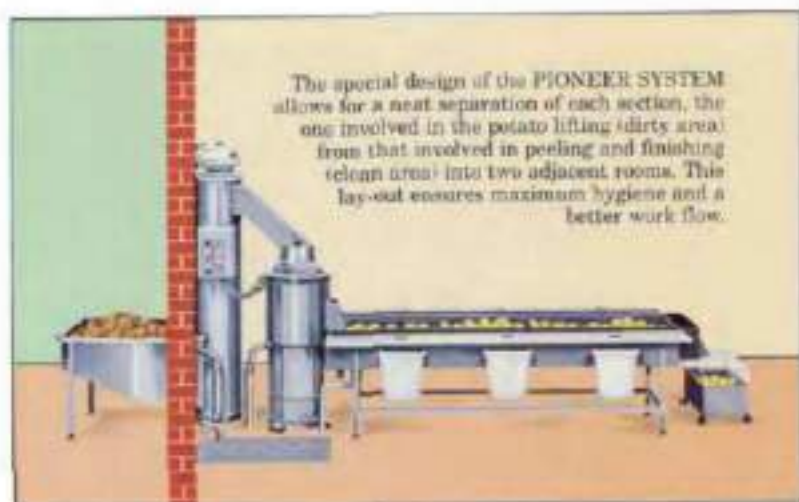
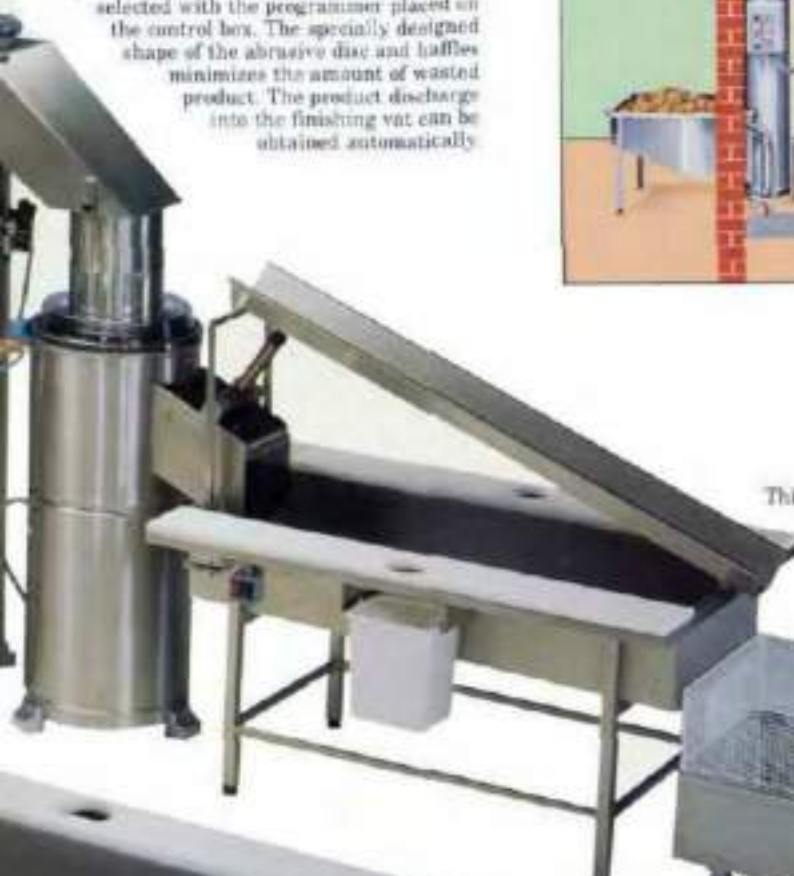


no down-time or waste

automatic air-operated
potatoes are dumped

Pioneer K 50 peeler

This versatile automatic peeler features an output of 50 Kgs of product per cycle. The peeling time (2 to 3 minutes) can be easily selected with the programmer placed on the control box. The specially designed shape of the abrasive disc and baffles minimizes the amount of wasted product. The product discharge into the finishing vat can be obtained automatically.



The special design of the PIONEER SYSTEM allows for a neat separation of each section, the one involved in the potato lifting (dirty area) from that involved in peeling and finishing (clean area) into two adjacent rooms. This lay-out ensures maximum hygiene and a better work flow.

Four-station finishing vat

This section was designed for a more rational potato finishing and soaking. It consists of a large vat for the product collection, two cutting boards made of food-grade plastic, with special openings to drop into waste disposal bins. It is designed for 4 operators and features a chute for the finished product discharge into the trolleys. The working height is adjustable. Push-button to start/stop the working cycle are within the operator's reach.



Trolley

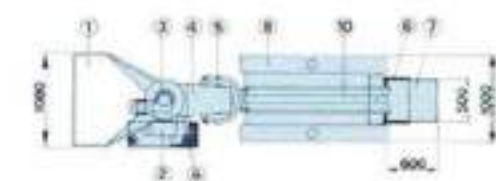
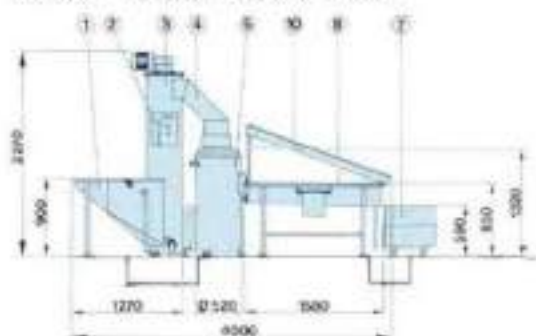
Both the single and double integrated systems are designed to operate with a trolley to collect the finished potatoes. The trolley can be replaced by a vegetable cutter of suitable size.



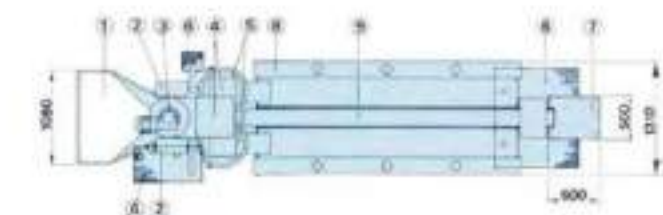
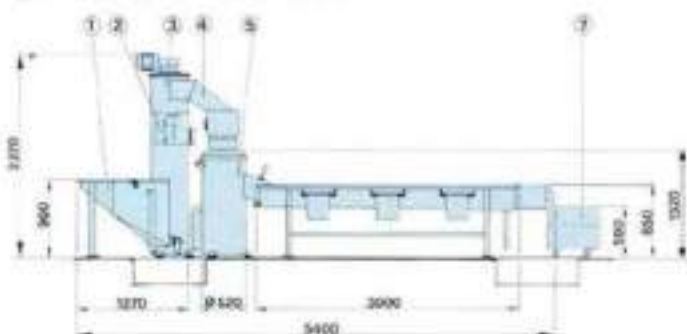
PIONEER SYSTEM

Automatic line for potato peeling

MONO - DIRECTIONAL LINE



BI - DIRECTIONAL LINE



KEY

- 1) Loading hopper
- 2) Control board
- 3) Endless screw elevator
- 4) Product diverting device
- 5) Potato peeler
- 6) Waste grid
- 7) Finished product trolley
- 8) Finishing boards
- 9) Potato discharge conveyor (double system)
- 10) Potato discharge chute (single system)

FEATURES

CONSTRUCTION

- Elevator, for single and double versions, made of 18/10 satin-finished stainless steel. Equipped with feeding hopper with pre-washing, over-flow pipe, 3/4" inlet for cold water and 2" discharge pipe. Lifting column with endless screw made of 18/10 stainless steel, with potato discharge conveyor.
- Potato peelers mod. K/30-A, made of satin-finished 18/10 stainless steel. Peeling disk, carborundum-coated, made of anticorodal, easily extractable for cleaning and maintenance. 1/2" inlet for cold water with solenoid valve. 2" discharge.
- Potato finishing vat, 4 or 6/8-stations, made of satin-finished 18/10 stainless steel. Cutting boards made of non-toxic material, with waste drop openings and underlying disposal bin.
- Trolley for finished product made of satin finished 18/10 stainless steel.

OPERATION

- Double-discharge elevator equipped with an air-operated product diverting device. Geared motor 1.5 kW for endless screw operation.
- Potato peeler mod. K/30-A equipped with an automatic device for door opening and closing.
- Geared motor 1.1 kW for peeling disc operation.
- 4-station finishing vat with chute for product discharge.
- 6/8-station finishing vat with central conveyor for product discharge, operated by a 0.2 kW geared motor.
- Low voltage control board including: power on-light, loading programmer, peeling programmer, potato peeler start button, elevator start button, cycle stop button, manual/automatic selector for door opening.

DIMENSIONS

		Single system	Double system
Length	mm	4.000	5.400
Width	mm	1.080	1.310
Height	mm	2.270	2.270

This copyright may not be reproduced either in full or in part, November 2002



DESIGNED AND MANUFACTURED
TO CE STANDARDS

ISO 9001 certified manufacturer

Wilma

LA SCIENZA DELLE GRANDI CUCINE

MAXIM

Fast onion peeler



FAST OPERATION IS AN IMPORTANT ASPECT

Maxim has been specifically designed to peel onions automatically.

All you have to do is to load the feeding hopper (up to seven Kg of product) and set the peeling time on the timer.

As onions are processed, a water jet instantly eliminates the skins. A stainless steel filter provided underneath the machine drain prevents

the floor drain from jamming with product waste. Thanks to its fine abrasive disk, Maxim peels delicately without damaging the product. The automatic onion peeler is another solution offered by Nilma to food processing requirements, ensuring excellent performance and savings in labour and running costs.

Nilma
LA SCIENZA DELLE GRANDI CUCINE

MAXIM

Fast onion peeler



Thanks to the modulated action of the peeling disk, Maxim peels onions evenly and delicately.



SKIN COLLECTION FILTER

It is an optional accessory designed to prevent floor drain from jamming with onion peeling waste. It is made of 18/10 stainless steel and it consists of a small vat with a removable perforated sheet grate installed just underneath the Maxim drain pipe.



DESIGN FEATURES

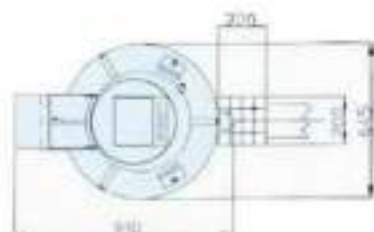
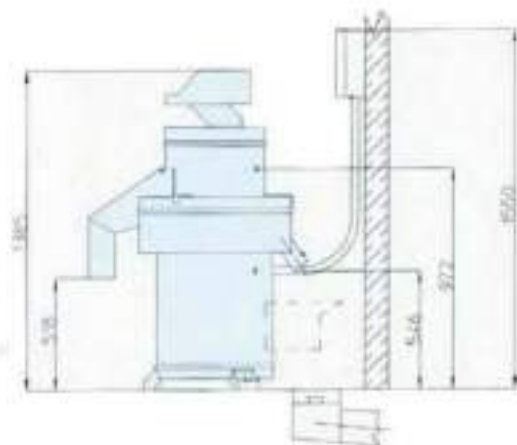
Entirely made of 18/10 stainless steel.
 Feet in anticorrosional aluminium with fixing hole.
 Feeding hopper with safety micro-switch.
 Product discharge opening with operator's guard.
 The motor is protected against power overload.
 Peeling disk directly coupled to the motor.
 External cylinder to collect and convey skins to the drain.



Low voltage (24 V) control board including: start/stop push-button, timer and power led.
 Protection degree IP 54.

OPERATING FEATURES

Loading capacity	7 Kg
Peeling time, minutes	2 approx.
Water inlet, ø	3/4"
Drain, ø	70 mm
Motor power	0.75kW
Power connection	230/400V•50Hz•3ph+E
Weight of machine	100 Kg



This pamphlet may not be reproduced either in full or in part - May 2004



DESIGNED AND MANUFACTURED
 TO CE STANDARDS

ISO 9001 certified manufacturer

Nilma

LA SCIENZA DELLE GRANDI CUCINE

BOXER

Quick garlic peeler



THE ONLY WAY TO AVOID AN UNPLEASANT WASTE OF TIME

Our garlic peeler BOXER has been designed to peel garlic in a quick, delicate manner and to minimize manual operations.

Garlic peeling is, in fact, one of the most annoying and unpleasant operations in the kitchens of catering establishments. After the cloves have been opened by hand, the operator will load the machine (up to 5 Kgs. per load): our BOXER will quickly, softly peel

each clove and immediately discharge the peel. This will be done within a pre-set time, and will save up to 90% of the time normally required for manual peeling. A high level of hygiene is ensured thanks to the abrasive disk, which can be easily taken off and washed with water in a few seconds.

Wilma

LA SCIENZA DELLE GRANDI CUCINE

BOXER

Quick garlic
peeler



The structure of the abrasive disk was designed to produce the most appropriate action to ensure a delicate, accurate peeling of garlic.



ACCESSORIES:



SKIN COLLECTING FILTER

It is an optional accessory designed to prevent the floor drain from getting obstructed by waste garlic peel. It is made of 18/10 stainless steel and it consists of a small container with a removable stainless steel mesh insert, installed just underneath the Boxer drain pipe.

THE FEATURES

DESIGN FEATURES

Entirely made of 18/10 stainless steel.
Feet in anticorrosive aluminium with fixing hole.
Lid made of transparent shock-proof plastic, equipped with safety microswitch.

Product outlet door with safety guard and closing handle.

Geared motor protected against overload cutout.
Stainless steel peeling disk, directly coupled to the motor.

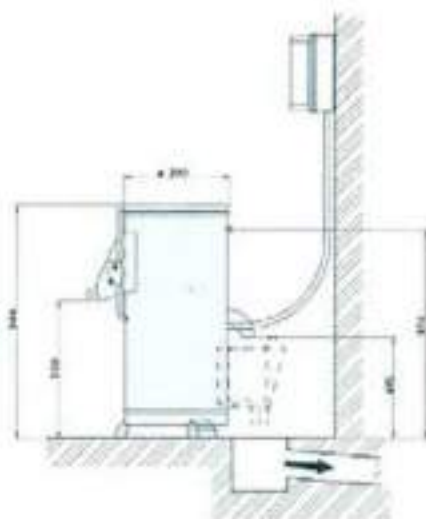
Device to convey the skins to the drain.

Low voltage control board (24 V), equipped with: power indicator, ON/OFF push button, timer and product discharge push button.
Protection degree: IP54.



SPECIFICATIONS

Loading capacity	5 kg
Peeling time	2-3 minutes
Water inlet, ϕ	3/4"
Drain, ϕ	60 mm
Installed power	0.4 kW
Power connection	230/400 50Hz 3ph + E
Weight of the machine	38 kg



Nilma

LA SCIENZA DELLE GRANDI CUCINE



DESIGNED AND MANUFACTURED
TO CE STANDARD

ISO 9001 certified manufacturer

CUT-BLEND&MIX

Three appliances for high-speed food preparation



QUICKLY AND WELL

Difficult, but not impossible, for the three Nilma appliances: the **VCB 61&62** vertical cutters, the **CC-34** combi-cutter and the **SB-4** blender. These essential appliances allow foods to be prepared quickly and to perfection, and are unrivalled in their class. Small but professional, solid and versatile, they take up very little space and are therefore ideal for restaurants, cooking centres, special diet kitchens, care homes, hospitals, school and company canteens and also for fast food outlets and supermarkets. They cut, mince, grate, slice, dice, blend and homogenise both fruit and vegetables, both meat and fish, or bread and cheese, and much more. They mix and make sauces, mayonnaise, mousses, mashed potato, dressings, chopped herbs, desserts, etc.

They help the chef in the most delicate, demanding tasks assuring extreme precision. It takes just a few minutes, or sometimes even seconds, for preparation processes that would take hours by hand. The (patented) blade shape and high-quality steels guarantee impeccable presentation and a longer product shelf life. Vegetables are cut cleanly, cold sauces are not heated up, and ingredients are not oxidised. All this is an assurance of better quality. The appliance is designed for easier handling and use. Cleaning after use is simple and immediate, since the dishwasher-friendly components are quickly dismantled. Operating safety is guaranteed. Quickly and well, now possible in all kitchens thanks to the new Nilma range of three machines.

Nilma

LA SCIENZA DELLE GRANDI CUCINE



SB-4 BLENDER

4 litre jug - speed adjustable up to 15,000 rpm

The **SB-4** is the ideal appliance for blending, mixing, chopping, stirring, whipping and homogenising products such as sauces, vegetables, fruit drinks, herb oils, cocktails, milk shakes, soups, smoothies, juices, etc.

The **SB-4** is the essential aid for bars, restaurants, the special-diet kitchens of clinics and hospitals, supermarkets and care homes, etc.

The specially shaped jug and exclusive cutting unit, together with the high blade speed, produce perfectly smooth, well mixed products every time, whether the jug is full to capacity or contains only a minimal amount.

The sturdy metal base gives the appliance excellent stability during processing.

Sprinter pulse function

The **SB-4** is fitted with the SPF system, a device which regulates the cutting speed from 700 to 15,000 rpm, and a sprinter pulse push-button that immediately increases the rotation speed of the blades to the maximum, when the appliance is in operation.

Combined with the special blade lengths, the SPF saves processing time and ensures exactly the required finish on every product.

The jug

The **SB-4** has an extremely lightweight, resistant, transparent 4 litre jug. The jug also has two solid handles for easier pouring. The jug (with blade unit), lid and dosing feeder are all dishwasher-friendly. Tilting tight lid for quicker opening and dosing, equipped with a micro-switch for absolute safety in use.

A funnel-shaped filling hole \varnothing 26 mm - 100 ml in the middle of the lid makes it easier to add ingredients during processing.



TECHNICAL SPECIFICATIONS

- Motor 1,000 W – 230 V single-phase, 50 Hz
- Jug of 4 litres, with graduated scale from 0.5 to 3.8 litres
- Motor overload cutout with automatic reset
- 10 A fuse with delay
- Electronic speed control from 700 to 15,000 rpm.
- PolyV belt drive
- Materials: housing in aluminium alloy, jug in tough polysulfone resistant to high temperatures (115°C), tough polypropylene lid, special high-resistant stainless steel blades, reinforced acetal jug base
- Operating safety ensured by mechanical microswitch on lid
- IP 34 degree of protection

VCB 61&62

VERTICAL CUTTERS

Innovative cutting system. 6 litre bowl, 2 speeds.

VCB 61&62 food processors are built to provide top capacity and performance, whether processing dry, liquid or juicy foods. They are ideal for chopping, mincing, mixing and homogenising: dressings, herb oils, butter, thickenings, batters, mayonnaise, sauces, mashed potato, pâtés, desserts, etc.

For processing meat, fish, fruit, vegetables, onions, parsley, walnuts, almonds, Parmesan cheese, mushrooms, chocolate, etc.

Removable bowl with tight lid

The bowl is 6 litres in capacity and has a lid with seal and inlet hole with tight cap. These features, together with the extra high central tube, allow processing of 4.3 litres of liquid products, 6 litres of dry products, and up to 2 kg of meat. All this with no splashes or product leaks.

Cool cutter system

The **VCB** cutter's patented knife unit includes not only two cutting blades at the bottom of the bowl but also two mixing blades. These upper blades push the product downward, onto the main cutting blades, guaranteeing perfectly uniform results, minimum product heating, shorter processing times and with no separation of the already processed product from its oil and fat contents. The blade unit has a special blade profile able to maintain sharpening for a long time.



Patented scrapers

Often, in food processors, the product remains out of reach of the blades because centrifugal force holds it against the sides of the bowl. To prevent this problem, the **VCB 61&62** cutters feature a patented system with four scrapers which separate the product from the sides and at the same time they move the ingredients back towards the knives, also with the appliance in operation. The four scrapers are operated, through a quarter of a turn, by a knob placed on the lid.



User friendly ergonomics

All **VCB** control functions (speed and pulses) are controlled by just one knob. Its convenient location allows the knob to be turned with the left hand, leaving the right hand free to feed product into the appliance. The lid of the bowl is transparent for a good view of the processing phases and it has a funnel-shaped filling hole (max. diameter 5 cm) which makes it easier to add ingredients without stopping the working process.

Easy to clean

The lid, knife unit, scrapers and bowl are easily dismantled and are dishwasher-friendly.

Safe

The **VCB** has three safety micro-switches and a mechanical motor brake, which means the knife stops rotating immediately when the machine is switched off or the lid locking arm is turned.

TECHNICAL SPECIFICATIONS

- Motor: 1500/900 W, Two speeds 1500/3,000 rpm (VCB 62); one speed 1500 rpm (VCB 61)
- Electrical connection: VCB 61 - 230 V single-phase, 50 Hz
VCB 62 - 230/400 V three-phase, 50 Hz
- Fuse holder: single-phase 10 A, delayed - three-phase 16 A, delayed
- Motor overload cutout
- Direct drive
- Safety system with three microswitches and mechanical motor brake
- IP 34 protection degree
- Materials: aluminium base, stainless steel bowl, special steel blades, polysulfone lid - handle - scrapers
- Noise level: 67 dBA
- Appliance weight: VCB 61: 25 kg - VCB 62: 21.2 kg

CC-34 COMBI CUTTER

**Two functions in one appliance.
4 working speeds.**



The **CC-34** combi cutter is ideal as a vegetable preparation machine for slicing, dicing, grating and cutting into strips not only fruit and vegetables but also bread, cheese, walnuts, mushrooms, etc., and as a cutter for chopping, mincing, mixing, and homogenising, for the preparation of sauces, meat, vegetables, fruit, mayonnaise, pesto, purées, chocolate, mousses, dressings, etc.

The **CC-34** is a professional appliance, the perfect compromise between a vegetable preparation appliance and a vertical cutter. Small and compact, it requires very little space and is easy to use and stow. It is ideal for restaurants, pizzerias, salad bars, fast food outlets and kitchens in general preparing up to 80 meals a day.

The ideal speed

The **CC-34** has four optimal cutting speeds: 500 and 800 rpm for the vegetable preparation machine, 1.450 and 2.650 rpm for the vertical cutter. This means that every product can be prepared perfectly with the most suitable speed, assuring optimal presentation.

The best hygiene

The **CC-34** is manufactured solely from hygiene certified materials. Surfaces are smooth for easy cleaning and have rounded corners to stop dirt building up in inaccessible zones. All appliance accessories are easily removable and dishwasher-friendly.

and ... the best materials

In the **CC-34** the base is manufactured of robust metal. The vegetable preparation feed head is in tough polycarbonate and the VCB bowl in stainless steel. The blades are in special stainless steel, selected for the best quality and strength, able to maintain sharpening for a long time.



TECHNICAL SPECIFICATIONS

- Four speed motor: vegetable preparation machine 500 and 800 rpm cutter 1.450 and 2.650 rpm and pulse control
- Electrical connection: 230 V single-phase, 50 Hz – 10 A delayed fuse
- Belt drive transmission
- Materials: sturdy aluminium base, polycarbonate lid and vegetable preparation insert, stainless steel bowl and blades, Xylex scrapers.
- Safety system with two micro-switches
- IP 34 protection degree
- Noise level: 67 dBA
- Weight: appliance body 8.8 kg – vegetable preparation insert 1 kg – cutter insert 1.4 kg – cutting discs 0.5 kg

THE VEGETABLE CUTTING MACHINE



The vegetable cutter feed head is fitted onto the appliance body with a turning movement. The vegetables can be inserted when the push-feeder is raised; when it is lowered, the appliance starts operation. A quick procedure that allows the processing of large volumes in complete safety.

The feed head includes a 0.9 litre mouth in which voluminous, round vegetables such as potatoes and tomatoes are placed, and a feed cylinder 53 mm in diameter, ideal for the guided cutting of long vegetables like carrots and courgettes.

A double safety system

When the vegetable cutter feed head is not fitted correctly, or the push-feeder is raised, the appliance will not work. This dual protective function allows completely safe operation.

Cutting tools for all occasions

The large assortment of cutting discs, 170 mm in diameter, available in the **CC-34** range, allows both firm and juicy products to be sliced, diced, cut into strips or grated. The knife blades are interchangeable. This means that complete replacement of worn discs is not necessary.



STANDARD SLICER
10 mm



FINE CUT SLICER
1/1,5/2/4/6/15 mm



CRUMBLING SLICER
4,5 mm



JULIENNE CUTTER
2x2/2,5x2,5
4,5x4,5/6x6
8x8/10x10 mm



DICING GRID
10x10/15x15 mm



GRATER
1,5/2/3/4
5/6/8/10 mm



FINE GRATER
EXTRA FINE GRATER
HARD CHEESE GRATER



SOFT DICING SET
8x8x8
10x10x10
12x12x12
15x15x15 mm

VERTICAL CUTTER



The bowl has a capacity of 3 litres, and thanks to the lid with seal it is capable of preparing large quantities of both dry and liquid products. The **CC-34** cutter is able to operate at two speeds, 1,450 and 2,650 rpm. It also has a handy pulse function which switches directly to high speed.

Exclusive features

The **CC-34** is fitted with a patented system of three scrapers which allow the product to be detached from the sides of the bowl during processing. The action of the blades on the whole product assures its perfect homogenising. The special shape and inclination of the cutting blades allow the product to be evenly mixed in short times.

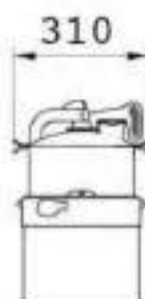
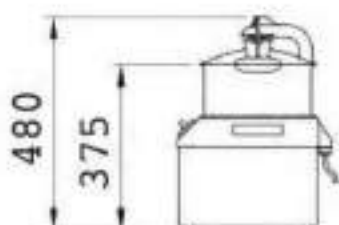
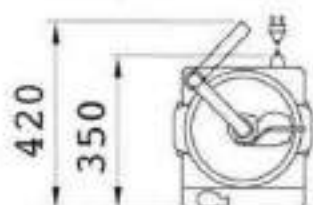


CUT-BLEND&MIX

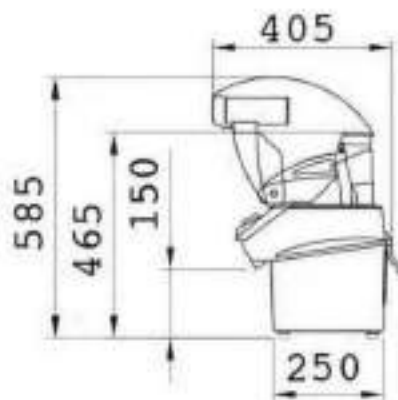
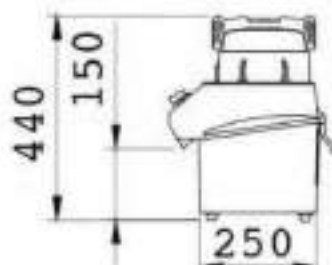
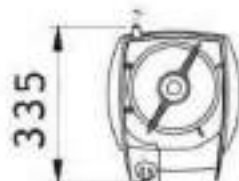
Three appliances for high-speed food preparation

TECHNICAL DRAWINGS

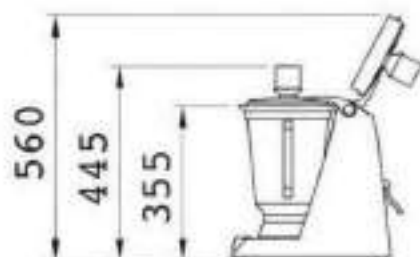
VCB 61&62 VERTICAL CUTTER



CC-34 COMBINED CUTTER



SB-4 BLENDER

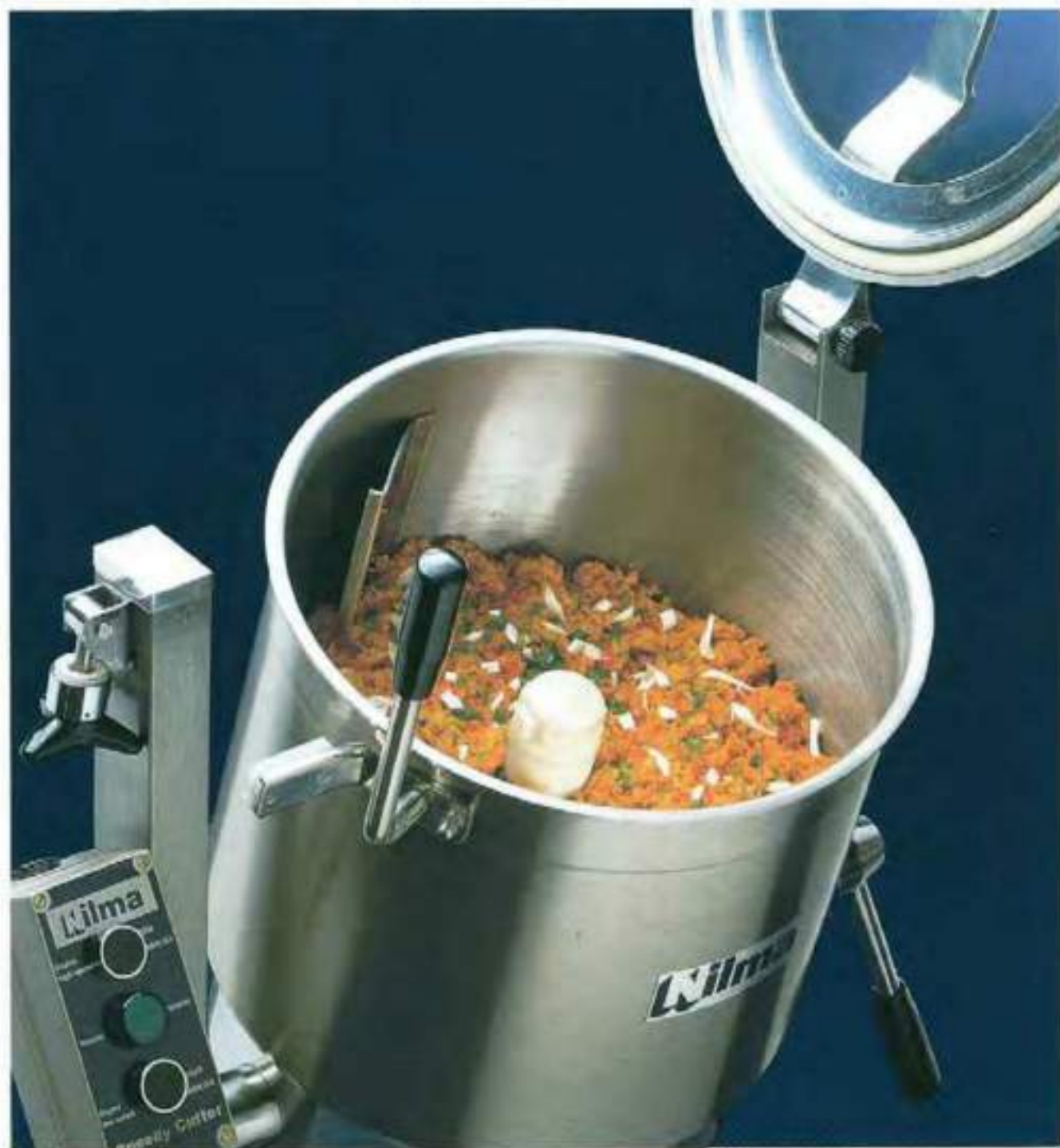


APPLIANCE CONSTRUCTED TO
HARMONISED STANDARDS AND
COMPLETE WITH CE MARKING

ISO 9001 certified manufacturer

SPEEDY CUTTER

Universal food processor



SO MANY PROCESSES ON THE ONE MACHINE

Mincing, grating, chopping, mixing are all operations which normally require a whole battery of equipment which is rarely automatic even though it may not be entirely a manual operation, as is still the case in the kitchens of many restaurants and small organizations. All this involves a considerable waste of time and therefore of money which also slows down the work of the kitchen. With the Speedy Cutter, Nilma has designed a machine to overcome all these problems,

incorporating a multiplicity of functions which it carries out extremely quickly and efficiently. The Speedy cutter transforms the preparation of mayonnaise or mincemeat, bread crumbs and grated cheese, chopping vegetables for soups, stuffings or sauces into simple operation, which can be carried out in a trice, with the additional guarantee of absolute hygiene and the advantage of more rational organization in the kitchen.

Nilma

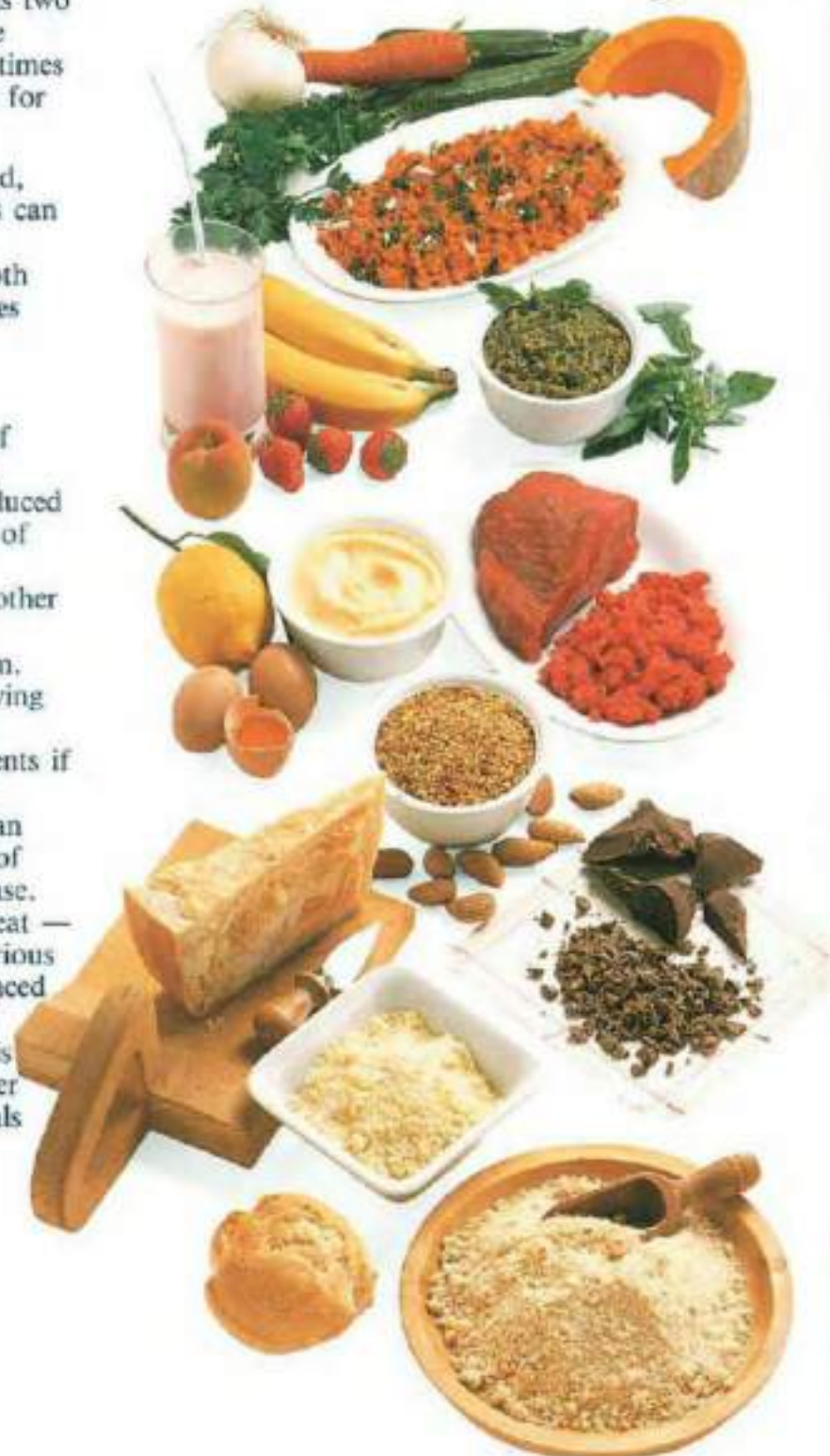
LA SCIENZA DELLE GRANDI CUCINE

Speedy Cutter, the indispensable

Two blades for a hundred jobs

The operation of the Speedy Cutter is based on the action of a special knife with two blades, one at the bottom of the bowl and the other a few centimetres higher. The rotating blades cut the product, simultaneously generating a circular movement which throws the suspended substances on to the walls of the bowl so that they fall back on to the blades. In addition, the Speedy Cutter has two speeds: the first, a low starting speed, the second a finishing speed. By varying the times and use of these two speeds it is possible for the Speedy Cutter to:

- **Mince** any type of meat, raw or cooked, and during processing other ingredients can be added, such as eggs, cheese, bread crumbs, spices; giving a perfectly smooth mixture suitable for **hamburgers, rissoles and fillings**.
- **Grate** stale bread or even cheese.
- **Chop** any type of ingredient, from vegetables for the soup and mixtures of onions, herbs and bacon for frying, to almonds or chocolate which can be reduced to grains or flakes for the preparation of confectionery.
- **Beat** up eggs, cream, margarine, with other ingredients too, to make mayonnaise, sillabub and all types of whipped cream.
- **Liquidize** all types of fruit without leaving any lumps.
- **Strain** vegetables, adding other ingredients if required. In addition to the traditional vegetable soups it is possible to make an excellent mashed potato and any type of sauce with a vegetable, meat or fish base.
- **Homogenize** all types of vegetables, meat — beef, veal, chicken — or fruit. The various substances are finely and smoothly minced and blended so that they are easier to administer and digest; it is precisely this function which makes the Speedy Cutter indispensable in the kitchens of hospitals and nursing homes.



complement for every kitchen

Speed as a guarantee of quality and economy

All the operations which can be done with the Speedy Cutter are carried out in a time varying between 20 seconds and maximum of 5 minutes. This high speed, not only prevents overheating of the product, but offers undeniable advantages both as regards the quality and the appearance of the food which, being less exposed to the atmosphere during processing, is not subject to deterioration or oxidization, so that improved hygiene is guaranteed. In addition it ensures considerable savings of time and labour, thanks to the high capacity of the Speedy Cutter (up to 60 litres in model DS/3) and the extreme simplicity of operation.

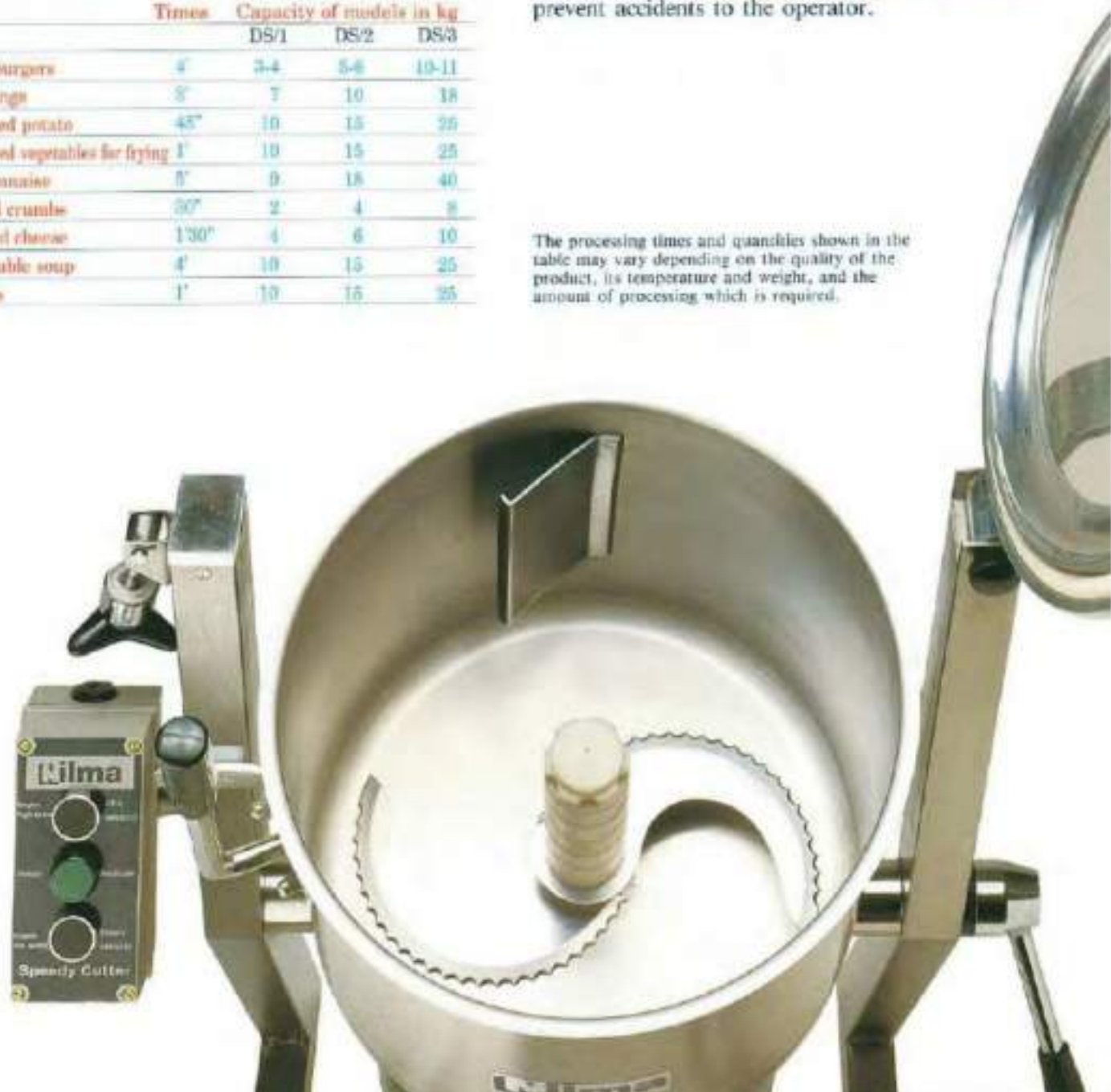
Times and capacities

	Times	Capacity of models in kg		
		DS/1	DS/2	DS/3
Hamburgers	4"	3-4	5-6	10-11
Stuffings	3"	7	10	18
Mashed potato	45"	10	15	25
Chopped vegetables for frying	1"	10	15	25
Mayonnaise	5"	9	18	40
Bread crumbs	30"	2	4	8
Grated cheese	1'30"	4	6	10
Vegetable soup	4"	10	15	25
Whips	1"	10	15	25

Technology at the service of productivity and safety

The specific experience and technology of Nilma have made the Speedy Cutter extremely simple, practical and also efficient to use. All you have to do is place the ingredients in the bowl, close the lid and start up the machine at the speed appropriate to the job. The Speedy Cutter is tightly sealed and can therefore be used without difficulty for liquid and semi-liquid products. The transparent lid enables the work to be observed at all times without interruption. When the work is done, the bowl tips to facilitate the removal of the product and the knife comes out easily for cleaning. In addition the parts which come in contact with the product are made of stainless steel 18/10 to guarantee maximum hygiene. Finally there are special safety devices to prevent accidents to the operator.

The processing times and quantities shown in the table may vary depending on the quality of the product, its temperature and weight, and the amount of processing which is required.



SPEEDY CUTTER

Universal food processor



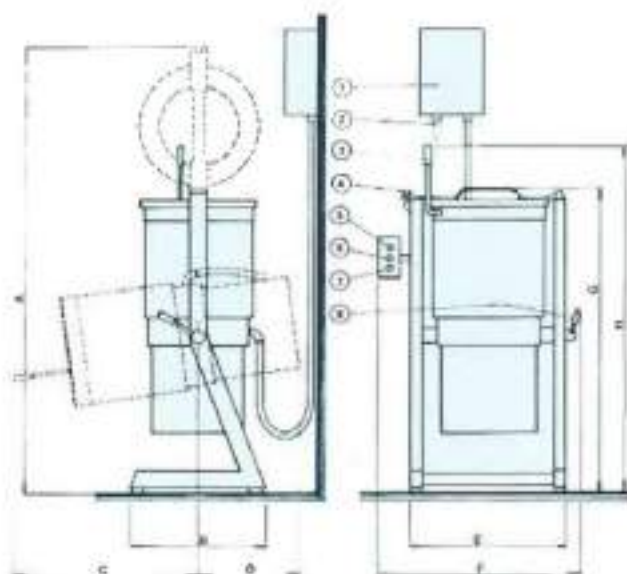
FEATURES

DESIGN FEATURES

- Frame made of stainless steel 18/10 equipped with vibration absorbing rubber feet.
- Bowl made of satin finished stainless steel 18/10 which tips to facilitate emptying of product.
- Levers to tip and hold the bowl in the required position.
- Lid, hinged on right hand side, equipped with seal, handle and clamp.
- Knife group made up of one removable support and two crescent shaped serrated blades made of treated stainless steel.
- Equipped with hole for the introduction of spices or liquids during the processing.

SPECIFICATIONS

- Wall-mounted, water-tight power board, equipped with protection against motor overheating.
- Low-voltage 24 V control panel, made up of: low-speed button (1400 rpm), high-speed button (2800 rpm) and power indicator.
- Safety device to prevent machine from starting up with lid open and to stop it if lid is opened.
- Three-phase, 230 or 400 V, non-commutable, high power motor, with two speeds (1400-2800 rpm), protected externally by a stainless steel case.



	DS/1	DS/2	DS/3
Max. bowl capacity liter	33	32	40
Processing speed rpm	1400-2800	1400-2800	1400-2800 Electric
Electric connection	230/400 2.50+L	230/400 2.50+L	230/400 3.50+L
Max. installed power kW	3.5	3.4	3.5
Weight of the machine kg	59	64	80

DIMENSIONS

	DS/1	DS/2	DS/3
A	1.420	1.500	1.600
B	470	470	510
C	380	450	520
D	350	370	390
E	470	510	590
F	675	715	790
G	985	1.000	1.160
H	1.090	1.140	1.200

KEY

- 1) Wall-mounted power board
- 2) Electric connection
- 3) Tipping lever
- 4) Lid locking knob
- 5) High speed button
- 6) Power indicator
- 7) Low speed button
- 8) Bowl locking lever



DESIGNED AND MANUFACTURED
TO CE STANDARD

ISO 9001 certified manufacturer

Wilma

LA SCIENZA DELLE GRANDI CUCINE

NILMA SpA - Via E. Zacconi 24/A - 43100 Parma - Tel. +39 0521 785241 - Fax +39 0521 273050 - E-mail: export@nilma.it - Home Page: www.nilma.it
Manufactured by NILMA s.p.a. - Italy - The factory reserves the right to make all the necessary alterations and technical improvements without notice

SOUPPER

Transfer pump for hot soups and beverages



FROM POT TO POT WITHOUT DIFFICULTY

The transfer of clear and thick soups, sauces, milk, coffee and so many other liquids or semi-liquids prepared in large cooking vessels is fraught with problems. First of all, as these liquids are always boiling, there is the risk of scalding the operators. And in any case a great deal of time is wasted.

And then there are the hygiene problems because the tap of the pot is so near the floor.

The Soupper was designed by Nilma to completely solve these problems.

The risk of contamination is eliminated because the Soupper draws directly from inside the pot. Trans-

fer times are minimal, and the operator is not exposed to any more risk and enjoys the considerable advantage of being able to see the precise quantity of liquid transferred, thanks to the programmer which controls the flow.

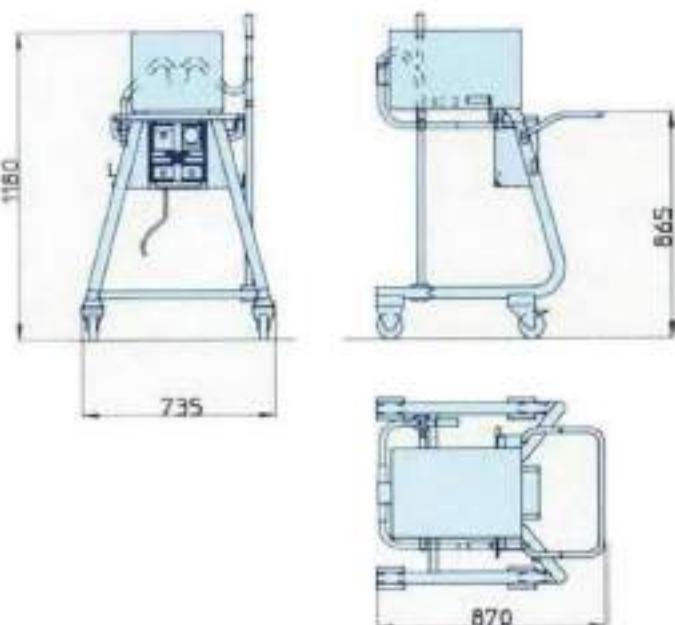
Like all the Nilma machines, the Soupper is constructed entirely of stainless steel and is both easy to use and easy to move about (it is equipped with a mobile trolley) and extremely easy to clean. For all these reasons, the Soupper is an indispensable accessory for all large kitchens.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

SOUPPER

Transfer pump for hot soups and beverages



THE FEATURES:

DESIGN FEATURES

Machine entirely made of 18/10 stainless steel. Trolley with handle and 4 wheels. 2 of the wheels pivot and have a brake.

Foodstuff quality rubber impeller manually removable for cleaning.

Suction pipe in transparent plastic, suitable for foodstuffs, equipped on one end with a stainless steel fitting for rapid connection to pump and on the other with a stainless steel nozzle with heat resistant grip.

Delivery pipe designed like the suction pipe but equipped with a grip and delivery push button.

Self-priming pump, foodstuff quality, suitable for transferring liquid or semi-liquid foods with a max. temperature of 85° C.



Low voltage control board (24 V.) equipped with: ON/OFF push button, manual/stop/automatic selector, flow programmer, power indicator and faulty connection light. Protection degree: IPX4.

SPECIFICATIONS

Capacity:	48 l/min
Motor power:	0.6 kW
Power connection:	V. 230/400 50Hz 3ph+E
Weight of the machine:	50 Kg

INTEGRAL ACCESSORIES:

Stainless steel filter for sucking up clear soups, stainless steel cone for sucking up thick soups and key for relising pipe connection.



DESIGNED AND MANUFACTURED
TO CE STANDARD

ISO 9001 certified manufacturer

Wilma

LA SCIENZA DELLE GRANDI CUCINE

MIXER

Homogenizing-Emulsifying machine



THE "TURBO" CRUSHER 200 TO 500 LITRES

At 900 r.p.m. the MIXER crushes, at 1.400 r.p.m. it homogenizes and emulsifies. It is designed to operate directly inside the cooking vessel at an incredibly fast rate. It simplifies considerably potatoes mashing or soup making operations. MIXER not only operates at great speed but also ensures good quality results.

The dynamics of its rotating blades assumes a perfect homogeneity in the whole mass of the product. MIXER is available in two models so that a choice can be made according to the job it has to perform.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

MIXER

Homogenizing-Emulsifying machine

MODELS AND FEATURES

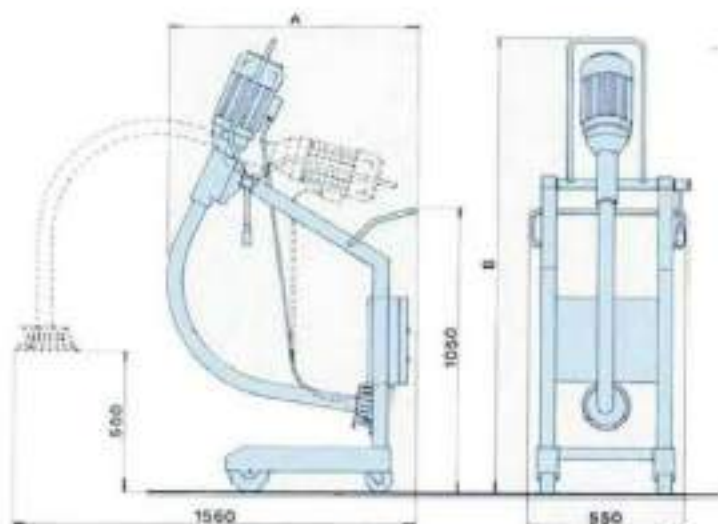
DESIGN FEATURES

- Frame in satin finished 18/10 stainless steel, equipped with two fix wheels and two castors with brake, and with handle.
- Turbine and flexible arm in polished 18/10 stainless steel.
- Turbine equipped with grate and rotating head, removable for cleaning.
- Integral accessories and safeties: two grates fine and coarse, for different processings, safety device allowing the machine operation only when in working position; protection against motor overheating.
- Low-voltage control board, equipped with: start push button (1-2 speeds for MIXER 500), stop push button. Indicator light when machine stops due to reversed phase.

SPECIFICATIONS

Mixer 200 for processing in containers up to 200 litres
Ventilated motor: 1,5 kW - Protection degree IP54
Voltage: 230/400 V, three-phase, 50 Hz + E
Turbine speed: 1.400 rpm
Weight of the machine: 80 kgs.

Mixer 500 for processing in containers up to 500 litres
Ventilated motor: 2,2 kW - Protection degree IP54
Voltage: 230/400 V, three-phase, 50 Hz + E
Turbine speeds: 1 st speed 900 rpm
2 nd speed 1.400 rpm
Weight of the machine: 98 kgs.



	MIXER 200	MIXER 500
A	930	1040
B	1700	1710

This paragraph may not be reproduced either in full or in part - September 2003



DESIGNED AND MANUFACTURED
TO CE STANDARD

ISO 9001 certified manufacturer

Nilma

LA SCIENZA DELLE GRANDI CUCINE

MS/4

Automatic moulding machine for meatballs and hamburgers



HAMBURGERS AND MEATBALLS IN PERFECT SHAPE

Preparing hundreds of hamburgers and meatballs requires a lot of labour and the results could easily be unsatisfactory.

Moulding and weight must be accurate and all operations must be carried out with the maximum hygiene levels and without handling.

This is now possible with **MS/4**, the latest moulding machine designed by NILMA which is capable of:

- moulding even, compact and homogeneous hamburgers and meatballs
- guaranteeing that each piece corresponds exactly to the desired weight
- enhancing the perfect presentation of the product.

- obtaining high production levels with just one operator
- assuring the maximum product hygiene by eliminating any handling

The two interchangeable discs of **MS/4** can mould meatballs with a diameter of 40 mm or hamburgers with a diameter of 90 mm, both with an adjustable thickness of up to 22 mm.

MS/4 is automatic: after loading the minced meat into the bowl and setting the required thickness, **MS/4** will quickly mould 900 hamburgers or 2,200 meatballs per hour! Less hassle and much more time to be dedicated to other tasks.

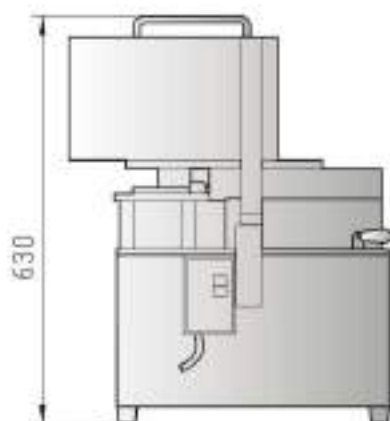
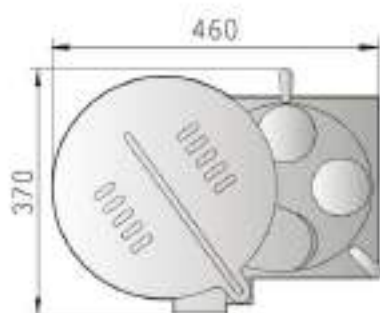
Nilma

LA SCIENZA DELLE GRANDI CUCINE



TECHNICAL DIAGRAMS

MS/4



FEATURES

MAIN ASPECTS

- Satin-finished stainless steel case
- Loading bowl made of a special bright food-grade alloy
- Thickness-adjusting device (up to 22 mm)
- Mixing paddles, loading bowl and moulding disc removable for cleaning
- Safety micro-switch on the loading bowl lid
- Electrical cable

ACCESSORIES

- 3-hole moulding disc (holes diameter: 90 mm) included in the machine
- 8-hole moulding disc (holes diameter: 40 mm) available on demand

Technical aspects

Electrical connection	3/N~230/400V 50Hz + G
Electrical power	0.25 kW
Loading bowl capacity	11 litres
Machine net weight	39 kg
Type of moulding disc	3 holes (Ø: 90 mm)
Adjustable weight	60 to 140 g
Maximum thickness	22 mm
Capacity	900 pieces/hour
Type of moulding disc	8 holes (Ø: 40 mm)
Adjustable weight	10 to 30 g
Maximum thickness	22 mm
Capacity	2.200 pieces/hour



This pamphlet may not be reproduced either in full or in part - April 2017



APPLIANCE MANUFACTURED IN ACCORDANCE WITH THE EU STANDARDS AND PROVIDED WITH THE CE MARKING

ISO 9001 certified manufacturer

S/95

Automatic hamburger and meatball forming machine



RECORDS FOR SPEED, HYGIENE AND PERFECTION

2,400 hamburgers per hour, 40 hamburgers per minute. Or 4,800 meatballs per hour, 80 per minute. This is the most extraordinary performance feature of the **S/95**, but not the only one. The Nilma automatic forming machine also serves to prepare hamburgers and meatballs in the exact weight desired, with a perfect presentation and a guarantee of absolute hygiene. Consisting of a loading bowl and interchangeable rotating cylinder, the **S/95** serves to shape hamburgers and meatballs, regulating the weight in relation to the

thickness. The self-cleaning scraper wire and the automatic product discharge belt permit practical operation and labor saving.

These are the reasons why the **S/95** is one more right answer from Nilma to your demands of high productivity.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

S/95

Automatic hamburger and meatball forming machine

>> THE FEATURES

STRUCTURAL

- ▶ Loading bowl, lid, motor/cylinder casing and support for conveyor belt in stainless steel 18/10 with satin finish.
- ▶ Base, load-bearing structure, mixing paddles and shaping cylinder in anticorrosive castings suitable for food processing.

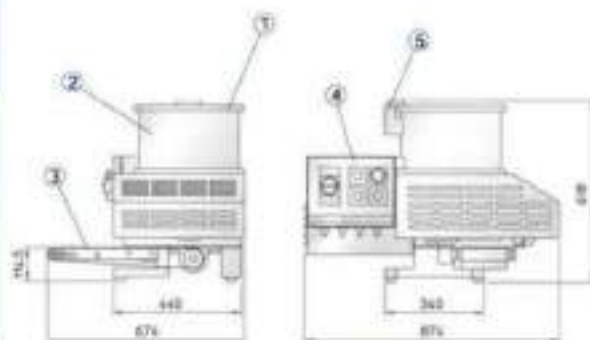
FUNCTIONAL

- ▶ Safety device on lid of loading bowl and protective casing of shaping cylinder.
- ▶ Interchangeable shaping cylinder, with thickness adjustment device.
- ▶ Mixing paddles, loading bowl, safety casing, discharge belt and shaping cylinder all manually removable for cleaning.
- ▶ Automatic scraping device on shaping cylinder and fixed scraper on product discharge belt.
- ▶ Product discharge belt in plastic material suitable for food processing, equipped with tightening mechanism.
- ▶ Self-cleaning scraper wire with automatic rotation.

Technical data

- Gearmotor unit powered at 0.4 kW-V 230.1.50Hz.
- Low voltage control panel, protected at IP 54 level.
- Hourly production:
 - hamburgers Ø 100mm, 2400 pieces/hour, (standard).
 - meatballs Ø 40mm, 4800 pieces/hours, (accessory).
- Capacity of loading bowl: 22 lt.
- Length of discharge belt: 430 mm.
- Machine weight: 65 Kg.

Technical drawings



Legend

- 1) Cover 2) Loading bowl 3) Belt
- 4) Control panel 5) Safety device.

ACCESSORIES

- ▶ Moulding disk with two holes for meatballs, diameter 40 mm. Other shapes on request.



Moulding disk for meatballs Ø 40



ISO 9001 certified manufacturer

Nilma
LA SCIENZA DELLE GRANDI CUCINE

NILMA S.p.A. Via E. Zacconi, 24/A - 43100 Parma - Tel. +39.0521.785241 - Fax +39.0521.273050 - www.nilma.it • nilma@nilma.it

The factory reserves the right to make all the necessary alterations and technical improvements without notice

BREAD 2000

Continuous breading machine



HOW TO BREAD IN A QUICK AND HYGIENIC WAY

In any large kitchen or commissary, BREAD 2000 automatically achieves the same results, that would normally require the manual work of four experienced operators. Quick, effective and safe, BREAD 2000 has been designed for breading cutlets, fish, shrimps, calamari, meat balls, vegetables, etc., with an output of 1500 to 3000 pieces/hour. BREAD 2000 operates through synchronized successive phases: product dipping into the batter, coating with bread crumbs, pressing, removal of the in excess bread crumbs, product knock-out into the container.

Quiet, hygienic operation without any need for manual handling of the product.

BREAD 2000 can be manually disassembled for an easy cleaning. Thanks to its trolley-mount, it can be stored in a very reduced space after use.

BREAD 2000 is a new development by NILMA, the ideal partner for food service professionals.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

BREAD 2000

Continuous breading machine



THE FEATURES

CONSTRUCTION

Entirely made of 18/10 stainless steel.

The machine can be manually disassembled for cleaning.

Exclusive devices for: breading, adjustment of bread crumb feeding, pressing and removal of excess breading from product.

Feeding conveyor belts in 18/10 stainless steel net.

Trolley for bread crumb hopper loading.

Mobile frame for GN 1/1 containers, for product collection.

Machine mounted on stainless steel castors (two with brake).

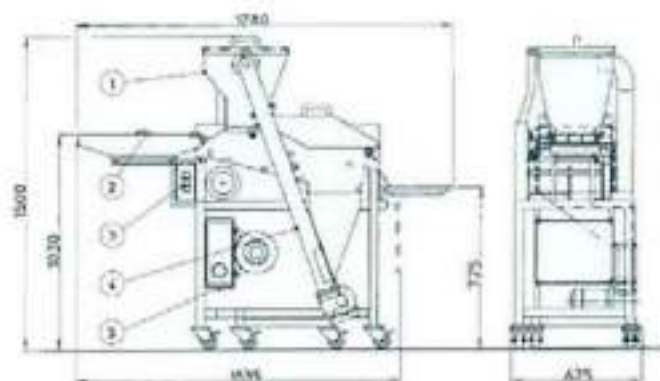
Safety devices on hopper, bread crumb loader and guards.

Low-voltage (24 V) control board, composed of: belts ON/OFF push-button, bread feeding ON/OFF push-button, excess breading removal ON/OFF push-button.

Protection degree: IP54.

TECHNICAL DATA

Power connection:	230/400 Volt, 50 Hz, 3-ph
Installed power:	0.85 KW
Max. width of feeding conveyor:	200 mm
Net weight of machine:	200 Kgs
Max. thickness of product accepted:	20 mm
Capacity of bread crumb hopper:	10 Kgs
Capacity of batter tank:	approx. 5 litres



KEY

- 1) Bread crumb hopper
- 2) Batter belt
- 3) Control board
- 4) Bread crumb loading device
- 5) Power connection



DESIGNED AND MANUFACTURED
TO CE STANDARD

ISO 9001 certified manufacturer

Wilma

LA SCIENZA DELLE GRANDI CUCINE

KLINER

Hand wash unit with knife sterilizer



CLEAN HANDS AND... CLEAN KNIVES

In the kitchen, the need for tidiness, functionality, hygiene and compliance with regulations, have prompted Nilma to find a simple, functional and safe solution to these requirements.

KLINER is a modern unit consisting of a convenient hand washing sink that can be combined with an electric knife sterilizer. Thank to its compact size **KLINER** can be easily fitted in any kitchen, so that workers can wash their hands without leaving the room; it can be installed on adjustable feet or wall-mounted. The hot and cold water tap is knee-operated. When pressure is removed from the control, the flow of water stops immediately. This reduces water consumption and prevents the contamination that may

be caused by hand-operated taps. The sterilizer can be mounted on either side of the sink, as needed, so that workers may quickly find the knives sterilized and ready to be used. Everything is within reach, including liquid soap dispenser and towel dispenser, fitted on the large back surface. Once again Nilma has thought of everything and with **KLINER**, hand washing and knife sterilizing are now more practical and function, in full conformity with legal sanitary requirements.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

KLINER

Hand wash unit with knife sterilizer

FEATURES

CONSTRUCTION

Hand wash unit mod LSC

- Mounted on height adjustable feet or, alternatively, wall mounted with the special brackets and anchors provided.
- Full stainless steel 18/10 construction, satin finished.
- Gooseneck movable faucet, hot and cold water tap and knee-operated control.
- Sink equipped with overflow pipe and Ø 40 drain with trap.
- Push-to-open/close door for cabinet inspection.
- Liquid soap dispenser, with tank and push-button control, made of stainless steel.
- Paper towel dispenser, with key lock, made of stainless steel.

Sterilizer mod SC

- Drum made of stainless steel 18/10, to be mounted on either side of the hand wash unit.
- Sink equipped with overflow pipe and Ø 1/2" drain.
- Removable knife grid.
- On-off water supply and discharge valve.
- Temperature regulation probe.
- Digital thermoregulator.



Wall mounting

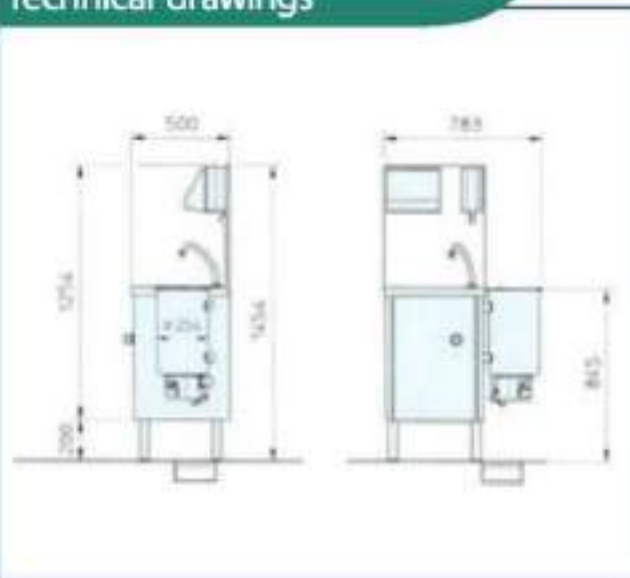


Installation on feet

Specifications

• Power supply	V 230
• Power absorption	kW 2
• Sink dimensions	400x400x190h mm
• Hot and cold water connections	Ø 1/2"
• Sink drain	Ø 40
• Hand wash unit weight	kg 35
• Sterilizer dimensions	Ø 254
• Sterilizer weight	kg 7

Technical drawings



MANUFACTURED IN
ACCORDANCE WITH
HARMONIZED REGULATIONS
AND BEARING CE MARK

ISO 9001 certified manufacturer

Nilma
LA SCIENZA DELLE GRANDI CUCINE

NILMA S.p.A. Via E. Zaccani, 24/A - 43100 Parma - Tel. +39.0521.785241 - Fax +39.0521.774642 - www.nilma.it • nilma@nilma.it

Nilma reserves the right to make all the necessary alterations and technical improvements without notice

APRIBOX

Automatic can opener



CAN OPENING MADE EASY

The traditional way of opening cans is time consuming, is usually unsafe and requires the can to be held with one hand while using the other hand to operate the opener. For large numbers these disadvantages become very acute.

APRIBOX removes these hazards and reduces costs. Once the can has been fitted into the cutting position non other direct manual intervention is required, the machine automatically locks on to the can and turns it at the same time as it cuts.

APRIBOX has a rotary cutting system which is fast and precise which:

- Leaves no sharp edges;
 - Allows an adjustment to the height of the cut;
 - Deals with circular cans weighing up to 5 Kg.
- APRIBOX is an easily operated, indispensable tool eliminating risk and saving valuable time.

Wilma
LA SCIENZA DELLE GRANDI CUCINE

APRIBOX

Automatic Can Opener



FEATURES

DESIGN FEATURES

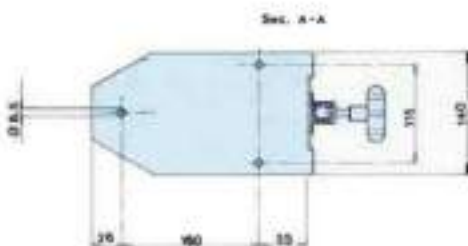
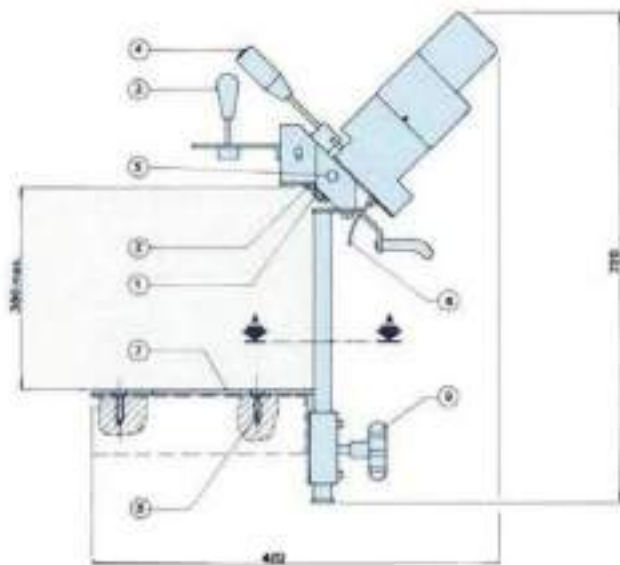
- Supporting column, locking clamp and fastening plate to the working surface, made of 18/10 stainless steel.
- Cutting blade protection made of 18/10 stainless steel.
- Can drive gear and cutting blade made of hardened steel.

SPECIFICATIONS

- Can rotation device.
- Can incision device.
- Height of cut adjusting device.
- Magnetic device for seizing and extracting the cut lid.
- Geared motor unit, kW 0,12-230.1.50+E, protected in a special plastic case.
- Weight 10 kg.

DIMENSIONS

- Width 140 mm
- Length 470 mm
- Height 720 mm



KEY

- 1) Drive gear.
- 2) Cutting blade.
- 3) Magnet supporting lever.
- 4) Cutting blade starting lever.
- 5) Lubricator.
- 6) Feeding cable.
- 7) Fastening plate.
- 8) Fastening screws.
- 9) Locking knob.

This pamphlet may not be reproduced either in full or in part - May 2004



DESIGNED AND MANUFACTURED
TO CE STANDARD

ISO 9001 certified manufacturer

Wilma

LA SCIENZA DELLE GRANDI CUCINE

NILMA SpA - Via E. Zecconi 24/A - 43100 Parma - Tel. +39 0521 785241 - Fax +39 0521 273050 - E-mail: export@nilma.it - Home Page: www.nilma.it
Manufactured by NILMA s.p.a. - Italy - The factory reserves the right to make all the necessary alterations and technical improvements without notice

THE STAR OF KITCHEN-RANGES



STARLINE

THE CANTILEVERED
KITCHEN-RANGES

- ✦ OPEN BURNER
- ✦ ELECTRIC HOTPLATES
- ✦ WHOLE PLATE GAS
- ✦ GRIDDLE WITH CHROME HOTPLATE
- ✦ BOILING PANS
- ✦ PASTA COOKERS
- ✦ DEEP-FAT FRYERS
- ✦ BRAISING PANS
- ✦ BAIN-MARIE
- ✦ NEUTRAL ELEMENTS
AND UNDER-COMPARTMENTS



Wilma
LA SCIENZA DELLE GRANDI CUCINE



the star of kitchen-ranges

The cantilevered kitchen-ranges

STAR LINE



Structure

The structure consists of an extremely thick supporting steel beam and stands on just 4 feet. The various modules which comprise the range are hooked onto the beam, producing solutions customised according to the client's needs. The cooking unit can be composed with a single-front wall, or as an "island" with the elements placed on both sides. The piping and connections necessary for the various supplies are located within the structure itself. This new solution makes cleaning operations easy and guarantees maximum hygiene.



s s solid and easy-to-clean



Solidity

Its solidity is one of "STARLINE's" strong points and places it at the highest European standards of quality. The free-standing structure, the external panelling and the shelves are made of 18-10 stainless steel. The extraordinary feature of this kitchen range is the strength of the work surfaces, which are 2 mm thick. This is why STARLINE is certain to maintain its value over time.



STARLINE

**STAINLESS STEEL
STRENGTH
OF THE WORK
SURFACE = 2mm**



>> the elements of STARLINE system



★ STARLINE -> Open burner range

- ★ Cooking hob made of 18/10 stainless steel, thickness 20/10.
- ★ Grill and burners in enamelled cast iron.
- ★ Burners activated by valve-tap, pilot light and thermocouple.
- ★ Underburner element in stamped 18/10 stainless steel, with rounded corners and removable for cleaning.
- ★ Models available: 2 - 4 - 6 burners and 2 burners with radiant right-hand plate.



★ STARLINE -> Range with electric hotplates

- ★ Cooking hob made of 18/10 stainless steel, thickness 20/10.
- ★ Sealed electric plates equipped with thermal protection.
- ★ 5-position plate-control switch.
- ★ Models available: 2 and 4 plates.



★ STARLINE -> Whole plate gas range

- ★ Top surface made of 18/10 stainless steel, thickness 20/10.
- ★ Plate made of special satin-finished 16 Mo.5 stainless steel for high temperatures.
- ★ Burners activated by valve-tap.
- ★ Maximum temperature of hottest point: 500° C.



★ STARLINE -> Griddle with chrome hotplate

- ★ Top hob made of 18/10 stainless steel, thickness 20/10.
- ★ Cooking hotplate made of FE 5100 steel, treated with hard chrome.
- ★ The versions: GAS with burners controlled by modulating valves and safety thermostat: temperature adjustable from 120° C to 280° C.
ELECTRIC with under-plate heating elements in AISI 304 L stainless steel and safety thermostat: temperature adjustable from 100° C to 270° C.
- ★ Models available: smooth 1/2 module, ribbed 1/2 module, smooth whole module, smooth/ribbed whole module.



★ STARLINE -> Boiling pans

- ★ Constructed in 18/10 stainless steel, with surface thickness 20/10.
- ★ Pan with bottom in AISI 316 L stainless steel and walls in AISI 304.
- ★ Models available:
DIRECT GAS PANS
 - ★ Double battery of independent burners activated by valve-taps.
 - ★ Self-balanced lid.
 - ★ Drain cock.
 - ★ Capacities available: 100, 145 and 250 litres.**INDIRECT PANS**
 - ★ Capacities available: 100 - 145 - 153 - 250 litres.
 - ★ The versions: GAS steam-production with burner activated by valve-tap and pressure-switch;
ELECTRIC low-pressure steam production with two independent heating elements activated by switches; STEAM at low pressure, produced by remote generator.**AUTOClave INDIRECT PANS**
 - ★ Autoclave balanced lid.
 - ★ Capacities available: 100 - 145 - 153 litres.
 - ★ The versions: GAS steam-production with burner activated by valve-tap and pressure-switch;
ELECTRIC low pressure steam production with two independent heating elements activated by selector-switches; STEAM at low pressure produced by remote generator.



STARLINE

>> the elements of STARLINE system



STARLINE >> Pasta cookers

- ☆ Constructed in 18/10 stainless steel, with surface thickness 20/10.
- ☆ Vat in AISI 316 L polished stainless steel.
- ☆ Starch-evacuation device with stainless steel surface.
- ☆ Water inlet tap.
- ★ The versions: GAS with stainless steel burners activated by valve-tap; ELECTRIC with heating elements in the vat activated by 5-position selector-switch.
- ★ Capacities available: 40 and 40+40 litres.



STARLINE – Deep-fat fryers

- ☆ Constructed in 18/10 stainless steel, with surface thickness 20/10.
- ☆ 18/10 stainless steel vat stamped with wide full rounded corners, integrated into the surface and equipped with cold area.
- ☆ Controls: electro-mechanical with temperature control from 100° C - 190°C and safety thermostat or electronic controls with temperature display and melting and maintenance programs.
- ★ The versions: GAS with burners equipped with pilot lights and safety thermocouples; ELECTRIC with armoured heating elements, tilting, in AISI 304 stainless steel.
- ★ Models available: one 21-litre vat, two vats of 21+21 litres.



STARLINE >> Braising pans

- ☆ Constructed in 18/10 stainless steel, with surface thickness 20/10.
- ☆ Vat with rounded corners in AISI stainless steel, thickness 20/10.
- ☆ Vat bottom in AISI 304 stainless steel, thickness 10 mm.
- ☆ Temperature control from 100° C to 270°C and safety thermostat.
- ★ Capacities available: 85 and 132 litres.
- ★ The versions: GAS with battery of stainless steel burners with stabilised flame controlled by a power-modulation valve and safety thermostat; ELECTRIC with armoured heating elements fixed to the base of the vat, equipped with power-modulation device.
- ☆ Tilting vat: manual or automatic gas version, electric version only automatic.



STARLINE >> Bain-marie

- ☆ Constructed in 18/10 stainless steel, with surface thickness 20/10.
- ☆ 18/10 stainless steel vat, stamped with full rounded corners, integrated with the surface.
- ★ The versions: GAS with indirect heating, thermostat-controlled from 30° C to 90° C and safety thermostat; ELECTRIC with heating elements (indirect heating) thermostat-controlled from 30° C to 90°C and safety thermostat.
- ★ Models available: for containers 1x1/1 + 1x1/3 GN or 2x1/1 + 2x1/3 GN.



STARLINE >> Neutral elements and under-compartments

- ☆ Constructed in satin-finish 18/10 stainless steel, with surface thickness 20/10.
- NEUTRAL ELEMENTS**
- ★ Models available: 1/2 module - 1/2 module with GN1/1 container-holder drawer or whole module - whole module with two GN1/1 container-holder drawers.
- UNDER-COMPARTMENTS**
- ★ Models available: 1/2 module with door - 1/2 module with two GN1/1 container-holder drawers or whole module with two doors.
- ★ Drawers for neutral elements and compartments excluding GN1/1, h 150 containers.



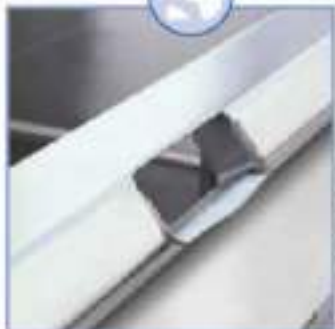
Ergonomics



STARLINE is the kitchen designed for those who labour for hours "over a hot stove". The work surface, at a height of 90 cm from the floor, is highly ergonomic. The sloping front panel makes reading the

controls easy, and owing to its special design the handle is easy to hold and manoeuvre. The front surfaces, the bottom compartments with their accessories and lots more, make up a line of kitchen-ranges that is extremely functional and aims to facilitate the work and reduce the effort.

Safety



Along with high performance, STARLINE also offers a high level of safety. For example, the deep-fat fryers are equipped with an electronic device for controlling the temperature of the oil, the braising pans

have a specially-shaped waste pipe, which avoids dangerous leakages of product and reduces all risks in use, in compliance with EC regulations.

Features



STARLINE is made up of technologically advanced and reliable equipment, created for large-scale work: 8 kW open burners, pans with direct and

indirect heating up to 250 litres, 130-litre braising pans, 300-watt/dm² heated griddles, etc. This equipment always offers great performance, under any condition, for all requirements.

Hygiene



























































All STARLINE elements are easy to clean because they are installed on a cantilever system and designed with HACCP regulations in mind.

The surfaces are sealed with a special liquid-proof joint. At the bottom of the smoke exhaust flues, there is a riser to prevent seepage. The bottom of the pans, which are made of AISI 316L stainless steel, is polished; the container-holder inside the compartments can be extracted, while the vats are stamped with full rounded corners at the base. That's why it's easy and quick to keep STARLINE clean.

With "STARLINE", Nilma once again proposes to become a faithful partner for the most demanding client, offering, apart from high quality equipment, a complete service from design to production, and right up to a wide-ranging after-sales service.



	Code	Description	Dimensions cm	Power kW
	87000100	Two-burner gas range	40x90x24	11,5
	87000102	Four-burner gas range	80x90x24	22
	87000104	Six-burner gas range	120x90x24	33,5
	87000106	Two-burner gas range with hotplate	80x90x24	18,5
	87000200	Range with two electric hotplates	40x90x24	8
	87000202	Range with four electric hotplates	80x90x24	16
	87000300	Whole plate gas range	80x90x24	12
	87000400	Griddle with smooth chrome-plated plate-gas version (module 40)	40x90x24	8
	87000402	Griddle with ribbed chrome-plated plate-gas version (module 40)	40x90x24	8
	87000404	Griddle with smooth chrome-plated plate-gas version (module 80)	80x90x24	16
	87000406	Griddle with smooth/ribbed chrome-plated plate-gas version (module 40)	80x90x24	16
	87000408	Griddle with smooth chrome-plated plate-electric version (module 40)	40x90x24	6,6
	87000410	Griddle with ribbed chrome-plated plate-electric version (module 40)	40x90x24	6,6
	87000412	Griddle with smooth chrome-plated plate-electric version (module 80)	80x90x24	13,2
	87000414	Griddle smooth/ribbed chrome-plated plate-electric version (module 80)	80x90x24	13,2
	87000500	Direct heating gas pan 100 l	90x90x72	24
	87000502	Direct heating gas pan 145 l	80x90x72	24
	87000524	Direct heating gas pan 250 l	120x90x72	38
	87000504	Indirect heating gas pan 100 l	90x90x72	24
	87000506	Autoclave indirect heating gas pan 100 l	80x90x72	24
	87000508	Indirect heating gas pan 153 l	80x90x72	24
	87000510	Autoclave indirect heating gas pan 153 l	80x90x72	24
	87000512	Indirect heating gas pan 250 l	120x90x72	35
	87000514	Indirect heating electric pan 145 l	80x90x72	14
	87000516	Autoclave indirect heating electric pan 145 l	80x90x72	14
	87000518	Indirect heating electric pan 250 l	120x90x72	24
	87000520	Indirect heating steam pan 145 l	80x90x72	25kg/h
	87000522	Autoclave indirect heating steam pan 145 l	80x90x72	25kg/h

	Code	Description	Dimensions cm	Power kW
	87000600	Gas pasta cooker single-vat 40 l	40x90x72	15
	87000602	Gas pasta cooker with two vats 40+40 l	80x90x72	30
	87000604	Electric pasta cooker single-vat 40 l	40x90x72	12
	87000700	Gas deep-fat fryer single-vat with electro-mechanical controls	40x90x72	18
	87000702	Gas deep-fat fryer single-vat with electronic controls	40x90x72	18
	87000704	Gas deep-fat fryer double-vat with electro-mechanical controls	80x90x72	36
	87000706	Gas deep-fat fryer double-vat with electronic controls	80x90x72	36
	87000708	Electric deep-fat fryer single-vat with electro-mechanical controls	40x90x72	18
	87000710	Electric deep-fat fryer single-vat with electronic controls	40x90x72	18
	87000712	Electric deep-fat fryer double-vat with electro-mechanical controls	80x90x72	36
	87000714	Electric deep-fat fryer double-vat with electronic controls	80x90x72	36
	87000800	Gas braising pan with manual tilting system 85 l	80x90x72	20
	87000802	Gas braising pan with automatic tilting system 85 l	80x90x72	20
	87000804	Gas braising pan with manual tilting system 132 l	120x90x72	30
	87000806	Gas braising pan with automatic tilting system 132 l	120x90x72	30
	87000808	Electric braising pan with automatic tilting system 85 l	80x90x72	12
	87000810	Electric braising pan with automatic tilting system 132 l	120x90x72	18
	87000900	Bain-marie element - gas version (module 40)	40x90x24	5
	87000902	Bain-marie element - gas version (module 80)	80x90x24	8
	87000904	Bain-marie element - electric version (module 40)	40x90x24	3
	87000906	Bain-marie element - electric version (module 80)	80x90x24	6
	87001000	Neutral surface (module 40)	40x90x24	-
	87001002	Neutral surface (module 40) with one drawer	40x90x24	-
	87001004	Neutral surface (module 80)	80x90x24	-
	87001006	Neutral surface (module 80) with two drawers	80x90x24	-
	87001008	Under-compartment with door	40x90x48	-
	87001010	Under-compartment with two drawers	40x90x48	-
	87001012	Under-compartment with two doors	80x90x48	-

KSP 40

Pass-through convection-steam oven



THE EVOLUTION OF THE SPECIES

Nilma, a leading manufacturer of high quality professional equipment has designed a new revolutionary convection steam oven, the KSP 40, based on the latest trends in manufacturing and hygiene, and particularly in the HACCP and Cook & Chill sectors.

This innovative, patented oven has a 20 GN 2/1 container capacity, a dual through door for loading products in the cooking area and taking them out in the chill or distribution area.

The oven is placed between these two areas to create a "heat barrier" during cooking which guarantees hygienic conditions for foods. Plus the KSP 40 features operating functions for reheating in kitchens where food is chilled.

In this case, the KSP 40 can quickly heat up foods from cold store to distribution temperatures, with a minimum weight loss

and without altering the organoleptic characteristics.

The KSP 40 design has been based on Nilma's long standing experience manufacturing combined convection steam ovens and guarantees all the benefits of the range, including versatility, the use of less seasoning, better product performance, uniform cooking on all racks, large scale production capacity, plus the easy and safe handling of foods.

The KSP 40 is a unique combination oven, for professionals that want to add value to their cooking.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

KSP 40

Convection-steam through oven

>> A DUAL CONTROL PANEL



The KSP 40 is easily and fully programmable, for both the basic version equipped with an electro-mechanical control panel and the electronic version, available on request.

With the control panel, on the side of the door where products are loaded, you can select the convection-steam cooking programme, set and control the temperature displays for the cooking chamber and middle of products and choose cooking times.

You can also select the ventilation rate and heating power during cooking or reheating, and save considerably on electricity when reheating.

The KSP 40 has a second control panel to check cooking on the side where products are unloaded, with operating and safety controls for all main oven functions.

>> UNIFORM, CONTROLLED COOKING THROUGHOUT

The KSP 40 has exclusive technical features, such as optimal air circulation from unique patented deflectors, for uniform cooking on all racks, irrespective of the cooking system or product to cook.



To cook large items such as roast meats and roast beef which must be tender in the middle, insert the temperature probe into the middle of the food and set the temperature you want.

When the probe reads the set temperature, the food is cooked.

>> EVERYTHING UNDER CONTROL

A connection for Nikma CCMP 'Creative Control Machine-Point' software can be fitted on the KSP 40, on request.

This system ensures that process parameters are constantly controlled and records each cooking stage, to guarantee operating safety and production standards according to HACCP procedures.

The latest release of this software, CCMP 4.0, can also identify and trace products used in all recipes.



>> EASY HANDLING

The exclusive rack trolley easily slides into and out of the cooking chamber, without risks of burns in the chill area, and can go into the QFP 40 through chiller.





>> MODELS

KSP 40 - ELECTRIC: with convection heating system and Incoloy 800 stainless steel armoured resistances. Electric steam generator, with exchanger, in 18/10 stainless steel.

>> ACCESSORIES

TROLLEY: with racks, which directly slides into the cooking chamber, with dual handle, two fixed casters and two revolving devices with brake.
 • Built in 18/10 stainless steel
 • 20 containers GN2/1 or 40 GN 1/1 capacity
 • Dimensions: 750 x 850 x 1670/10 mm

RACKS: Gastronorm GN2/1 (530 x 650 mm) or GN1/1 (530x 325 mm) in 20-40-65 mm stainless steel or Teflon coated racks.

GRILLS: Gastronorm GN2/1 (530 x 650 mm) or GN1/1 (530 x 325 mm) stainless steel or chrome plated grills.

CONTAINERS: Gastronorm GN2/1 (530x650mm) or GN1/1 (530 x 325 mm) in 20-40-65-100-200 mm solid or hollow stainless steel containers.

>> OUTSTANDING VERSATILITY IN THE KITCHEN

KSP40 lets you cook all foods, from the most delicate to the most robust, giving every chef the chance to get creative and conjure up superb dishes. Some cooking stages and temperatures for the KSP 40 combination oven are given below. Data and results may vary depending on the quality and size of the product used.

	Cooking T°	Cooking time	GN h. mm	Product cap. kg
Convection cooking				
Lasagne	170°	25'	65	100
Semolina gnocchi	170°	20'	40	100
Whole chicken	180°	30'	grill	100
Milanese veal cutlet (100g)	190°	8'	20	60
Whole trout (200g)	230°	12'	20	100
Fruit tart	170°	25'	40	80
Steam cooked				
Whole salmon (1 kg)	100°	25'	40 F	100
Spinach	100°	8'	65 F	40
Diced carrots	100°	20'	65 F	100
Whole new potatoes	100°	20'	65 F	70
Combined cooking				
Sliced courgettes	180°	10'	40	100
Rabbit pieces	170°	90'	40	100
Roast veal (1 kg)	170°	90'	40	110
Fresh sole (150g)	170°	12'	20	70
Sequence cooking				
Fennel au gratin	steam 100°	10'	40	50
	convection 170°	15'		
Whole duck a l'orange	steam 100°	10'	40	80
	combined 170°	50'		
Lamb pieces	convection 200°	10'	40	100
	steam 100°	15'		
Frozen bread	combined 170°	50'	40	100
	convection 180°	10'		
Frozen bread	combined 180°	5'	20	60
	convection 180°	18'		



KSP 40

Pass-through convection-steam oven



>> CHARACTERISTICS

>> CONSTRUCTION

- Built entirely in 18/10 stainless steel.
- Insulated cooking chamber in 18/10 stainless steel, with air conveyor and detachable grease filter. Rounded edges, seam welding (airtight) and shaped base for drainage.
- Insulated rack trolley inlet and outlet doors in 18/10 stainless steel with viewing window in double, safety glass. Dual handle and device for stopping ventilation.
- Load-bearing frame in 18/10 stainless steel with adjustable feet to level the oven.
- Stainless steel grease filters which can be manually removed for cleaning.

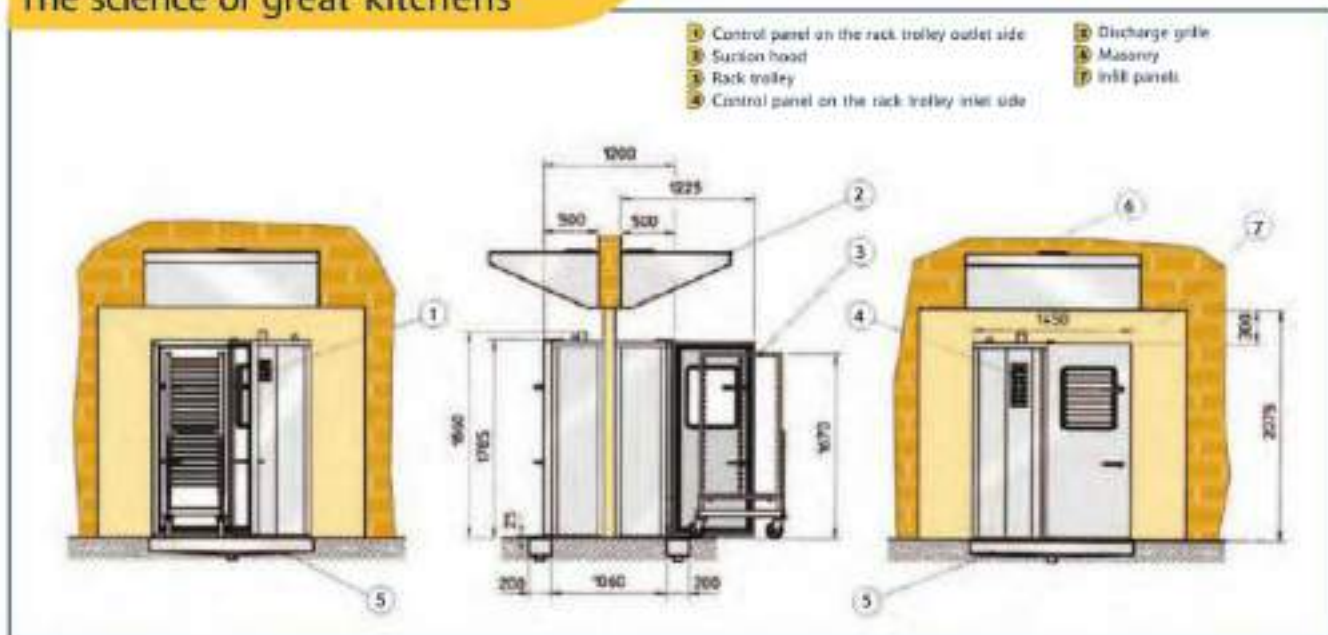
>> FUNCTIONS

- Low voltage, electro-mechanical control panel, with 3 cooking programmes, digital thermostat and timers. Digital selector for combined steam-convection cooking, dual ventilation rate, energy saving selector. Version with electronic control panel available on request. Equipped with auto-diagnostics for main oven functions.
- Electric steam generator, in 18/10 stainless steel, with safety valve.
- 84 kW armoured heating resistances in Incoloy stainless steel.
- Cooking chamber light.
- Digital thermometer probe to adjust temperature in the middle of the product.
- Door opening safety micro switch.
- Uniform temperature device (patented).
- Automatic condensation device for discharged steam.
- Automatic safety devices on main oven parts (solenoid valve, boiler, probes, temperature control).
- Automatic steam generator washing cycle at the end of operations.
- Steam generator discharge control.

Technical data

Model	KSP 40 pass-through convection-steam oven
Container capacity	20 GN 2/1
Power supply	230/400 V 3.50+N+E
Installed electrical power	86 kW
Softened cold water supply	Ø 1/2"
Weight	820 kg
Ambient noise	75 dBA

The science of great kitchens



DEVICE MANUFACTURED TO HARMONIZED STANDARDS, WITH CE MARKING

ISO 9001 certified manufacturer

Nilma
LA SCIENZA DELLE GRANDI CUCINE

NILMA S.p.A. Via E. Zecconi, 24/A - 43100 Parma - Tel. +39.0521.785241 - Fax +39.0521.774642 - www.nilma.it • nilma@nilma.it

Nilma reserves all rights to make all changes and technical updates it considers necessary, without prior notice.

KONVECTIO-STEAM

Combi oven



>>> THE OVEN WITH THE MAXIMUM FLEXIBILITY OF OPERATION

KONVECTIO-STEAM is the result of two innovative cooking systems, which Nilma with its specialistic equipment introduced in Italy as the first: the convection and steam cooking systems.

This combination makes it possible both to cook with steam and to roast, grill and gratinate with one oven only; also to obtain new cooking possibilities by combining these two systems or by alternating them.

The above ensures that the final cooking is perfectly uniform on each pan.

Anyway, KONVECTIO-STEAM advantages go beyond the simple functional aspects, as they also include:

- full respect of the food organoleptic characteristics;
- less flavouring for more dietetic dishes;
- more yield of product (less loss of weight);

- high productivity with minimum overall dimensions;
 - great costs savings;
 - short heating times;
 - easy cleaning;
 - rational handling of the product: the exclusive trolley with grid-rack fits also the chiller mod. Quick Frost.
- All these qualities make KONVECTIO-STEAM a proper answer to the needs of innovation, rationality and economy of each large kitchen.

Nilma

LA SCIENZA DELLE GRANDI CUCINE



KONVECTIO-STEAM >> 10

>> VERY EASY TO OPERATE AND USE

Thanks to the easy and clear electronic control board, it is easy to programme the different cookings in the KONVECTIO-STEAM. Each cooking system (convection-steam-mix) has got its proper display showing temperature and time.



Cooking phases are stored as per the programmed order and automatically follow one another without any intervention. Besides, it is possible to change the already selected programme (amending times and temperatures) without interrupting the cooking cycle. By operating the proper push-buttons on the control board the suitable fan speed (high or low according to the type of product) and the proper heating power (full or half) can be selected, this allow considerable energy savings.

The core probe is equipped with a proper display which shows the reached temperature and takes priority on the other selected parameters. The internal light in the cooking chamber shows the cooking results. Finally, the upper part of the control board refers to a very important function: the fault-tracing. Thanks to six warning lights, the possible faults of the oven are automatically indicated.

>> A REALLY UNIFORM COOKING IN THE OVEN

The special technical characteristics of the KONVECTIO-STEAM ovens - such as the special baffles, the perfect air circulation and speed - allow cooking to be really uniform on each pan. This with all cooking selected systems and all types of products.

>> ...AND REALLY PERFECT TO THE CORE OF THE PRODUCT TOO

When large volume foodstuffs have to be cooked, it is difficult to obtain the required cooking both on the surface (browning or gliding) and on the core of the product. The best example is the roast-beef, to a very good outside browning, it corresponds a partial inside cooking.

With KONVECTIO-STEAM it is possible to obtain these two different cookings without continuous checkings and trials: you just have to put the probe into the core of the product, select the temperature (i.e. 70°C) and, at the same time, select the external cooking (i.e. 180°C). When the probe points out that the core temperature has been reached, the cooking is over, aside from the time and the temperature programmed for the outside.





KONVECTIO-STEAM >> 20

On demand, the KONVECTIO-STEAM may be equipped with a printer for the recording of the cooking process (number of the operation, date, time, product temperature), according to the ISO 9000 standards and HACCP procedures.

>> SAFETY OF OPERATION GUARANTEED THROUGH HACCP CONTROL SYSTEM

Upon request, KONVECTIO-STEAM may be equipped to run Nilma's "Creative Control Machine Point" software.

This software is capable of recording not only the temperature/time function, but also the ingredients, quantity and procedures to execute any recipe.

Data collected are recorded in special files in the Chef's computer.



>> THE TROLLEY IS PRACTICAL AND EASY TO HANDLE

Thanks to the exclusive trolley which can be directly inserted in the cooking chamber, with the KONVECTIO-STEAM the job in the kitchen really becomes more rational and risks of burns are avoided.

Nilma, designed this trolley considering also the need to chill the foodstuffs after cooking.

For this reason the trolley perfectly fits the Quick-Frost and any further transfer of parts can be avoided.



Example of trolley interchangeability between KONVECTIO-STEAM 10-20-40 and QUICK FROST 10-20-40.

>> A QUICK AND EASY CLEANING

Cooking chamber cleaning takes just a very short time, as there are no more edges and gorges. Internal edges are round and walls perfectly smooth with hermetic weldings. The stainless steel fat filter is removable for cleaning and easy to be washed. The grid-rack does not enter the oven on welded rails, but it glides on the bottom of the cooking chamber which is shaped in the Konvectio-Steam 10 and perfectly smooth in the Konvectio-Steam 20.





KONVECTIO-STEAM >> 40

>> THE MODELS

KONVECTIO-STEAM >> 10 20 40

>> THE VERSIONS

GAS: with double exchanger for steam or convection cookings, made of 18/10 stainless steel with independent functioning. Stainless steel burners with electronic ignition, with ionisation flame detector.

ELECTRIC: operating with stainless steel incoloy heating elements (convection). Electric steam generator with 18/10 stainless steel exchanger (steam).

>> THE ACCESSORIES

TROLLEY FOR KONVECTIO-STEAM 10: with wheel-mounted grid-rack, equipped with quick hooking device to the oven, two fix wheels and two castors with brake.

- Made of 18/10 stainless steel
- Loading capacity: 10 pans GN 1/1
- Dimensions: 550 x 600 x 1460 mm

TROLLEY FOR KONVECTIO-STEAM 20: with fix grid rack that fits the cooking chamber, equipped with removable handle, with two fix wheels and two castors with brake.

- Made of 18/10 stainless steel
- Loading capacity: 20 pans GN 1/1 or 10 pans GN 2/1
- Dimensions: 700 x 890 x 1250 mm

TROLLEY FOR KONVECTIO-STEAM 40: with fix grid rack that fits the cooking chamber, equipped with removable handle, with two fix wheels and two castors with brake.

- Made of 18/10 stainless steel
- Loading capacity: 40 pans GN 1/1 or 20 pans GN 2/1
- Dimensions: 850 x 750 x 1860 mm

Stainless steel or Teflon covered **PANS**, gastronorm GN 1/1 (530x325 mm) or GN 2/1 (530x650 mm), available in the heights of 20-40-65 mm.

Stainless steel or Chromium-plated **GRIDS**, gastronorm GN 1/1 (530x325 mm) or GN 2/1 (530x650 mm).

Stainless steel full size or perforated **CONTAINERS**, gastronorm GN 1/1 (530x325 mm) or GN 2/1 (530x650 mm), available in the heights of 20-40-65-100-200 mm.

PRINTER, for the recording of the cooking process. It shows the number of operations, the date, the time and the temperature of product.

KONVECTIO-STEAM

Combi oven

MAXIMUM FLEXIBILITY OF OPERATION

KONVECTIO-STEAM is really an oven that can cook every kind of product obtaining such good

results that the same are unobtainable with the traditional ovens.

CONVECTION COOKING



This is the traditional oven or grill cooking with temperature up to 250°C and, thanks to the perfect forced-air circulation, there are no risks of burns or not uniform results. It is perfect to roast meat, to cook pizza, bread, cakes and omelettes, to gratinate and grill meat and vegetables with, moreover, the possibility of selecting ventilation and moisture or setting the cooking at product core, through the special probe.

	COOKING TEMPERATURE	COOKING TIME	CONTAINER H. (cm)	TOTAL CAPACITY kg		
				KS 10	KS 20	KS 40
Lasagne	170°C	25'	65	25	60	100
Carneloni	170°C	20'	40	20	50	100
Gnocchi romana style	170°C	20'	40	20	50	100
Whole chickens	180°C	30'	grid	20	50	100
Liver Venice style	250°C	8'	20	15	30	60
Meat loaf (500 gr)	250°C	12'	20	25	40	110
Codex milan style (300 gr)	190°C	8'	20	12	28	60
Whole trout (200 gr)	250°C	0'	20	25	55	100
Deep-frozen fish	180°C	18'	15	15	35	70
Roast potatoes in quarters	180°C	45'	40	25	55	100
Deep-frozen brioches	160°C	15'	10	10	22	44
Fruit jam tart	170°C	25'	40	15	40	80

STEAM COOKING



From the nutritional and economical point of view, it is an excellent cooking system: it helps limiting the nourishing substances and vitamins dispersion, it exalts flavour and colour of the food. Besides, with this system, it is not necessary to boil big quantities of water or to cook for long times, with considerable energy savings. It is ideal for cooking vegetables, fish and fruit, or -operating on the temperature- for particular cookings, such as bain-marie.

	COOKING TEMPERATURE	COOKING TIME	CONTAINER H. (cm)	TOTAL CAPACITY kg		
				KS 10	KS 20	KS 40
Whole salmon (1Kg)	100°C	25'	40 perf.	25	55	100
Whole trout (200gr)	100°C	12'	40 perf.	26	55	100
Whole zampone	100°C	60'	40	20	45	90
300 gr beef	100°C	90'	40	25	55	110
Chicken - in quarters	100°C	30'	40	25	55	110
Spinach	100°C	8'	65 perf.	10	25	40
Sliced carrots	100°C	20'	65 perf.	25	55	100
Fennels	100°C	20'	65 perf.	20	45	90
French beans	100°C	25'	40 perf.	20	45	90
Whole new potatoes	100°C	20'	65 perf.	15	35	70
Deep-frozen broccoli	100°C	25'	65 perf.	15	35	70
Deep-frozen cauliflower	100°C	25'	65 perf.	15	35	70

COMBINED COOKING



It is a cooking system which sums up the advantages of both steam and convection cooking. Therefore you can obtain more quick cookings with a high percentage of moisture, so that foods don't get dry (less loss of weight), the outside remains soft and taste and look are exalted.

	COOKING TEMPERATURE	COOKING TIME	CONTAINER H. (cm)	TOTAL CAPACITY kg		
				KS 10	KS 20	KS 40
Gratin fennels (in quarter)	170°C	8'	40	12	25	50
Zucchini	180°C	10'	40	20	45	100
Stew	175°C	120'	65	15	35	70
Roast chicken (500gr)	170°C	60'	40	25	55	100
Rabbit pieces	170°C	90'	40	25	55	100
Roast veal (1Kg)	170°C	90'	40	25	55	100
Fresh side (150gr)	170°C	12'	20	15	35	70
Deep-frozen side	180°C	18'	20	18	38	75
Deep-frozen monoporcons (10x160x40)	140°C	35'	grid	100	216	420

COOKINGS IN SUCCESSION



The flexibility of the Konvectio-Steam oven makes it possible to have many different combinations (27) which alternate the steam/convection/combi cooking systems. All these phases can be stored as they are programmed. Each single cooking can be selected as per time and temperature required for that specific food. In this way each product is cooked according to its organoleptic characteristics, the gastronomical results required and to the chef's fantasy.

	COOKING TEMPERATURE	COOKING TIME	CONTAINER H. (cm)	TOTAL CAPACITY kg		
				KS 10	KS 20	KS 40
Stuffed pepper	Steam 100°C	12'	20	25	55	100
	Forced Air 170°C	20'				
Gratin broccolis	Steam 100°C	10'	40	12	25	50
	Forced Air 170°C	15'				
Meat loaf	Steam 100°C	15'	40	20	50	100
	Combi 170°C	55'				
Deep frozen shank	Steam 100°C	20'	40	20	45	90
	Combi 170°C	50'				
White duck	Forced Air 180°C	20'	40	20	50	80
	Steam 100°C	10'				
	Combi 170°C	50'				
Lentil pieced	Steam 100°C	15'	40	25	55	100
	Combi 170°C	50'				
Deep frozen bread	Forced Air 180°C	10'	20	25	55	60
	Combi 180°C	5'				
	Forced Air 180°C	18'				

RECONSTITUTION AND REGENERATION

By using the combi system it is possible to reconstitute pre-cooked foods (at 130°C) without the risk of getting them dry - on the outside. While, talking about deep-frozen products, it is possible to immediately cook them after defrosting.

The steam system, at controlled temperature, makes it possible to reconstitute vacuum-packed products by placing them directly on the pan. The required temperature can be obtained by inserting the probe inside the packing.

The cooking times and the quantities of food products may vary according to their quality and size.

KONVECTIO-STEAM

Combi oven

THE FEATURES

STRUCTURAL

- Construction in satin-finished 18/10 stainless steel
- 18/10 stainless steel cooking chamber, fully insulated, with round edges, hermetic weldings, bottom properly shaped to allow the fats drain
- 18/10 stainless steel door, fully insulated, with tempered double-glass window and handle
- 18/10 stainless steel bearing frame with adjustable feet
- Condensate collecting groove placed under the door for KS 10.
- 18/10 stainless steel fume exhaust chimney
- 18/10 stainless steel fat filter removable for cleaning operation.

FUNCTIONAL

- Thermometric digital probe for 'core' temperature
- Two speed motor.

- Low voltage electronic control board, provided with three cooking programmes to be memorized, digital thermostat and timer for each cooking system (steam-combi-convection). Fault tracing of the most important functions of the oven. Power selector (electric version)

- Internal light in the cooking chamber
- Safety micro-switch on the door opening
- Temperature uniforming device (patented)
- Device for automatic condensation of fumes
- Automatic safety systems on main parts of oven (solenoid valve, boiler, burners, probe, temperature control, door)
- Automatic washing cycle of the steam generator at the end of work
- Steam generator discharge control

Technical drawings KONVECTIO-STEAM >>



Technical data

Model	KS/10 gas	KS/20 electric	KS/20 gas	KS/20 electric	KS/40 gas	KS/40 electric
Capacity	10 GN 1/1	20 GN 1/1	20 GN 1/1	20 GN 1/1	40 GN 1/1	40 GN 1/1
Electric connection V	230 or 400 3.50+N+E	230 or 400 3.50+N+E	230 or 400 3.50+N+E	230 or 400 3.50+N+E	230 or 400 3.50+N+E	230 or 400 3.50+N+E
Installed power Kw	0.5	21.5	1	37	2	74
Water connection Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Heating power Kw	24	-	48	48	98	-
Gas connection Ø	3/4"	-	1"	-	1"	-
Machine weight kg	180	160	320	300	950	510
Noise level dB _a	60	60	68	68	68	68



DESIGNED AND
MANUFACTURED
TO CE STANDARDS

ISO 9001 certified manufacturer

Nilma
LA SCIENZA DELLE GRANDI CUCINE

NILMA S.p.A. Via E. Zaccaroni, 24/A - 43100 Parma - Tel. +39.0521.785241 - Fax +39.0521.273050 - www.nilma.it Y nilma@nilma.it

The factory reserves the right to make all the necessary alterations and technical improvements without notice

QUICK FROST

Chiller



» WHEN GOOD FOOD HYGIENE OFFERS MANY ADVANTAGES

QUICK FROST chills temperature of justcooked products to below 8°C so quick that it avoids the bacteria proliferation, which develops between +65° and 8°C.

This is the QUICK FROST basic hygienic function, which together with many other practical advantages, makes QUICK FROST necessary in all large kitchens. First of all, it enables production times to be separated from distribution ones.

In this way work can be organized with maximum efficiency, by exploiting equipment to the utmost and by saving labour.

Also, QUICK FROST solves production problems by enabling foodstuffs to be stored, thus reducing

losses and wastage.

Last but not least, the cold-food portioning grants a higher degree of hygiene, less wastage and a better presentation of dishes. The advantage of having improved food hygiene, nutritional and operational benefits, makes QUICK FROST a most important item of kitchen equipment to answer the caterer's needs for quality, efficiency and savings.

Wilma

LA SCIENZA DELLE GRANDI CUCINE



QUICK FROST >> 5

QUICK FROST >> 10

>> A PERFECT AND EXTENDED TIME PRESERVATION OF COOKED FOOD

Rapid cooling is fundamental to limit the microbes developing in compliance with regulations in force. The maximum development of bacteria takes place in the temperature range from +65°C to +8°C. Therefore, it is clear that cooked foods need to be reduced to a safe temperature of +8°C as quickly as possible, particularly if they are not to be eaten at once. The table below gives a significant illustration of how, within a standard production process, the contamination of foods varies according to its temperature. The contamination of all samples cooled at ambient temperature, in terms of aerobic micro-organisms per

gramme, is some tens of times higher than the one present in the beginning.

Even if they are stored at +2°C, after twelve hours, the contamination further increases (this contamination is more evident in the solid samples).

On the contrary, samples chilled with QUICK FROST show that the initial quality of bacteria is either unchanged or even slightly less. Besides, after a twelve hour storage at +2°C, they show no increase in the contamination at all. These data show how QUICK FROST, with rapid chilling, reduces the initial contamination of foods and prolongs the period during which the micro-organisms present are dormant, thus increasing the storage-time of cooked products.

CONDITIONS AND RESULTS OF TESTS ON RAPID COOLING

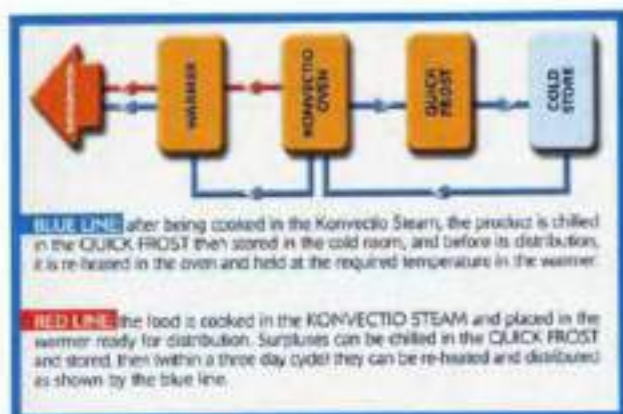
Type of foodstuff (cooling conditions)	Weight sample (g)	Temp. at centre of product(°C)		Cooling time in min.	Aerobic micro-org.			Pathogenic micro-org.
		Start exp.	End exp.		Start exp.	End exp.	After 12hrs	
BOILED BEEF								
(ambient temp)	1300	+76	+35	75	<50	3x10 ²	103	nil
(chiller)	1350	+76	+8	52	<50	<50	<50	nil
STUFFED ROAST TURKEY								
(ambient temp)	600	+73	+34	70	2x10 ²	3x10 ³	2x10 ⁴	nil
(chiller)	650	+73	+8	50	2x10 ²	10 ²	10 ²	nil
RICE SOUP								
(ambient temp)	1150	+82	+30	45	<50	5x10 ²	9x10 ²	nil
(chiller)	1200	+82	+5	34	<50	<50	<50	nil
BECHAMEL SAUCE								
(ambient temp)	580	+74	+29	35	50	3x10 ²	5x10 ²	nil
(chiller)	600	+74	+2	20	50	<50	<50	nil

It is important to note that the results for slow cooling at ambient temperature were obtained under optimum ambient conditions such as to make the positive results obtained with the chiller look less impressive.



>> NEW OPERATING SOLUTIONS

The quick temperature chilling of just-cooked products not only grants maximum hygienic safety, but also allows production operations to be separated from distribution ones. This is a proper way to optimise work and costs. Also it allows the storage of pre-cooked food products, solving in this way production problems, and allows kitchen operators to exploit processing and cooking equipment to the full, with the possibility to carry out more production cycles during the day. Finally, **QUICK FROST** makes it possible to optimise the production cycle on cold-line. In fact, Nilma has designed the chiller so that its trolley fits the one of the ovens Korvectio and Korvectio-Steam, on a modular system line.



>> QUALITY FULL RESPECT



To ensure a perfect hygiene, which is the basic quality characteristic of foodstuffs, **QUICK-FROST** can be equipped, on demand, with a time-programmed printer, with the function of recording the data of product chilling process. With this system, Nilma offers a concrete solution to the new problems raised by ISO 9000

certificate and by HACCP standards. In addition to that, to maintain the organoleptic qualities of pre-cooked foodstuffs, by complying with health and hygiene regulations, the temperature reduction has to be regulated in such a way that the maximum speed of product cooling is not exceeded. For this reason **QUICK FROST** is equipped with a core temperature probe, which shows the core product temperature on the display outside the machine: it takes from 40 to 60 minutes to the temperature to go from +65°C to -8°C for 60/80 kg of product. This system respects the particular qualities of processed foods: time by time and, preserving their features, avoids creation of frozen patches which could alter them.





QUICK FROST >> 40

>> SAFETY OF OPERATION GUARANTEED THROUGH HACCP CONTROL SYSTEM

Upon request, QUICK FROST may be equipped to run Nilma's "Creative Control Machine Point" software. This software is capable of recording not only the temperature /time function, but also the ingredients, quantity and procedures to execute any recipe. Data collected are recorded in special files in the Chef's computer.



Example of interchangeability between Konveccio Steam 10-20-40 and Quick Frost 10-20-40.



>> THE TROLLEY IS PRACTICAL AND EASY TO HANDLE

Thanks to this exclusive trolley which can be directly inserted in the chilling chamber, with the QUICK-FROST the job in the kitchen really becomes more rational. Nilma, designed this trolley considering the need to chill the foodstuffs after cooking. For this reason the trolley perfectly fits the Konveccio-Steam and any further transfer of pans can be avoided.

QUICK FROST

Chiller



>> THE MODELS

QUICK FROST >> **5** **10** **20** **40**

>> THE ACCESSORIES

TROLLEY FOR QUICK FROST 10: with wheel-mounted grid-rack, equipped with quick hooking device to the chiller, two fix wheels and two castors with brake.

- Made of 18/10 stainless steel
- Loading capacity: 10 pans GN 1/1
- Dimensions: 550 x 600 x 1460 mm

TROLLEY FOR QUICK FROST 20: with fix grid rack that fits the cooling chamber, equipped with removable handle, with two fix wheels and two castors with brake.

- Made of 18/10 stainless steel
- Loading capacity: 20 pans GN 1/1 or 10 pans GN 2/1
- Dimensions: 700 x 890 x 1250 mm

TROLLEY FOR QUICK FROST 40: with fix grid rack that fits the cooling chamber, equipped with removable handle, with two fix wheels and two castors with brake.

- Made of 18/10 stainless steel
- Loading capacity: 40 pans GN 1/1 or 20 pans GN 2/1
- Dimensions: 850 x 750 x 1860 mm

Stainless steel or Teflon covered **PANS**, gastronorm GN 1/1 (530x325 mm) or GN 2/1 (530x650 mm), available in the heights of 20-40-65 mm.

Stainless steel or Chromium plated **GRIDS**, gastronorm GN 1/1 (530x325 mm) or GN 2/1 (530x650 mm).

Stainless steel full size or perforated **CONTAINERS**, gastronorm GN 1/1 (530x325 mm) or GN 2/1 (530x650 mm), available in the heights of 20-40-65-100-200 mm.

PRINTER: for the recording of the chilling process. It shows the number of operations, the date, the time and the temperature of product.

QUICK FROST

Chiller

>> THE FEATURES

>> STRUCTURAL

- ▶ Double-wall 18/10 stainless steel construction, entirely insulated by means of expanded polyurethane, CFC-free.
- ▶ Bearing frame finished 18/10 stainless steel with adjustable feet.
- ▶ Cooling chamber of bright 18/10 stainless steel, bottom so moulded as to allow condensation draining.
- ▶ Double-wall 18/10 stainless steel door, with handle.
- ▶ Compressor and evaporator built inside an inspectable housing.
- ▶ Forced air-ventilation system equipped with two powerful 18/10 stainless steel electric fans (QF 10-20-40).

>> FUNCTIONAL

- ▶ Core temperature probe linked to a digital electronic display on the control panel.
- ▶ Control panel complete with: electronic temperature regulator, start/stop selector, on light, reached temperature warning light, compressor-jam light. Control panel QF 5 completely electronic.
- ▶ Double speed of product cooling (soft and hard) with checking system of air temperature (QF 10-20-40).
- ▶ Application of CFC-free refrigerant gas (R 134A- R404A).
- ▶ Safety device to prevent the refrigeration plant from exceeding the normal operating values when the product temperature is higher than +100°C.

Technical drawings QUICK FROST >>



Technical data

>> model	QF/5	QF/10	QF/20	QF/40
Fan capacity	5 GN 1/1	10 GN 1/1	20 GN 1/1	40 GN 1/1
Power connection V	230/150+N+E	400/3.50+N+E	230or400/3.50+N+E	230or400/50 Hz/3ph+N+E
Installed power kW	1	2	4	9.5
Compressor power Inghl	1.200	2.600	15.000	19.200
Condensation battery cooling	air	air	water or air	water
Cold water connection in	-	-	1/2"	1"
Water drain in	-	-	1"	1"
Refrigerant	R 134A or R 404 A	R 404 A	R 404 A	R 404 A
Weight of the machine Kg	110	200	285	485
Noise level dB _A	63	63	65	65



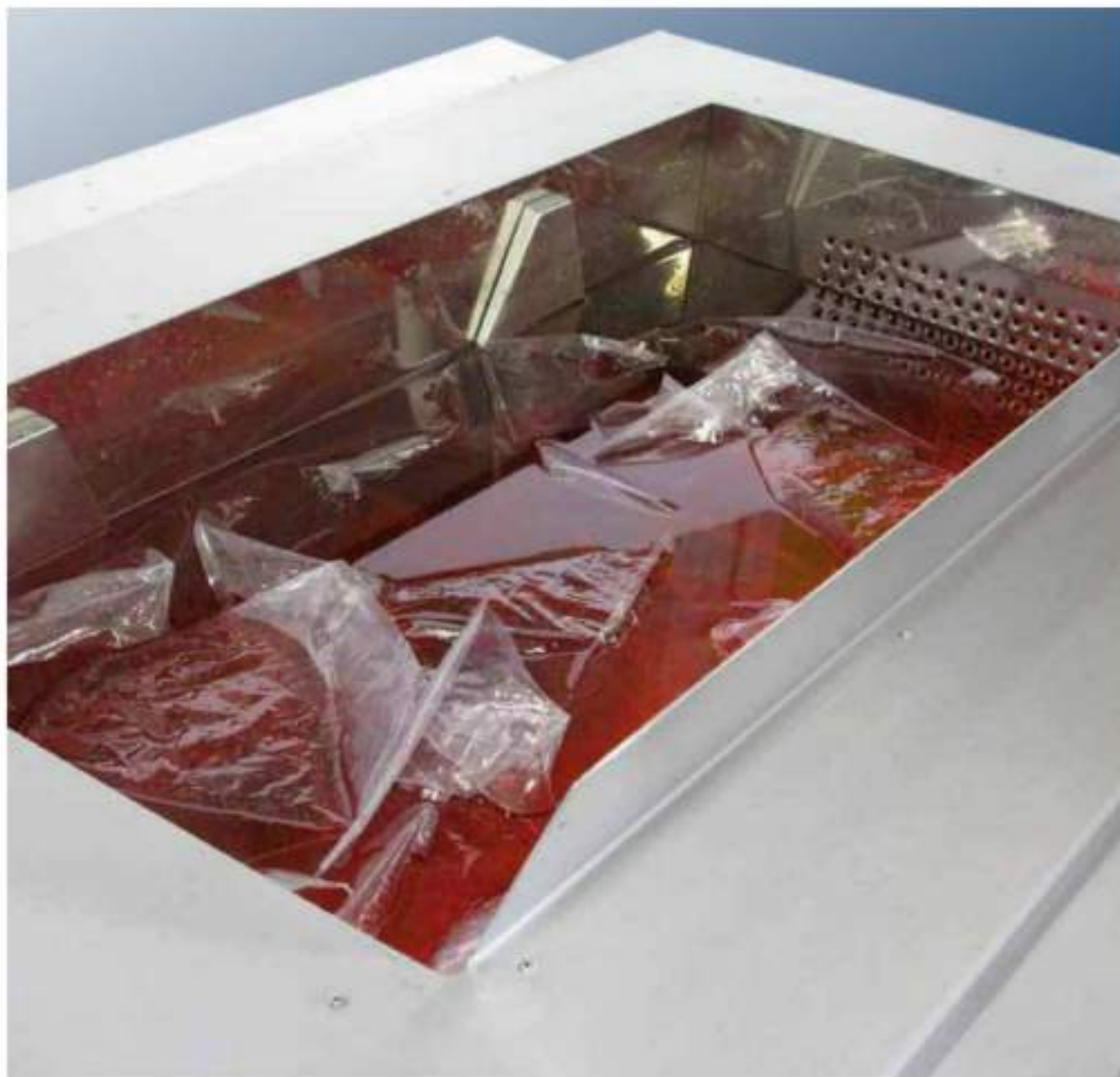
ISO 9001 certified manufacturer

Nilma

LA SCIENZA DELLE GRANDI CUCINE

FASTERCOLD

Water-bath chillers for bags



QUICK CHILLING AND SHELF LIFE: A SUCCESSFUL COMBINATION

In the institutional catering sector, cooking centres and ready meal factories, it is becoming more and more necessary to plan production cycles separately from the distribution of the food. This involves the use of a quick, hygienically safe production and chilling system. The new **NILMA Cook & Chill System** allows freshly cooked sauces, ragouts, soups, stews and béchamel sauces to be packed in bags and then quickly chilled in the new **FASTERCOLD** water-bath chillers. These chillers are able to reduce the

temperature of the bags containing the product evenly and with chilling times more than 50% shorter than with conventional blast chillers. This technology allows compliance with the HACCP procedures and guarantees a product shelf life of more than 20 days. On reactivation, the foods will seem to be as freshly cooked. The new **FASTERCOLD** water-bath chillers are the most modern way of rationalising production in the kitchen. Reducing times and costs, while improving quality and extending product shelf life.

Nilma

LA SCIENZA DELLE GRANDI CUCINE



FASTERCOLD

Water-bath chillers for bags

The revolution of the system

To increase the shelf life of cooked foods well beyond the five days of an ordinary refrigerated product, by preventing the proliferation of bacteria which takes place between 65°C and 8°C after cooking, it is essential to quickly reduce the temperature of foods to below 8°C.

But that is not enough! What can be done about soups, sauces, ragouts, mashed potato, béchamel sauce, and stews, too?

Nilma has produced the **FASTERCOLD**, the innovative water-bath bag chiller, the essential technology in a modern, innovative Cook & Chill system.

After cooking in the Mix Matic or Salsamat universal cookers, a pumping system connected to them transfers the product to the bag filling machine, at over 90°C. The airtight bags, produced in different weights as required, are then soaked into the Fastercold chiller. The bag chilling time varies depending on their weight and the type of product they contain.

An effective cold water vortex

The Fastercold is automatically filled with refrigerated water at 2°C from a remote water cooler connected to it.

Once the chilling time has been programmed, the bags are placed in the drum. The water vortex with adjustable intensity allows the product to cool quickly and evenly. The action of the water whirlpool facilitates heat exchange between the cold water and the bags. It also moves the food around within the bag, enabling it gradually to give up its heat. This provides a rate of heat exchange much higher than with the ordinary blast chiller techniques.



Remote water cooler



Fastercold 300 - pass-through installation



Water vortex movement

Outlet for discharging bags onto rotary table





Everything under control

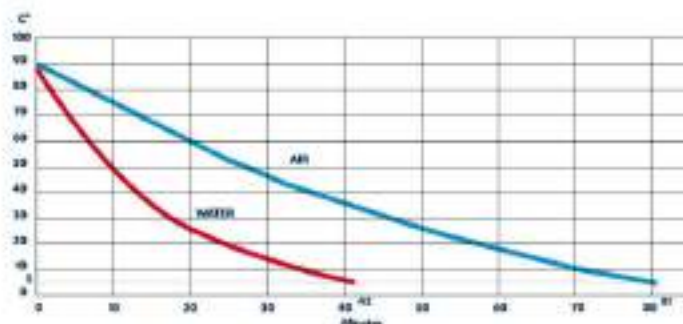
On request, the Fastercold chiller can be connected to the "Creative Control Machine Point", the Nilma patented software that memorises temperature/time chilling functions.

CCMP 4.0, interactive with the chef's remote PC, also performs automatic diagnostics on the appliance, signalling and saving alarms.

The great benefits of shelf life of over 20 days

The foods processed by this Cook & Chill method through to storage in a cold store at 0°C maintain their organoleptic characteristics virtually unchanged for more than 20 days.

This provides a large number of practical benefits, including: production can be scheduled throughout the day and on more than one shift; stocks of food can be kept ready for use; the product's characteristics can be conserved for a long time without freezing it; the product can be conveniently transported to multiple distribution points. All this combined with savings of product, energy, time, space and labour.



TEMPERATURE MEASUREMENTS FOR CHILLING
3 kg BAGS OF TOMATO SAUCE

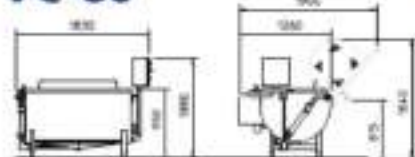
Handy bags



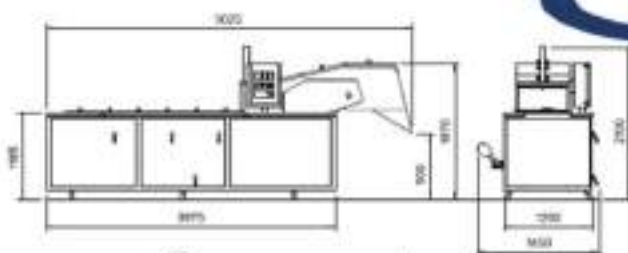
Preformed or made from coils, heat sealed or clipped, made from suitable material resistant to high temperatures, the bags can be of various shapes and filled with different weights of product depending on requirements.

TECHNICAL DRAWINGS

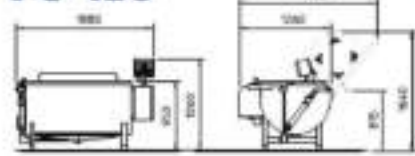
FC-80



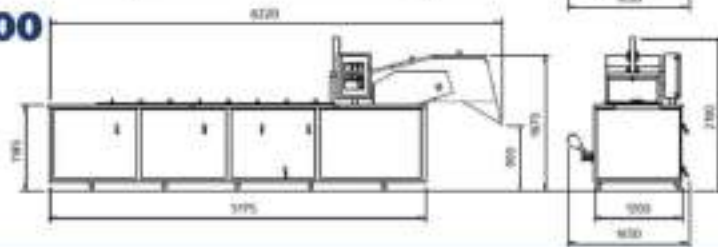
FC-300



FC-120



FC-600



Technical Data	FC-80	FC-120	FC-300	FC-600
Filling water inlet Ø	1"	1"	1" 1/2	1" 1/2
Refrigerated water inlet Ø	2"	2"	1" 1/2	1" 1/2
Chiller return water connection Ø	4"	4"	2"	2" 1/2
Water drain	2"	2"	2" 1/2	2" 1/2
Counter-vat capacity l	600	650	1.500	2.300
Load capacity kg	80	120	300	600
Bag unloading time sec.	25	25	120	120
Compressed air connection Ø	-	-	1/8"	1/8"
Air consumption l/hour	-	-	100	300
Installed power	2,25 kW/3 - 230/400 V 50 Hz	4,25 kW/3 - 230/400 V 50 Hz	17,7 kW/3 - 230/400 V 50 Hz	20,3 kW/3 - 230/400 V 50 Hz
Approx. refrigeration power required kW	7,5	9,5	18	30
Weight kg	230	250	770	1.150

FC80 and FC120 TECHNICAL FEATURES

CONSTRUCTION

- Constructed entirely in 18/10 stainless steel.
- Vat with rounded corners and adjustable feet.
- Chilling drum with rounded corners.
- On request: vat insulation.

FUNCTIONAL

- Hydraulic system discharges bags by tipping the chilling drum.
- Adjustable water flow generated by motor-driven pumps.
- Automatic regulation of water vortex.
- Automatic water level regulation.
- Appliance fully accessible for inspection and cleaning.
- Control panel in 18/10 stainless steel, IP rating 55, at low voltage 24 volts, including: chilling water temperature control thermostat, chilling time programmer, manual/stop/automatic operating mode switch, power on light, appliance on light, bag discharge control.

FC300 and FC600 TECHNICAL FEATURES

CONSTRUCTION

- Constructed entirely in 18/10 stainless steel.
- 18/10 stainless steel tubular bearing frame, with adjustable feet.
- Bottom grid of chilling drum removable for cleaning.
- Insulated counter-vat and lids.

FUNCTIONAL

- Automatic device for bag discharging.
- Adjustable water flow generated by motor-driven pumps.
- Hydraulic commands with levers for water discharge and chilling vortex regulation.
- Automatic chilling water level adjustment.
- Appliance fully accessible for inspection and cleaning.
- Bag discharge conveyor belt can be removed by hand for cleaning.
- Refrigerated water circulation system with motor-driven pump.
- Control panel in 18/10 stainless steel, IP rating 55, at low voltage 24 volts, including: master switch, chilling water temperature control thermostat, chilling time programmer, manual/stop/automatic operating mode switch, appliance on light, discharge belt stop/start button, emergency stop button.



APPLIANCE CONSTRUCTED TO HARMONIZED STANDARDS AND COMPLETE WITH CE MARKING

ISO 9001 certified manufacturer

SPIRAL®

Raffreddatore carrellato per prodotti liquidi

SPIRAL è un' innovativo apparecchio carrellato, una vera rivoluzione per il Cook & Chill, ideato per raffreddare rapidamente i prodotti liquidi (brodi, minestre, salse, sughi, besciamelle, ecc.) direttamente in pentole di cottura con capacità dai 100 ai 200 litri. Il contatto diretto della spirale fredda con il prodotto cotto garantisce tempi di abbattimento rapidi, nel pieno rispetto delle normative HACCP.

Un particolare accorgimento tecnico favorisce lo scambio termico fra spirale e prodotto da raffreddare, migliorando il rendimento di oltre il 30%.

Clicca qui per visionare tutto il catalogo SPIRAL

DOUGH.O.MAT

Automatic pasta cooker



TECHNOLOGY AT THE SERVICE OF TRADITION

In Italy, pasta is not simply a staple, but is a national specialty.

Everybody knows that it must be cooked in abundant water and put in the pot when the water is boiling. But there are many secrets to a good plate of spaghetti. And very few people know them all.

For example:

- cook at a controlled temperature so as not to lose the gluten and starch;
- stir at the right speed for each type of pasta, so that it cooks evenly without sticking;
- do not raise the lid as this changes the cooking temperature.

Nilma, in the design of the **Dough.O.Mat**, took all these factors into account and the result is a pasta cooker which combines revolutionary performance with the best gastronomic traditions.

A pasta cooker which is so perfect that you can even cook notoriously difficult dishes without problems, including: rice, spaghetti, tortellini and gnocchi.

And above all, a totally automatic pasta cooker which not only brings out the best in the pasta, but also improves the kitchen environment, the quality of your work, and is labour and energy saving.

Nilma

LA SCIENZA DELLE GRANDI CUCINE



DOUGH.O.MAT

Automatic pasta cooker

The surest way to cook large quantities, with big benefits and unbeatable results



The work environment? Absolutely steam free

Dough.O.Mat requires no manual operation and can thus work with the lid closed, thus preventing steam from escaping and making the kitchen environment more humid.

Savings: energy.... and labour!

The **Dough.O.Mat** heating system (gas, electricity, steam) is automatic and temperature controlled. This perfect thermostatic control - available on all versions - combined with the machine's effective insulation, gives considerable energy savings.

Dough.O.Mat operates fully automatically, with only a few manual tasks: setting the cook time and stirring parameters, loading the pasta, adding salt and, when cooking is completed, ending the pasta automatic unloading into the trolley. A single operator can handle these simple tasks, and while **Dough.O.Mat** is working, he can get on with other jobs.

Complete automation for perfect Italian cooking

Boil - but not too much



Over 98°, the pasta loses its starch and gluten and tends to overcook. The **Dough.O.Mat** is equipped with a device for temperature controlled cooking. This gives both quality and practical benefits, including: less foaming during cooking and energy savings of up to 20% compared to normal boiling pans.

1 kg pasta per 10 litres of water



This is the ideal ratio according to the best Italian tradition. In this amount of water, the pasta cooks evenly and with less starch; well-cooked, even consistency, no sticking.

Automatic stirring

Cooking many kilos of pasta is far from simple: the pasta clumps together, adheres to itself, breaks and does not cook evenly.



The **Dough.O.Mat** is equipped with a hydrodynamic stirrer which operates while the pasta is cooking. The pasta is stirred by a vortex of water, at adjustable speed. This has the following advantages: completely automated cooking (no need for manual intervention while the pasta is cooking), the possibility to cook any type of pasta easily without damaging it, including tagliatelle and spaghetti, and even stuffed pastas like tortellini and soft pasta like gnocchi.

All this in a very reduced space

The **Dough.O.Mat** is available in six models, with one or two vats. Their large capacity enables them to cook from 200 to 2,400 plates of pasta an hour, in limited space, thanks to full automation and fast boiling times. Such performance is simply beyond the reach of normal boiling pans.

model	capacity	portions/hour*
C40 1 vat	7 kg	200-300
C40/2 2 vats	7+7 kg	400-600
C80 1 vat	20 kg	600-800
C80/2 2 vats	20+20 kg	1200-1600
C150 1 vat	40 kg	1200-1600
C300 1 vat	60 kg	1800-2400

* data for short format pasta or rice, portion size 100 g of uncooked product





CHARACTERISTICS	CONSTRUCTION	Frame in 18/10 stainless steel tubing, on adjustable feet.
		Counter-vat and cooking baskets in AISI 316 stainless steel, external panelling, control panel, lids and flues in AISI 304 stainless steel.
		Self-balancing lid with integral handle.
		Tilting basket, perforated side walls and base.
		Cooking vat, insulated, with overflow device.
	Finishing: all parts in contact with product are polished. External panelling, lid and flue, fine satin finish.	
	FUNCTIONAL SPECIFICATIONS	Automatic basket tilt system controlled by electronic programmer.
		Hydrodynamic stirrer with stop/continuous/alternating modes.
		Indirect heating system with double jacket (except for gas heated versions).
		Stirrer automatically switches off when the basket is tilted.
Vat with electronic water level control.		
Control panel mounted on mobile arm, IP55 rating.		
Thermostatically controlled water temperature, calibrated to 98°C.		
Automatic basket lift at the end of cycle.		
Cooking water drain device.		
Safety device switches off heating power if water is lacking in the vat.		
Independent basket and heating system operation (models C40/2 and C 80/2).		

All models are available without stirrer on request



Complete cooking programming

These allow busy chefs to get on with other jobs while the **Dough.O.Mat** cooks the pasta.

The programmer automatically controls the cook time and stirring modes (continuous-alternating).

On completion, the basket automatically lifts the pasta into the drain position. The chef needs only unload the pasta into the trolley.

Everything under control

On request, the **Dough.O.Mat** can be connected with the "Creative Control Machine Point" software which records not only the temperature/time values, but also the ingredients, quantities and steps required to cook any recipe.

Interactive use with the chef's PC allows you to track all ingredients and log all data. The "CCMP" software also runs fault-tracing on the Dough.O.Mat to highlight and log any alarm conditions.



Hygiene? Total

All surfaces in contact with the cooking water are in AISI 316 stainless steel for resistance to corrosion by salt. The cooking baskets and countervats are polished, with rounded corners, for easy cleaning. When cooking is finished, simply run the mixing pump to stir the water with additional "Keal" detergent, and even the most inaccessible areas are effectively self-cleaning.



ACCESSORIES

Trolley tank in insulated double-walled 18/10 stainless steel, complete with bottom shelf and four castor wheels, two with brakes.

C40 and C40/2

Dimensions: 740x620x912 h mm
Capacity: n 2 GN 1/1 h 200

C80 and C80/2

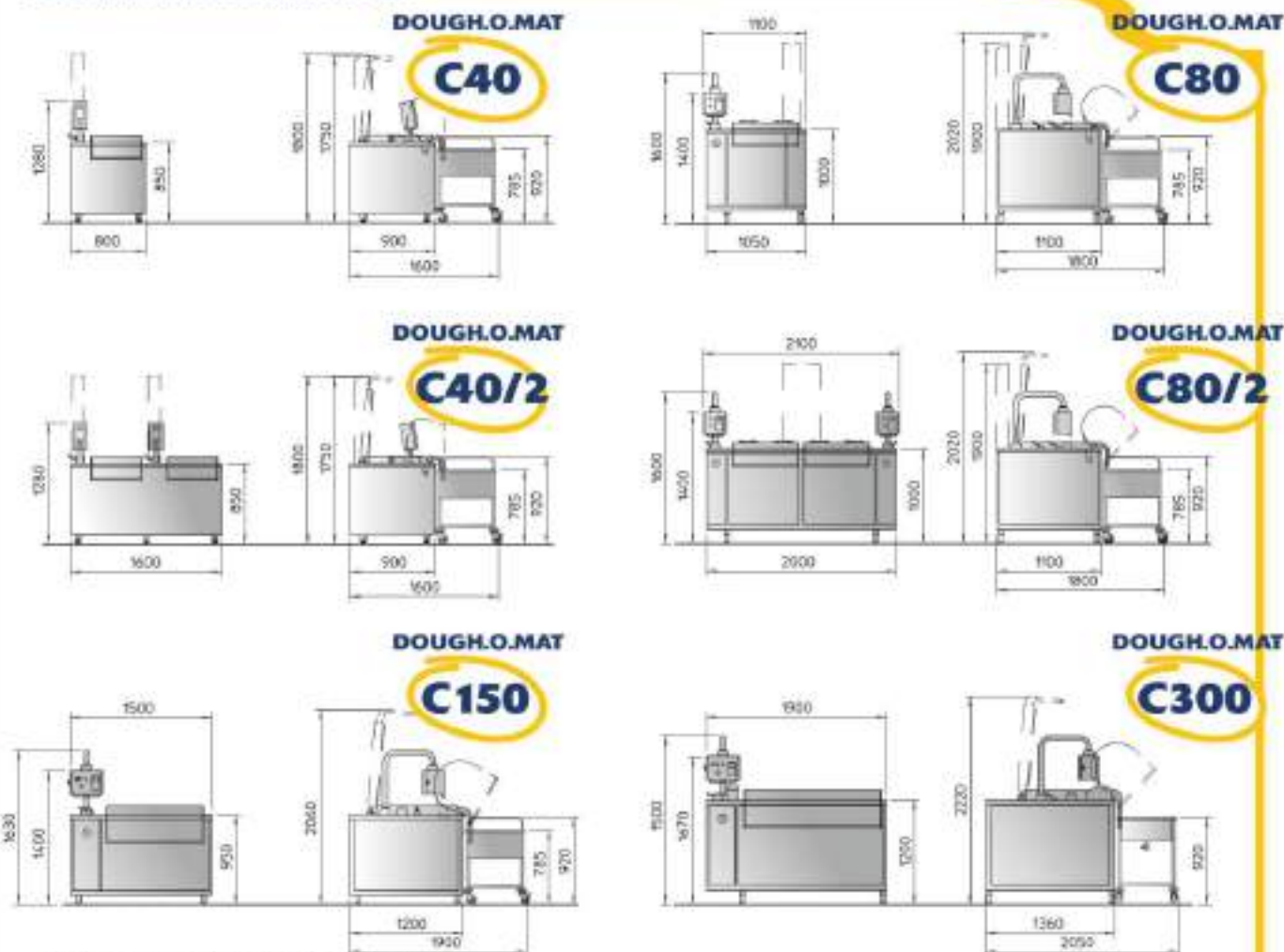
Dimensions: 1058x620x912 h mm
Capacity: n 3 GN 1/1 h 200

C150 and C300

Dimensions: 1875x620x800 h mm
Capacity: n 5 GN 1/1 h 200



TECHNICAL DRAWINGS



The dimensions for cookers without stirrer are unchanged.

TECHNICAL DATA	C40			C40/2			C80			C80/2			C150			C300		
	Electricity	Gas	Steam	Electricity	Gas	Steam	Electricity	Gas	Steam	Electricity	Gas	Steam	Electricity	Steam	Steam			
Vat capacity l		100			2x100			200			2 x 200			400		600		
Hot water Ø		3/4"			3/4"			3/4"			1"			1"		1 1/2"		
General drain Ø		1 1/2"			2 x 1 1/2"			2"			2 x 2"			2"		2"		
Steam Ø			3/4"			2 x 3/4"			1"			1 1/2"		1 1/2"		1 1/2"		
Pressure bar (kPa)			0,5/501			0,5/500			0,5/500			0,5/500		2/2000		2/2000		
Steam temperature °C			110			110			110			110		133		133		
Condense drain Ø			1/2"			2 x 1/2"			1/2"			1"		1/2"		1/2"		
Steam flow rate kg/h			50			100			80			160		150		260		
Gas Ø		1"			1 1/4"			3/4"			1 1/4"							
Caloric power (kW/kV _A) _{nom}		17			2 x 17			29/30			2 x 29/30							
Installed power kW	12,5	0,75	0,75	2x12,5	1,5	1,5	38	1,75	1,75	2 x 38	2x3,5	2x3,5	61,8	1,8	3,6			
Voltage	3 - N 400 / 230 V 50Hz																	
Weight kg	184	225	184	370	450	370	350	320	350	700	650	700	350	380	880			

No reproduction even in part. June 2011



APPLIANCE CONSTRUCTED TO HARMONISED STANDARDS, CE MARKED

ISO 9001 certified manufacturer

PASTALINE

pasta cooking and cooling line



INNOVATION WITH RESPECT FOR TRADITION

Two concepts which may seem polar opposites, but which unite in **Pastaline**: a new pasta cooking and quick cooling line which combines the benefits of Italian cooling with modern Cook & Chill technology. Pasta overcooks very quickly and, once cooked, should be served as quickly as possible. But production requirements often do not permit pasta to be cooked in a hot line (cook and serve), for example in airport kitchens or central kitchens preparing meals for hospitals, company and school canteens, or food industries and cooking centres producing ready-to-eat meals. Nilma has thus

developed **Pastaline**, to satisfy the requirement to cook large amounts of pasta to the highest standards, with the right time, temperature and water/pasta ratio. But it also solves the problem of separating cooking from distribution, while maintaining the special qualities of a good plate of Italian pasta and observing HACCP regulations. **Pastaline** is a genuinely universal cooking and cooling line which can be used for all types of pasta: long format, like tagliatelle, spaghetti, short format like penne, but also gnocchi, rice, stuffed pasta like tortellini and ravioli and other foods cooked in the same way.

Nilma

LA SCIENZA DELLE GRANDI CUCINE



PASTALINE

pasta cooking and cooling line

Perfect results... in the best tradition

Once cooked and drained, pasta tends to overcook in just a few minutes. If stored in multi-portion gastronorm containers, it maintains its heat for even longer. But it tends to lose its freshly cooked quality, thus compromising quality.

This is usually dealt with by shortening cook times, so that when left to rest at temperature, the pasta finishes cooking by itself. This gives good results up to around half an hour after cooking.

But if the food cannot be served within this limit, the only solution is Cook & Chill: cooking and quick cooling.

Pastaline, the fully automatic cooking and cooling line, makes this possible. The operator needs only put the pasta and salt into the water. The rest of the cooking process is handled by the pasta cooker, the line's main component, which automatically controls the cooking temperature, the water level, stirs the pasta to prevent it sticking and then delivers it to the cooler.

The cooler, supplied with refrigerated water, hydrodynamically stirs the pasta, thus stopping the cooking process and chilling the food in 1-2 minutes. The cooling cycle is controlled by a time and temperature programmer. When cooling completed, the basket lifts the pasta to the drain position. The operator needs then only unload the pasta into the trolley.

The cooled pasta must then be stored in a cold room while awaiting reactivation. The pasta may be reactivated either by submerging it once more in boiling water for a short time or by heating in a saucepan, in a microwave oven with steam.

Savings: time, labour and energy!

The possibility to process large amounts of pasta and store them for reactivation is an enormous advantage both in terms of production scheduling, and hence reduced costs, and in terms of quality, under the terms of the HACCP standards.

Both the pasta cooker and cooler used in **Pastaline** are fully automated. Once they have been programmed, they reduce the operator's work to a minimum.

And the pasta cooker's heating system, with its perfect water thermostatic temperature control and efficient insulation, gives significant energy savings.

Big performance - small space

Pastaline is very compact, composed of: a pasta cooker, on a frame with platform, a water cooler and product collecting trolley. Production capacity varies with the model of pasta cooker, pasta type and cook time. The pasta cooker is available in four models, with one or two vats.

model	capacity	portions/hour*
C80 1 vat	20 kg	600-800
C80/2 2 vats	20+20 kg	1200-1600
C 150 1 vat	40 kg	1200-1600
C 300 1 vat	60 kg	1800-2400

* portion size: 100 g of uncooked pasta



The production cycle in four phases



Technical data

PASTA COOKER	C80			C80/2			C150		C300
	Electricity	Gas	Steam	Electricity	Gas	Steam	Electricity	Steam	Steam
Hot water Ø		3/4"			1"			1"	1 1/2"
Vat capacity l		200			2 x 200		400	400	600
General drain Ø		2"			2 x 2"			2"	2"
Steam Ø			1"			1 1/2"		1 1/2"	1 1/2"
Pressure bar (Pa)			0,5/50			0,5/50		2/200	2/200
Steam temperature °C			110			110		133	133
Condense drain Ø			1/2"			1"		1/2"	1/2"
Steam flow rate kg/h			80			160		150	260
Gas Ø		3/4"			1 1/4"				
Cal power level kW L ₁		29/30			2 x 29/30				
Installed power kW	40	3,5	3,5	2 x 40	2x5,4	2x5,4	64,5	4,5	3,6
Voltage					3 - N 400 / 230 V 50Hz				
Weight kg	350	320	350	700	650	700	350	380	880

CHILLER	C80	C80/2	C150	C300
Cold water	1"	1"	1"	1 1/2"
Vat capacity l	200	700	700	700
Drain valve Ø	2"	2"	2"	2"
Voltage		230/400V 3,50+T		
Weight kg	220	260	260	280

Ideal for...



Integrated cooking programs

The programmer automatically controls the cook time and stirring modes (stop-continuous-alternating). At the end of cooking, the basket lifts automatically to pour the pasta into the cooler.



...and cooling programs

The programmer automatically controls the cooling time and unloading into the trolley.

Hygiene? Total

All surfaces in contact with the cooking water are in AISI 316 stainless steel for perfect resistance to corrosion by salt. The cooking baskets, counter vats and cooler baskets are polished, with rounded corners. At the end of the job, for effective self-cleaning, simply add some "Keal" detergent to the water and run the mixing pump.



PASTA COOKER CHARACTERISTICS

- | | |
|---|---|
| CONSTRUCTION | Frame in 18/10 stainless steel tubing, on adjustable feet. |
| | Counter vat and cooking baskets in AISI 316 stainless steel, external panelling, control panel and frame in AISI 304 stainless steel. |
| FUNCTIONAL SPECIFICATIONS | Tilting basket, perforated side walls and base, with product unloading hopper. |
| | Finishing: parts in contact with product: polished finish. External panelling, lid and flue: fine satin finish. |
| | • Cooking vat, insulated, with drain and overflow device. |
| | • Automatic basket tilt system controlled by electronic programmer. |
| | • Hydrodynamic stirrer with stop/continuous/alternating modes and stirring intensity adjustment. |
| | Indirect heating system with double jacket. |
| | Stirrer automatically switches off when the basket is tilted. |
| | Cooking and cooling vat with electronic water level control. |
| | Control panel in AISI 304 stainless steel, rating IP55, mounted on mobile arm. |
| | Thermostatic water temperature control, set to 98°C. |
| | Automatic basket lift at the end of cooking cycle. |
| • Cooking water drain device. | |
| • Safety device switches off heating power if water is lacking in the vat. | |
| • Electronic digital programmer, manual/automatic mode buttons, basket raise buttons. | |
| • Two vat model with independent operation of the baskets and heating systems. | |



Everything under control

On request, the pasta cooker and cooler can be connected to the "Creative Control Machine Point" software which not only records temperature/time values, but also: ingredients, quantities and steps required to cook any recipe. Interactive use with the chef's PC allows you to track all ingredients and log all data. The "CCMP" software also runs fault-tracing on the cooker and cooler to highlight and log any alarm conditions.

Accessories

Cooler product collecting trolley.
Made in 18/10 stainless steel, polished interior finish, with four caster wheels (two with brakes).

C80 and C80/2

Dimensions: 1058x620x912 h mm

Capacity: n 3 GN 1/1 h 200

C150 and C300

Dimensions: 1875x620x800 h mm

Capacity: n 5 GN 1/1 h 200

CHILLER CHARACTERISTICS

CONSTRUCTION

- Constructed in 18/10 AISI 304 stainless steel throughout.
- Adjustable levelling feet.
- Cooling basket in AISI 304 stainless steel with polished finish, holes suited to cooling pasta and rice.
- Insulated version available on request.

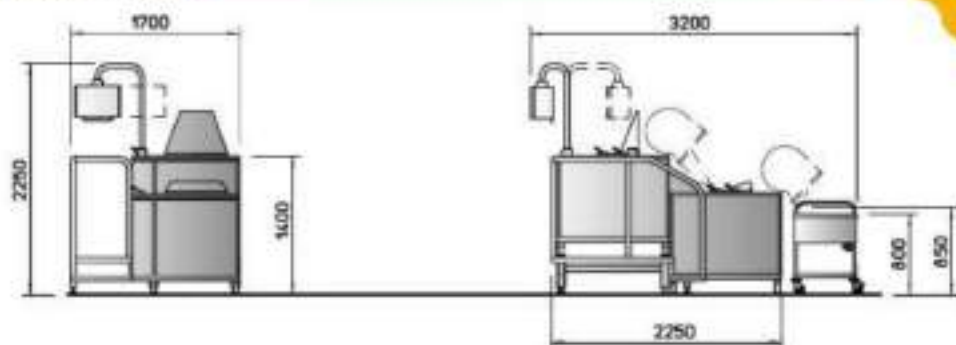
FUNCTIONAL SPECIFICATIONS

- Counter-vat equipped with drain and overflow.
- Product unload hopper.
- Automatic basket tilt, hydraulically operated.
- Stirrer vortex power adjustment.
- Automatic vat water level control.
- Thermostatic water temperature control.
- Controls integrated into main panel, equipped with: water temperature thermostat, electronic timer, start button, basket up/down switch.

TECHNICAL DRAWINGS

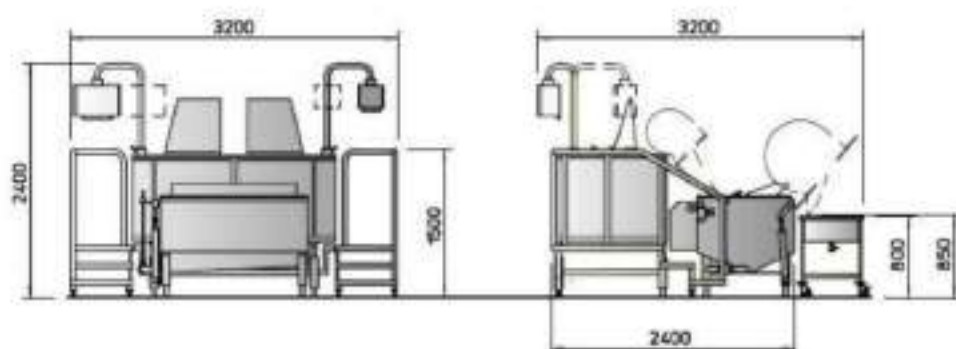
PASTALINE

C80



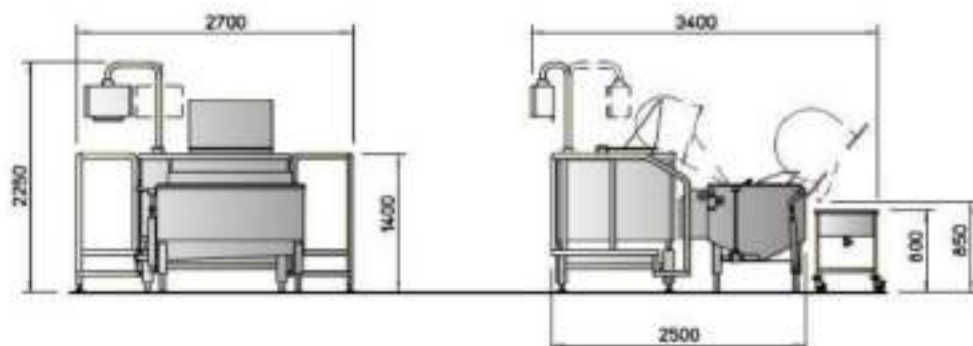
PASTALINE

C80-2



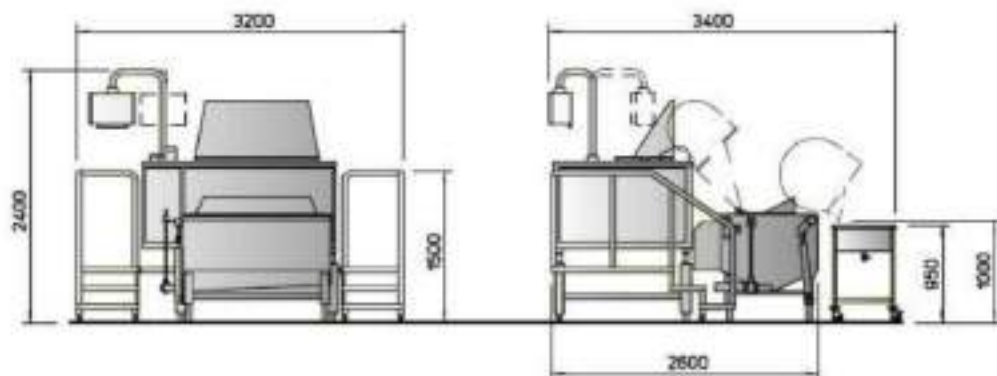
PASTALINE

C/150



PASTALINE

C/300



No reproduction even in part. June 2011



APPLIANCE CONSTRUCTED TO HARMONISED STANDARDS, CE MARKED

ISO 9001 certified manufacturer

MIX-MATIC

Tilting boiling pan with mixing



AN ASSURANCE OF RESULTS

MIX MATIC not only works as a traditional boiling pan – cooking soups, rice, sauces, jams, porridges, custards etc... – it is special because it completes these tasks perfectly and reliably!

When ever were these jobs possible, without constant inspections and interventions?

In fact, MIX MATIC is the first pan allowing:

- a perfect cooking uniformity: ingredients are continuously amalgamated by the mixing arms, so that the heavier ones are not left on the bottom;
- the maximum practicalness, thanks to the automatic control of the cooking temperature. This device is very important for the preparation of soups and creams and very useful to

quick reconstitute ready-to-eat products;

- the perfect blending of those ingredients added during the cooking, thanks to the automatic mixing;
- the quick discharge of the product, enabled by the automatic tilting of the pan.

Last but not least, MIX MATIC grants all the advantages of NILMA's equipment: time and labour savings, reduced energy costs, safe operation.

All these features make MIX MATIC essential to meet the needs of quality, rationality and economy of any large kitchen.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

MIX-MATIC

Tilting boiling pan
with mixing



TECHNICAL FEATURES

- Entirely made of stainless steel 18/10, on adjustable feet
- Hydraulically driven pan tilting device
- Lid mounted on balanced hinges, with handle
- Insulated cooking pan
- Automatic mixing device, operated by a geared motor and equipped with blending paddles
- Discharge cock, \varnothing 2", made of chromium-plated brass
- Safety devices on the pan tilting and on the mixing
- Blending paddles easily removable for cleaning
- ISPESEL exempted machine as per DPR 341 dd. 13.02.81
- Adjustable cooking temperature
- Safety valve for steam overpressure
- Hot/cold water tap
- Low tension control board, equipped with: electronic programmer (with built-in timer, pan tilting push-button, continuous/alternate mixing selector, ON light, reached temperature warning light), pressure gauge, digital thermoregulator, emergency stop button.
- Upon request, Mix-Matic may be equipped to run Nilma's "Creative Control Machine Point" software.

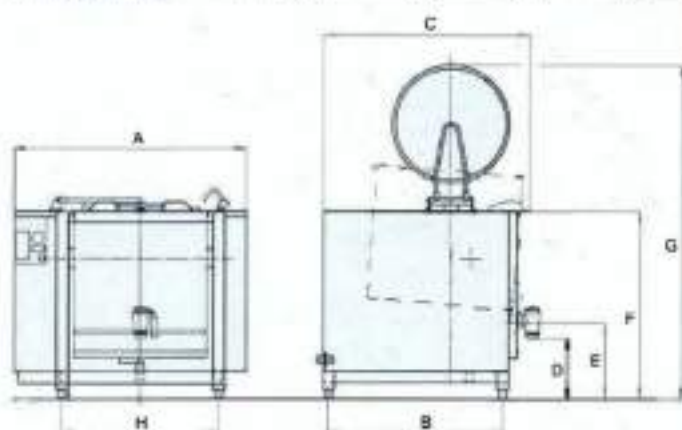
THE VERSIONS

STEAM: stainless steel cavity wall, working with low pressure steam (0,5 bar), equipped with steam inlet solenoid valve and steam trap

ELECTRIC: with incoloy steel heating elements placed into the cavity wall. Automatic level regulator

THE MODELS

	120 ELECT.	120 STEAM	300 ELECT.	300 STEAM
capacity	1	125	300	300
steam connection	ø	—	1"1/4	1"1/2
electric connection	V	230/41.50-E	230/43.50-E	230/43.50-E
installed power	kW	34.5	0.5	36.5
steam consumption	kg/h	—	120	160
condensate discharge *	ø	—	1 1/2"	1 1/2"
water connection	ø	1/2"	1/2"	1/2"
weight of the machine	kg	280	280	410
diameter of the pan	mm	600	600	900



	A	B	C	D	E	F	G	H
Mix Matic 300	1600	1190	1360	320	390	1000	2240	1210
Mix Matic 120	1250	930	1100	320	440	1000	1870	835

THE ACCESSORIES

Stainless steel 18/10 trolley, with two fix wheels and two castors with brakes.

Tilting collecting vat, capacity 80 l, removable for cleaning.

The height of the vat is adjustable by means of a manual device, according to the tilting height of the pan (from 375 to 915 mm).

Weight of the trolley: 56 kg

Dimensions: 805x1030x1050 mm.



ISO 9001 certified manufacturer

Nilma

LA SCIENZA DELLE GRANDI CUCINE

NILMA SpA - Via E. Zacconi 24/A - 43100 Parma - Tel. +39 0521 785241 - Fax +39 0521 273050 - E-mail: export@nilma.it - Home Page: www.nilma.it
Manufactured by NILMA s.p.a. - Italy - The factory reserves the right to make all the necessary alterations and technical improvements without notice

MIX-MATIC 250/500 S

Universal cooker with mixer



HIGH PERFORMANCE AT FULL STEAM

Mix-Matic S is the ideal cooker for all types of sauces, Bolognese, bechamel, etc. Cooking temperature can be adjusted as required from very low up to a maximum of 165°C. This makes it possible to achieve the cooking results typically obtained with kettles, pans and braising pans. The kettle's hemispherical bottom and automatic mixing system ensure perfect mixage of the product during cooking.

The functioning of the mixing arm can be programmed for continuous or alternated operation with speed adjustable according to the recipe used. Basic and added ingredients are constantly stirred by the mixing device to prevent the heavier ingredients from falling to the

bottom of the kettle and thus assure perfectly homogeneous cooking.

Mix-Matic S is fully programmable and can be equipped with HACCP control and cooling system. It also enables rapid product discharge through a special valve or by automatic tilting of the cooking kettle.

Easy to clean, extremely sturdy and reliable, **Mix-Matic S** offers excellent performance in terms of both product output and product quality.

Mix-Matic S, a winning solution for the cooking needs of all food processing industries.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

MIX-MATIC 250/500 S

Universal cooker with mixer

THE FEATURES

STRUCTURAL

- ▶ Cooking kettle with hemispherical bottom, full stainless steel AISI 316 construction.
- ▶ Frame, lid, panels and mixer in stainless steel AISI 304.
- ▶ Lid with hydraulic lifting device and steam outlet.
- ▶ Automatic mixing device, controlled by geared motor.
- ▶ Hydraulic kettle tilting device.
- ▶ Stainless steel AISI 304 discharge valve, with DN 50 connector, located on the bottom of the kettle.

FUNCTIONAL

- ▶ Indirect steam heating. Operating pressure 8 bar.
- ▶ Double adjustment device for cooking temperature.
- ▶ Electromechanical control for hot and cold water inlet.
- ▶ Automatic mixing device with variable speed.
- ▶ Mixer with fluid-dynamic blades: easily removed for cleaning.
- ▶ Safety device on kettle tilting and mixing system.
- ▶ Jacket fitted with certified safety valve and adjustment pressure switch.
- ▶ Low voltage, analog control panel with digital display. Protection degree IP55.



Accessories

Stainless steel AISI 304 footbridge equipped with adjustable feet. Steps and floor surface made of antislip metal sheet.

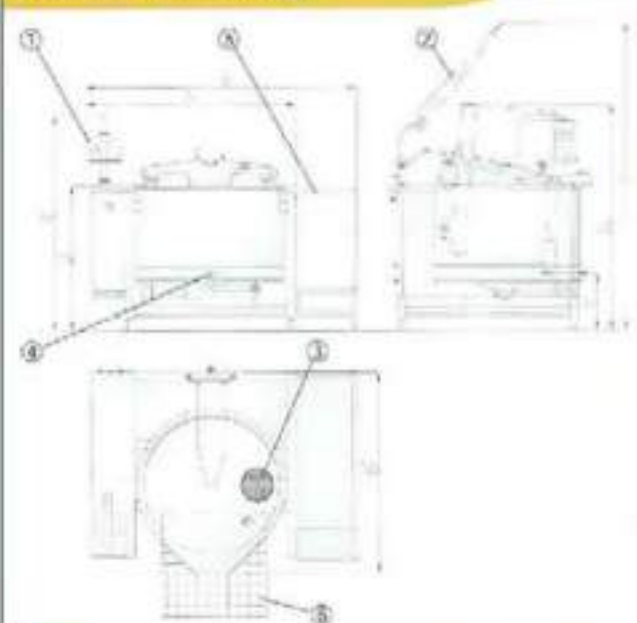
Technical data

	MIX-MATIC 250 S	MIX-MATIC 500 S
Power connection	230/400V 3ph 50Hz+T	230/400V 3ph 50Hz+T
Installed power kW	11	4
Steam connection Ø	3/4"	1"
Pressure (Mpa)	0.8	0.8
Maximum loading capacity lt	250	500
Steam consumption kg/h	200	300

DIMENSIONS

A	1714	2044
B	1534	1988
C	1847	2028
D	1173	1352
E (optional)	-	2644
F	462	503
G	1735	2131
H	2447	2926

Technical drawings



Legend

1) control panel, 2) lid, 3) steam outlet, 4) product discharge valve, 5) footbridge (optional), 6) discharge gate.

Special options

- ▶ Machine equipped with product cooking and cooling system (cook & chill).
Data available upon request.



DESIGNED AND
MANUFACTURED
TO CE STANDARD

ISO 9001 certified manufacturer

Nilma
LA SCIENZA DELLE GRANDI CUCINE

NILMA S.p.A. Via E. Zaccaroni, 24/A - 43100 Parma - Tel. +39.0521.785241 - Fax +39.0521.273050 - www.nilma.it • nilma@nilma.it

The factory reserves the right to make all the necessary alterations and technical improvements without notice.

SALSAMAT

Tilting automatic braising pan



A RIGHT-HAND WITH LOTS OF NEW IDEAS

Top technology, top functionality. This means considerable savings in time, labour and energy together with new culinary possibilities.

This is what **SALSAMAT** offers to communities, centralized kitchens, canteens and food processing industries.

The integrated automation of the various operating and heating phases, the optimal heat distribution, the programmable cooking functions and the exclusive stirring system, complete with special scrapers,

make **SALSAMAT** extremely versatile. Browning, cooking and braising meats, preparing stews, meat sauces, sauces, risottos, purees, vegetables, jams and other specialties is no longer a problem: **SALSAMAT** gives you high quality results every time.

Wilma

LA SCIENZA DELLE GRANDI CUCINE

Ideal for small gastronomic productions and catering for up to 500 people
Max. capacity: 65 litres



SALSAMAT >>

80

>> **MUCH MORE THAN A BRAISING PAN**



SALSAMAT offers surprising gastronomic results thanks to its exclusive functional features that ensure maximum flexibility of use with every type of product. With **SALSAMAT** you can now brown, braise and cook most foods: pasta and rice dishes, braised meats, vegetables, sauces and other condiments with excellent results every time!

SALSAMAT offers surprising gastronomic results thanks to its exclusive functional features that ensure maximum flexibility of use with every type of product. With **SALSAMAT** you can now brown, braise and cook most foods: pasta and rice dishes, braised meats, vegetables, sauces and other condiments with excellent results every time!

>> **UNIFORM COOKING**

SALSAMAT uses an absolutely exclusive stirring system: it can be programmed to choose a suitable type of stirring action during cooking with 3 different modes: continuous, alternated and with direction reversal. The cooking vat is large and not very deep, the bottom is stainless steel 18/10, constructed in a single 18 mm thick piece; it has rotating arms fitted with removable mixing paddles and special stainless steel scrapers that reach every part of the vat to keep the product from sticking to the bottom during the browning stage.

>> **FULLY AUTOMATIC**



All the operating phases are fully automated through the control panel, located on a movable arm. The electronic timer, thermostat, temperature control and other components automatically perform the functions set by the operator, ensuring perfect execution of the desired recipe.



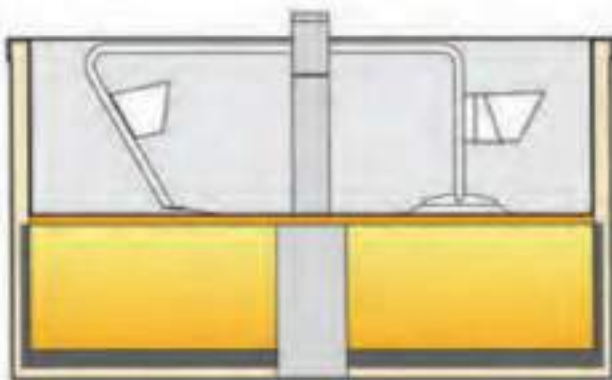
Ideal for medium gastronomic productions and cooking centres, canteens, hospitals with over 600 people
Max. capacity: 160 litres



SALSAMAT >>

160

>> LOW POWER CONSUMPTION



Both the electric and gas versions of **SALSAMAT** are designed to reduce energy consumption to the minimum. The technical characteristics that help achieve this power saving are: thermostatic temperature adjustment, complete insulation of cooking vat and extra-thick pan bottom which, once heated, ensures effective thermal retention. The gas version also features an exclusive, patented combustion chamber with thermal accumulation, to guarantee maximum exploitation of combustion heat.

>> MAXIMUM OPERATIONAL CONTROL (H.A.C.C.P.)

If requested, **SALSAMAT** can be supplied with connection facilities for Nilma's software "**Creative Control Machine Point**". This system ensures constant control of process parameters and recording of every cooking phase, to guarantee operating safety and production standards in accordance with HACCP procedures. Version 1.2 of the software complies with EC regulation no. 852/2004 on food product hygiene (HACCP) and the new version 4.0 also enables the retracing of food products along the supply chain, as required by EC regulation no. 178/2002 (TRACEABILITY). The system also makes it possible to perform the cooking phases in the required sequence and monitor the main functions and system alarms.



Ideal for large productions in food processing industries

Max. capacity: 300 litres



SALSAMAT >> 300

>> EASY TO USE

SALSAMAT requires no manual actions and performs the various cooking procedures completely automatically. The operator only has to place the ingredients in the vat and, when cooked, tip the product into the trolley. This is equipped with a device for lifting and tilting the collection vat to make product unloading operations safer and more functional. The structure is fitted on four swivel wheels for easier handling around small areas.



>> I MODELS

SALSAMAT >> 80 160 300

500 litre capacity only available upon request.

>> LE VERSIONS

ELECTRIC: heating system features section armored heating elements, made of stainless steel "Incoloy 800", located on the bottom of the cooking vat.

GAS: with air burner, electronic ignition, equipped with ignition electrode and flame ionisation signal tracer.



Wilma

SALSAMAT

Tilting automatic braising pan



>> Safe unloading operations

>> ACCESSORIES

TROLLEY

With product collecting vat, tilting device, fitted with height adjustment device, handles, two fixed wheels and two swivel wheels with break.

- Construction stainless steel 18/10
- Max. vat capacity 80 litres
- Weight 56 kg
- Dimensions: 805x1030x1050(h)mm
- Vat height adjustable between 375 and 915 mm

RINSING SHOWER HEAD

Handy, sturdy and functional, with progressive opening even with high pressure, anti hammer device, double effect concentric water jet, flow rate at 3 bar: 16 l/min.



SPEED VARIATOR

Stirring regulation system with inverter.

LITRE COUNTER

Automatic vat filling device, with volumetric measuring unit.

DISCHARGE VALVE

Stainless steel 18/10, butterfly valve fitted with hose connector.

STEAM DISCHARGE SYSTEM

With protection guard, hopper and hinged lid

TREND MACHINE POINT

Software for time-temperature data collection.

SOFTWARE CREATIVE CONTROL MACHINE POINT 1.2

To enable programming of 6 cooking phases, constant control of process monitors and recording of every phase or alarm.

SOFTWARE CREATIVE CONTROL MACHINE POINT 4.0

To enable programming of 9 cooking phases, constant control of process inputs and recording of every phase or alarm, with product traceability function.

SALSAMAT

Tilting automatic braising pan

FEATURES

CONSTRUCTION

- ▶ Cooking pan, lid, stirring arms and outer panelling in stainless steel 18/10.
- ▶ Heat-diffusion bottom of cooking pan made of stainless steel 18/10, in a single 18 mm-thick piece.
- ▶ Support frame in stainless steel 18/10, minimum thickness 30/10, fitted with adjustable feet for levelling.
- ▶ Lid fitted on balanced hinges.
- ▶ Control panel located on movable arm in stainless steel 18/10.
- ▶ Automatic cooking pan tilting device.

- ▶ Insulated cooking pan and heating system.
- ▶ Hot and cold water mixer tap.
- ▶ Automatic three-arm mixing device (two arms in mod. 80) provided with stainless steel scrapers and movable stirring paddles.

OPERATION

- ▶ Low-voltage, analogue control panel with digital display.
- ▶ Programmable stirring device: continuous, alternated and direction reversal mode.
- ▶ Safety device fitted on pan tilting unit and stirring unit.

Technical drawings SALSAMAT >>



Technical data

>> model	80 elect.	80 gas	160 elect.	160 gas	300 elect.	300 gas
Loading capacity	65 l	65 l	160 l	160	300 l	300 l
Electric power V	9,5	0,5	24,7	0,7	51	1,1
Thermal power kW	-	14	-	37	-	53,5
Heating surface cm ²	28	28	74	74	132	132
Hot and cold water	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Gas	-	3/4"	-	3/4"	-	3/4"
Electrical connection	230/400V 3.50+T	230/400V 3.50+T+N	230/400V 3.50+T	230/400V 3.50+T+N	230/400V 3.50+T	230/400V 3.50+T+N
Temperature	30°-250°C	30°-250°C	30°-250°C	30°-250°C	30°-250°C	30°-250°C
Weight kg	250	270	530	570	700	840
Cooking pan height mm	300	300	300	300	300	300



MANUFACTURED IN ACCORDANCE WITH HARMONIZED REGULATIONS AND BEARING CE MARK

ISO 9001 certified manufacturer



NILMA S.p.A. Via E. Zaccaroni, 24/A - 43100 Parma - Tel. +39.0521.785241 - Fax +39.0521.774642 - www.nilma.it • nilma@nilma.it

Nilma reserves the right to make all the necessary alterations and technical improvements without notice

MINI STEAM

Automatic atmospheric steaming oven



**EFFECTIVE STEAMING....
EXCELLENT COOKING**

Nilma have created **MINI STEAM**, a steaming oven that uses an atmospheric cooking system and, thanks to its innovative technological design, can guarantee maximum functionality and perfect results. **MINI STEAM** cooks by heat diffusion: the dry saturated steam that develops inside the oven prevents food oxidization and condensation formation. Meat, vegetables, fish and eggs will preserve all their nutritional properties since the vitamins, proteins and mineral salts are not dispersed in water.

Cooking times are reduced by 30%-40% compared to traditional cooking in water; frozen or pre-cooked food prepared with **MINI STEAM**,

will be tender and perfectly moist. **MINI STEAM** also allows significant savings on labour, because it is completely automatic, and on power, thanks to its exclusive heat recovery system; **MINI STEAM** is the equipment with the lower energy consumption in its category. **MINI STEAM** with its new cooking system is ideal for hotels, restaurants and small communities, because it makes every menu tastier and more economical.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

MINI STEAM

Automatic atmospheric steaming oven



>> FEATURES

>> CONSTRUCTION

- ▶ Electric steam generator with "incoloy" stainless steel heating elements, equipped with a safety valve and dry steam production device.
- ▶ Covering, interior and door in stainless steel 18/10.
- ▶ Oven and steam generator fully insulated.
- ▶ Height-adjustable feet.
- ▶ Stainless steel 18/10 rack, may be removed for cleaning.
- ▶ Door equipped with seal, handle and removable condensation drip-tray.

PRODUCTION AND COOKING TIMES

FOOD	PANS	NO. OF PANS	CAPACITY in Kg GN1/1	COOKING TIME (min.)
VEGETABLES				
Peas	h 40 P	4	17	15
Sliced potatoes	h 40 P	4	14	25
Sliced carrots	h 40 P	4	12	25
Beets and spinach	h 40 P	4	3,2	10
Sliced courgettes	h 40 P	4	12	15
Fennel quarters	h 40 P	4	12	22
Brussels sprouts	h 65 P	3	9	20
Asparagus	h 40 P	4	12	15
MEAT				
2 kg beef chunks	h 65 P	3	12	100
Chicken quarters	h 40 P	4	12	30
700 g. pork sausage	h 65 P	3	12	90
FISH AND SEAFOOD				
250 g trout	h 20 P	6	12	16
Sole fish	h 20 P	6	7	6
Mussels	h 40 P	4	12	6
Lobsters and prawns	h 20 P	6	12	12
OTHER FOOD				
Boiled eggs	h 40 P	4	n° 96	12
Soup	h 65 S	3	12	60
Sliced mushrooms	h 40 P	4	8	5
Pears	h 40 P	4	11	35

The above cooking times may vary depending on the initial temperature, size and quality of the product.

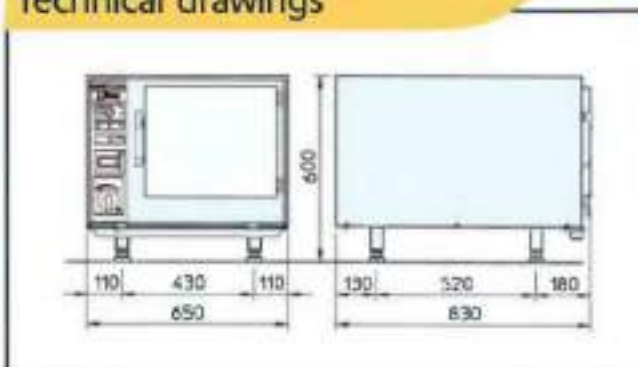
>> FUNCTIONAL

- ▶ Low voltage (24 V) control panel with: start/preheat/stop switch, power light, temperature ready light, programmer for cooking times with end-of-cycle sound signal, boiler drain knob.
- ▶ Automatic control of water level in boiler.
- ▶ Heat-recovery energy saver.
- ▶ Safety device to prevent elements from heating up when water runs out in the generator.

Specifications

• Pan capacity	4 GN 1/1 h40 perforate-P or solid-S
• Power supply	V 230.1.50+T or 230/400.3.50+N+T
• Power absorption	kW 6,4
• Water connections, inlet and outlet	Ø 3/4" and 1"
• Weight	Kg 60

Technical drawings



MANUFACTURED IN ACCORDANCE WITH HARMONIZED REGULATIONS AND BEARING CE MARK

ISO 9001 certified manufacturer

Wilma
LA SCIENZA DELLE GRANDI CUCINE

NILMA S.p.A. Via E. Zacconi, 24/A - 43100 Parma - Tel. +39.0521.785241 - Fax +39.0521.774642 - www.nilma.it • nilma@nilma.it

Nilma reserves the right to make all the necessary alterations and technical improvements without notice

QUICK-STEAM

Automatic steam cooker



**COMPACT, QUICK, PRACTICAL:
IT IS THE ANSWER TO MOST OF
YOUR COOKING PROBLEMS**

When compared to the other cooking methods, steam cooking presents many gastronomic, nutritional and economical advantages. For these reasons, NILMA was the first in Italy to introduce steam cooking and, through Quick-Steam models, offers these advantages to the restaurants and small catering centers with lack of space. In fact, Quick-Steam is a compact and well designed machine which can cook large quantities in short

times, allowing the preparation of complex and varied menu. Thanks to NILMA know-how and long lasting technical experience, Quick-Steam is able to handle in a few minutes 6 to 18 kgs. of different kinds of foods: vegetables, fish, meat, fruit, soup, etc., in only a half square meter of space. It can practically cook a whole menu preserving nutritional value, aroma, flavour and appetizing quality and presentation.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

Quick-Steam the ideal cooking



because it reduces cooking times

The remarkable saving of time (and costs) achievable with steam cooking is even more appreciable with Quick-Steam, thanks to its total automation, its cooking pressure (which is of 1 Bar, equal to 120°C) and its excellent insulation.

because it is extremely versatile

With Quick-Steam any kind of food can be cooked even simultaneously – vegetables, meat, fish, fruit – also ready diced, sliced or in portions, etc. Everything can be positioned in a very limited space, because Quick-Steam takes up only a half square meter in the kitchen.

because it saves in energy and labour

With Quick-Steam the only necessary operations are to place the food in the cooking chamber, set the cooking time and, at the end of cycle, take the cooked food out. No control is necessary during the cooking, so that kitchen staff can carry out other jobs. Moreover, the reduction in cooking times and the special construction and insulation result in an energy saving as high as 90% against traditional cooking methods.

system for the professional caterer

It retains the natural texture and quality of the product

Conventional boiling of food results in a high wastage of vitamins and mineral salts, thus robbing the food of its precious nourishing qualities. This waste is greatly reduced with Quick-Steam by ensuring better nutritional value. This is today a very important element and the comparative table shows the results of laboratory tests.

and it makes the most of its gastronomical qualities

Another positive feature of steam cooking with regard to boiling system is that vegetables are not spoiled, meat preserves its natural tenderness and, above all, food taste is improved making seasoning less necessary.

Vegetable nutritional values and the percentage reduction during cooking:

Vegetables	Main nourishing values	Contents mg/kg	Reduction during cooking	
			in water or stewed	Quick-Steam steam cooking
PEAS	iron	1,8	81%	27%
	potassium	220	51%	18%
	magnesium	35	61%	18%
BEANS	iron	3	18%	4,3%
	potassium	220	21%	16%
	magnesium	30	24%	16%
	calcium	44	43%	20%
POTATOES	potassium	458	52%	10%
SPINACH	iron	2,9	58%	42%
	vitamin A	485	64%	28%
	vitamin B2	0,37	55%	19%
BROCCOLI	calcium	25	41%	21%
CARROTS	vitamin A	1148	38%	31%
FRENCH BEANS	vitamin A	41	10%	8%
	vitamin C	16	48%	31%

Production and cooking times

Cooking times indicated in the following table may vary according to the inlet temperature, the size and the quality of the product itself and they have been calculated starting from when the necessary operating pressure is achieved in the cooking chamber.

FOOD	Container type GNI/l	Container Qty	Container capacity Kg.	Production per cycle Kg.	Cooking times minutes
VEGETABLES					
Sliced potatoes	h. 65 P.	3	5	15	10-12
Diced carrots	h. 65 P.	3	5	15	10-12
Peas	h. 65 P.	3	4	12	4-5
Sliced zucchini	h. 65 P.	3	4	12	6-8
Fennel quarters	h. 100 P.	2	6	12	6-8
Broccoli	h. 100 P.	2	4	8	8-10
Cauliflower in pieces	h. 100 P.	2	4	8	8-10
Spinach	h. 200 P.	1	6	6	5-6
Chards	h. 200 P.	1	6	6	6-7
MEAT					
Chicken quarters	h. 65 N.P.	3	4	12	35-40
Spiced sausage	h. 65 N.P.	3	6	18	90-100
Beef	h. 100 N.P.	2	6	12	80-90
FISH					
Trout	h. 65 P.	3	4		10-12
Cod	h. 65 P.	3	4,5	12	12-15
Hake	h. 65 P.	3	4	12	15-20
OTHER KINDS OF FOOD					
Vegetable soup	h. 65 N.P.	3	6 lt.	18 lt.	12-15
Hard-boiled eggs	h. 65 P.	3	200 pcs.	600 pcs.	12
Apples, pears	h. 65 N.P.	3	6	18	14-16
Mushrooms	h. 65 N.P.	3	3	9	12-15



QUICK-STEAM

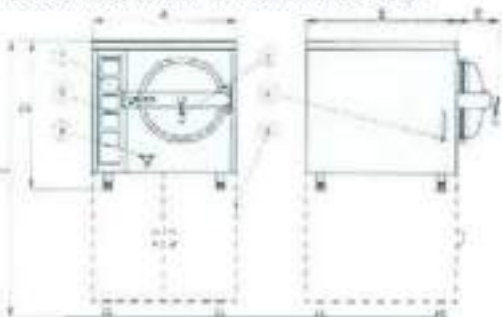
Automatic steam cooker

THE MODELS



ELECTRIC

Provided with steam generator with armoured heating elements, made of stainless steel.

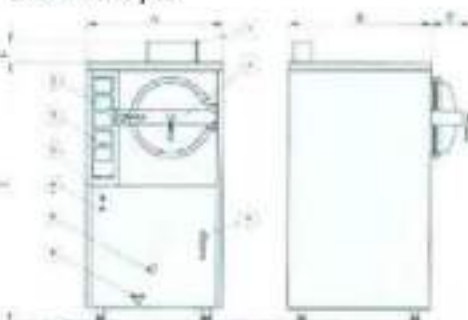


KEY

1) Steam control handle 2) Control board 3) Boiler drainage knob 4) Door control handle 5) Pan-holding base (optional) 6) Level gauge

GAS

Provided with tube nest steam generator, with electric ignition atmospheric burners, pilot flame, safety thermocouple.



KEY

1) Plug 2) Steam control handle 3) Control board 4) Door control handle 5) Burner ignition push button 6) Burner stop push button 7) Sight glass 8) Level gauge 9) Boiler drainage knob

ACCESSORIES (OPTIONAL)

Base for the Electric version with compartment for Gastronorm containers, made of 18/10 stainless steel with two doors and adjustable feet.

Dimensions: 750x800x795 (h) mm

Gastronorm containers (GN 1/1 530x325 mm), can be supplied in different heights and types (perforated or not perforated).

DESIGN FEATURES

- External panelling, cooking chamber and locking door in 18/10 stainless steel.
- Completely insulated cooking chamber and steam generator.
- Adjustable supporting feet.
- 18/10 stainless steel extractable pan-holding rack. Capacity: 3 containers GN 1/1 (h) 65 mm, or 2 containers GN 1/1 (h) 100 mm, or 1 container GN 1/1 (h) 200 mm.

SPECIFICATIONS

- Hinged door provided with sealing gasket and handle with mechanical locking device.
- Cooking time programmer with sound signal for end of cycle.
- Pressure control gauges for cooking chamber and steam generator.
- Water level electronic adjustment in the steam generator with sight glass.
- Safety device preventing the heating system operation in case of water lack in the steam generator.
- Pressure adjustment pressure switch in cooking chamber and steam generator.
- Approved safety valve, calibrated at 1.5 Bar.
- Mechanical safety device preventing steam from getting into the cooking chamber when the door is open, and preventing the door from being opened when the cooking chamber is under pressure.

	ELECTRIC MOD.	GAS MOD.
Electric connection	230 VCA 50/60 Hz 1+N+T	230V 50 Hz 1ph +T
Typical power kW	—	18
Electric power kW	12	0.5
Gas connection	—	11"
Steam drain	34"	24"
Softened water inlet	34"	24"
Weight of empty machine	91	125

DIMENSIONS

	ELECTRIC MOD.	GAS MOD.
A	750	750
B	800	800
C	1215	1215
D	790	—
E	750	750
F	—	730



DESIGNED AND MANUFACTURED
TO CE STANDARD

Nilma

LA SCIENZA DELLE GRANDI CUCINE

ISO 9001 certified manufacturer

NILMA SpA - Via E. Zecconi 24/A - 43100 Parma - Tel. +39 0521 783241 - Fax +39 0521 273050 - E-mail: export@nilma.it - Home Page: www.nilma.it

Manufactured by NILMA s.p.a. - Italy - The factory reserves the right to make all the necessary alterations and technical improvements without notice

VAPHOOR

Automatic steam cooker



A NEW AND BETTER METHOD OF COOKING

If compared with other methods, steam cooking has really many advantages: reduction of cooking and cleaning times, increase of employee productivity, reduction of wastes and retaining of food nutritional values. In order to reach these aims, especially in large establishments, we have created a machine by using the highest level of design and technology.

We have studied the fundamental requirements of the very best gastronomy to preserve the highest level of vitamins and mineral salts and not to alter the taste, consistency or appearance of the food.

We believe that Vaphoor meets all the needs of the sophisticated large kitchen.

Nilma
LA SCIENZA DELLE GRANDI CUCINE

Vaphoor, the automatic
economical cooking of



atic machine which gives quick and of many main dishes and vegetables.

Production and cooking times

The product cooking times indicated in the following table can be more or less sensibly altered, according to the introduction temperature, the size and quality of the product, and they have been calculated starting from when the necessary operating pressure is achieved in the cooking chamber.



	Cooking pressure (bar)	Container GN 1/1	Introduced containers No.	Container capacity Kg.	Cooking time min.	Production per cycle Kg.
VEGETABLES:						
Whole potatoes	1	h.200P.	6	15	15/20	90
Cauliflower	1	h.200P.	6	9	10/12	54
Spinach	0,5	h.200P.	6	6	6/8	36
Ribs	0,5	h.200P.	6	6	6/8	36
Cabbage	0,5	h.200P.	6	6	6/8	36
Fennel quarters	1	h.100P.	12	6	8/10	72
Brussel sprouts	1	h.100P.	12	4,5	10/12	54
Cur peppers	1	h.100P.	12	5	8/10	60
Onions	1	h.100P.	12	5	12/15	72
Broccoli	1	h.100P.	12	5	10/12	60
Sliced potatoes	1	h. 65P.	18	5	15/20	90
Diced potatoes	1	h. 65P.	18	5	15/20	90
Peas	0,5	h. 65P.	18	4	8/10	72
French green beans	1	h. 65P.	18	2,5	12/15	45
Sliced carrots	1	h. 65P.	18	5	10/12	90
Sliced zucchini	0,5	h. 65P.	18	4	8/10	72
Asparagus	0,5	h. 65P.	18	2,5	8/10	45
Borlotti beans	1	h. 65P.	18	4	12/15	72
Chick-peas	1	h. 65P.	18	4	10/12	72
Sliced turnips	1	h. 65P.	18	4	12/15	72



MEAT:						
Corchino	0,5	h.100P.	12	5	90/120	60
Zampone	0,5	h.100P.	12	6	90/120	72
Beef	1	h.100N.P.	12	8	80/90	96
Pork	1	h.100N.P.	12	8	60/80	96
Chicken quarters	1	h.100N.P.	12	6	25/30	72
Veal stew	1	h. 65N.P.	18	4	35/40	72



FISH						
Trout	0,5	h. 65P.	18	3	10/12	54
Cod	1	h. 65P.	18	4	10/12	72
Hake	1	h. 65P.	18	3	12/14	54
Salmon	1	h. 65P.	18	4	12/14	72



PASTA AND OTHER KINDS OF FOOD						
Mixed veget. and pasta soup	1	h.100N.P.	12	12,5	15/20	150 lt
Pasta	1	h.100N.P.	12	3 + Water	8/12	36
Rice	1	h.100N.P.	12	3 + Water	10/15	36
Hard boiled eggs	0,5	h. 65P.	18	150 pcs	5/6	2700 pcs
Apples, pears	0,5	h. 65N.P.	18	4	15/20	72
Truffled mushrooms	0,5	h. 65N.P.	18	2	20	36
Egg-plants	0,5	h. 65N.P.	18	3	20	54
Stuffed tomatoes	0,5	h. 65N.P.	18	60/70 pcs.	12	1000/1250 pcs

VAPHOOR

Automatic steam cooker

THE MODELS

ELECTRIC

With steam generator with armoured heating elements, provided with safety against overheating.

INDIRECT STEAM

With tube nest steam generator fed with mains steam at a pressure included between 5 and 8 bar.

GAS

With steam generator equipped with special burner and electronic ignition, supplied with a safety device approved by the Italian Ministry of Interior.

VAPORE DIRETTO

It is fed with clean steam, at a maximum pressure of 1 bar.

THE ACCESSORIES



TRANSPORT TROLLEY

It is made of stainless steel 18/10, equipped with 4 swivel castors, two with brakes, quick hooking system to the machine and rack locking device. Dimensions: 830x630x960 (h) mm.



TROLLEY-MOUNTED RACK

It is made of stainless steel 18/10, provided with slide guides for pans and with handle, it has a capacity of:

- 18 pans GN 1/1 (h) 65 mm. or
- 12 pans GN 1/1 (h) 100 mm. or
- 6 pans GN 1/1 (h) 200 mm.

Dimensions: 700x435x705 (h) mm.

CONTAINERS

Containers normally used are gastronorm 1/1 (530x325 mm) in three different depths 65-100-200 mm. They are available with or without holes; containers with holes are generally employed to cook vegetables and fish.



Vaphoor: all the merits of steam cooking together with all the advantages of Nilma technology.

Vaphoor treats its vegetables with respect

Vegetables	Main nourishing values	Contents mg/kg	Residues during cooking	
			in water or stewed	Vaphoor steam cooking
PEAS	iron	1,8	47%	27%
	potassium	280	33%	18%
	magnesium	95	51%	19%
BRASS	iron	3	38%	4,8%
	potassium	220	21%	16%
	magnesium	29	24%	14%
	calcium	40	47%	28%
POTATOES	potassium	450	30%	39%
SPINACH	iron	2,9	24%	42%
	vitamin A	662	6%	32%
	vitamin B2	0,07	36%	39%
BRUSSELS	calcium	29	41%	11%
CARROTS	vitamin A	13,45	38%	31%
PUMPKIN	vitamin A	11	10%	8%
BEANS	vitamin C	16	48%	21%

The table above shows how Vaphoor treats its vegetables with respect as well as other kinds of food nourishing principles: there is a great difference between boiling vegetables in water – a strongly dispersive one – and steam cooking. Laboratory tests have proved that Vaphoor steam cooking improves the appearance and taste of the food. Vegetables in fact retain less water and they are unspoiled, meat becomes more tender and everything is much tastier, thus requiring smaller quantities of seasoning.

Vaphoor cooks better and quicker

Vaphoor has a pressure selector which allows the operator to choose the most suitable temperature for the different kinds of food and their degree of delicacy from 0,5 bar (111°C) to 0,9 bar (118°C). As it cooks, Vaphoor produces steam, it restores automatically the evaporation water level and it adjusts its operating pressure with a precision assuring among other things a great reduction in cooking times.

For example, Vaphoor can process in an hour up to 400 Kg. potatoes, 200 Kg. spinach, 100 Kg. pork rolls.

Moreover, when steaming meat a very good stock is obtained which can be used to prepare soups.

Vaphoor is equipped with 2 trolleys and 2 racks and this makes it possible to alternate the preparation and cooking phases, thus obtaining a full working schedule.

Vaphoor quickly reactivates pre-cooked and deep frozen foods

Vaphoor is also ideal for the reactivation of deep-frozen or refrigerated food, because it proceeds directly from the defrosting to the final steaming.

Vaphoor saves energy

With vaphoor cooking times are greatly reduced and this leads to a substantial reduction in energy consumption.

Vaphoor is automatic and therefore it also saves on labour costs

All you have to do with Vaphoor after introducing food is simply to set the time and close the door. At the end of the cooking cycle both the steam exhaust and the door opening are automatic; all you need to do is to lock the trolley against the steamer and take out the racks with the food thoroughly cooked. Even in cleaning operations the saving of labour is huge; in fact at the end of the cooking cycle a self cleaning device operates automatically.



Another advantage: the safety of the operating personnel

The many safety devices make all operations automatic and safe for the operating personnel. For example, the door remains locked all through the cooking period and it is unlocked only at the end of the cooking cycle, when all the steam has been automatically condensated and expelled. Both food introduction and extraction is carried out with a trolley-mounted rack.

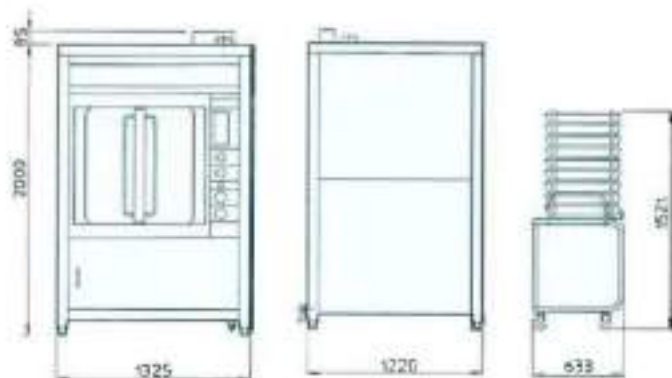
And the safety of operation guaranteed through HACCP control system

Upon request, Vaphoor may be equipped to run Nilma's "Creative Control Machine Point" software. This software is capable of recording not only the temperature/time function, but also the ingredients, quantity and procedures to execute any recipe. Data collected are recorded in special files in the Chef's computer.



VAPHOOR

Automatic steam cooker



CONSTRUCTION

- Outside frame, cooking chamber, locking door and external panelling made of stainless steel 18/10.
- Closing system with sliding door rotating on the vertical axis of the cooking chamber.
- Completely insulated cooking chamber and steam generator.
- Adjustable stainless steel supporting feet.

DIMENSIONS

Width	1325	mm(*)
Length	1220	mm
Height	2000	mm

* (GAS version *S*1700 mm)

THE FEATURES

OPERATION

- Door automatic release device at the end of the cooking cycle.
- Digital electronic programmer for cooking times and main operating functions such as steam inlet and discharge at the end of the cooking cycle.
- Generator and cooking chamber pressure control gauges.
- Cooking pressure selector: 0,5 bar or 0,98 bar.
- Cooking chamber bottom automatic washing device.
- Floating particles filtering device placed at the water inlet.
- Device for quick hooking of the pan holding trolley at the entrance of the cooking chamber.
- Water level electronic adjustment in the steam generator with external window.
- Safety device preventing the heating system from being switched on in case there should be no water in the steam generator.
- Safety devices: cooking chamber pressure switch, steam generator pressure switch, safety valve calibrated at a maximum pressure of 0,9 bar and safety microswitch on the door.
- Machine built according to I.S.P.E.S.L. regulations and provided with test and inspection certificate.
- VAPHOOR Mod. Gas "S" has been especially designed for the cooking of the frozen foodstuffs.

	Direct Steam Mod.	Indirect Steam Mod.	Gas Mod.	Gas "S" Mod.	Electric Mod.
Water inlet	1/2"	3/4"	3/4"	1/2"	1/2"
Main exhaust	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Water consumption Kg	440	700	495	565	606
Steam production	1 1/2"	3/4"	-	-	-
Condensate drainage	-	3/4"	-	-	-
Steam consumption Kgh	180	306	-	-	-
Gas connection	-	-	3/4"	5/8"	-
Thermal power kW	-	-	75	90	-
Empty weight Kg	600	785	788	780	675
Electric power kW	1	1	1	1	75
Electric motor cm	230 L50-T	330 L35-T	230 L90-T	230 L55-T	330 L03.50-X-T

This manual may not be reproduced without the full or in part - September 2004



ISO 9001 certified manufacturer

Wilma

LA SCIENZA DELLE GRANDI CUCINE

NILMA SpA - Via E. Zaccaroni 24/A - 43100 Parma - Tel. +39 0521 785241 - Fax +39 0521 273050 - E-mail: export@nilma.it - Home Page: www.nilma.it
 Manufactured by NILMA s.p.a. - Italy - The factory reserves the right to make all the necessary alterations and technical improvements without notice

GRILL MARKER

For vegetables, meat and fish

Kilma
LA SCIENZA DELLE GRANDI CUOCINE

**Click here for more details
about GRILL MARKER**

FS

Automatic fryers



SAFE AND SPEEDY FOR LARGE SCALE CATERING REQUIREMENTS

The particular care which has gone into designing and manufacturing NILMA's FS automatic fryers, not only takes care of gastronomic and dietetic requirements, but also takes full account of other factors, such as ease and practicality of use, safety, hygiene, speed of operation and large capacity production performance.

The automatic deep fat fryers FS consist of two frying vats (model FS/2) or one frying vat (model FS/1) and special runners, at whose end is placed the trolley for product collecting.

When the frying, controlled by a timer, is reached, the basket containing the product automatically

lifts up. By moving it alongside the upper runners, the product can be unloaded into the trolley by opening the bottom of the basket.

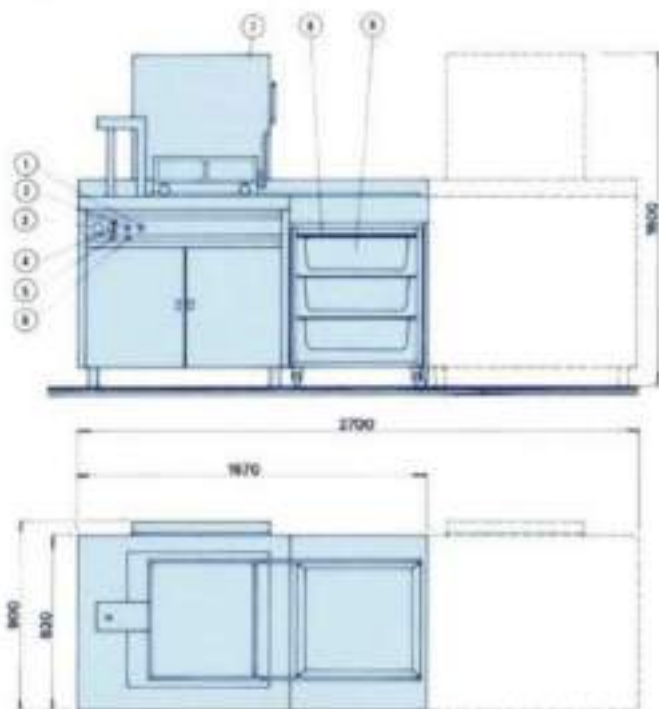
The automatic deep fat fryers FS are the ideal equipments for the caterer, thanks to the high capacity frying vat (80 lt), the "cold zone" tube stack heating and the independent work of the vats.

Nilma

LA SCIENZA DELLE GRANDI CUCINE

FS

Friggitrici automatiche



LEGENDA

- 1) Selettore salita-discesa 2) Selettore manuale-automatico 3) Temporizzatore 4) Termoregolatore 5) Spia di raggiunta temperatura 6) Spia di tensione 7) Scarico fumi 8) Carrello estraibile 9) Teglie.

GLI ACCESSORI



Pompa carrellata per il travaso dell'olio delle vasche di frittura con: serbatoio ispezionabile della capacità utile di 160 litri, filtro di separazione residui, comandi a bassa tensione, potenza installata kW 0,55 230/400.3.50+T, temperatura massima di lavoro 180°, dimensioni 700x870x1260 (h.) mm.

La pompa è costruita in acciaio inox 18/10 ed è dotata di quadro comandi con spia tensione e pulsanti di mandata e aspirazione.

LE CARATTERISTICHE

COSTRUTTIVE

- Vasche, silo, carrello e carenatura esterna in acciaio inox 18/10
- Telaio portante in acciaio inox 18/10, dotato di piedini regolabili in altezza
- Vasche di frittura a "zona fredda" coibentate dotate di valvola di scarico da 1"
- Cestelli di contenimento forati sulle pareti e sul fondo dotati di dispositivo a leva per l'apertura dei deflettori di scarico prodotto
- Elemento a silo composto da una tramoggia di convogliamento prodotto e da un carrello, in acciaio inox, corredato di tre contenitori GN 2/1 530x650x150 (h.) mm

FUNZIONALI

- Termostato elettronico di regolazione della temperatura dell'olio
- Termostato di sicurezza
- Bruciatore ad accensione elettrica, con fiamma pilota e termocoppia di sicurezza, indipendente per ogni vasca nel mod. FS 2
- Sollevamento automatico dei cestelli realizzato tramite una centralina idraulica e da due pistoni indipendenti, comandati dai timer che regolano il tempo di frittura
- Quadro comandi dotato di: termostato elettronico, temporizzatore 0-15 minuti, selettore di funzionamento manuale/automatico, selettore salita/discisa, spia di tensione, spia di raggiunta temperatura

Modelli	FS 1 elet.	FS 1 gas	FS 2 elet.	FS 2 gas
numero vasche	1	1	2	2
capacità olio vasca l	80	80	80+80	80+80
pot. elettr. installata kW	20,5	0,5	26,30,5	20,5
alimentazione elettrica	230/400.3.50 + T			
potenza bruciatore kW	-	27	-	2x27
alimentazione gas	-	3/4"	-	3/4"
capacità di carico prodotto	8	8	8 + 8	8 + 8

DIMENSIONALI

- Modello FS 1: 1670X900X930 (h.) mm, altezza camino versione gas 1600 mm
- Modello FS 2: 2700x900x930 (h.) mm, altezza camino versione gas 1600 mm
- Cestello di carico prodotto: 500x500x200 (h.) mm.



APPARECCHIO COSTRUITO SECONDO NORME ARMONIZZATE E DOTATO DI MARCATURA CE

Nilma

LA SCIENZA DELLE GRANDI CUCINE

DD 9001 certified manufacturer

FRYMATIC

Continuous Fryer



LARGE-SCALE FRYING MADE EASY

Frying large quantities of foods has always been problematic: as well as the many production difficulties, wastage levels are high, labour efficiency is low, and quality results are poor. The **Frymatic** continuous fryer is the solution to these problems.

It fries breaded meat, crisps, chips, fish, aubergines, chicken breasts and drumsticks, tourtons, nems, acras, confectionery and all products that have to be fried to a perfect golden finish, at impressively low costs.

Thanks to its original construction and innovative features, **Frymatic** delivers absolutely exclusive benefits:

- high productivity in a compact size
- minimal labour requirements
- long frying oil lifetime
- high quality, easily digested end product
- very easy to clean

as well as the other features typical of all **Nilma** appliances: low energy costs, rugged construction in 18/10 stainless steel throughout, perfect compliance with standards and absolute reliability and operating safety. All these qualities make **Frymatic** the perfect solution to the quality and economic needs of large kitchens and food producers.

Nilma

LA SCIENZA DELLE GRANDI CUCINE



FRYMATIC

Continuous Fryer



No more dirty oil

The Frymatic's built-in recycling pump with filter automatically filters the used oil from the recycling tank and returns it, clean, to the frying tank.



The right Frymatic for every user

The technical specifications of each Frymatic can be tailored to the output rate required and the type of food to be fried. Fryers are produced with a belt width of up to 800 mm.



CONSTRUCTION FEATURES

- Constructed in 18/10 stainless steel throughout
- Product conveyor and immersion belts in 18/10 stainless steel mesh
- Belt speed adjustable to suit the type of product for frying
- "Cold zone" frying tank
- Product loading hopper removable for cleaning
- Oil recycling tank in 18/10 stainless steel, with recycling pump and filter
- Standard belt width: 450 mm
- Standard product passage height between belts: 60 mm

FEATURES

FUNCTIONAL FEATURES

- Low voltage control panel with master switch, belt speed regulator, temperature pilot lights, digital thermoregulators for oil temperature, belt tipping button, oil pump switch, and burner reset button (gas version)
- Automatic belt lifting for cleaning of the frying tank
- Electronic frying oil anti-cracking device (for electric versions from 48 to 144 kW only)
- Dual device for independent oil temperature regulation (for 60 kW gas version and electric versions from 48 to 144 kW only)
- Frying time and temperature adjustable to suit the food for frying
- Safety thermostats
- Lid with frying vapours outlet (for 60 kW gas version and electric versions from 48 to 144 kW only)
- Electronic digital thermometer for visual checking of load position and oil temperature

Easy to programme

Frymatic is easy to programme thanks to a very user-friendly control panel. Just set the ideal frying temperature on the thermostats and select the best belt speed for the product and healthy, tasty frying is assured.

Unbeatable hygiene

A continuous fryer has to save production time. But this saving can be cancelled out by complex cleaning procedures. To prevent this, **Frymatic** has a frying tank with rounded corners, an easily removable loading hopper, and belts that can be lifted automatically for full access to the frying tank.



Everything under control

On request, **Frymatic** can be fitted for connection to the Nilma "Creative Control Machine

Point" software, able to provide HACCP temperature/time logging and select operating modes to suit the product for frying. CCMP also carries out autodiagnosis on operation of the appliance, recording any technical anomalies. The operating data is stored in special files on a PC.



ACCESSORIES

Fried food collection trolley

in 18/10 stainless steel, with three GN 2/1 containers, h 150 mm
Dimensions: 590x660x810 mm



Wheeled food loading belt

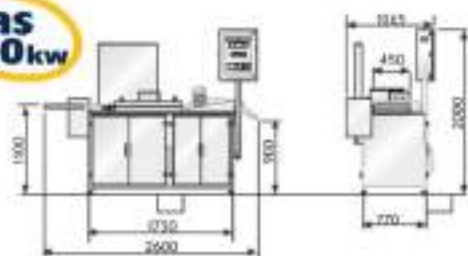
in 18/10 stainless steel with control panel with start/stop button and speed setting control
Dimensions: 1500x650x1050h
Belt width: 400 mm
Electricity supply connection: 0,07 kW- 230V50Hz 1ph+T



TECHNICAL DRAWINGS

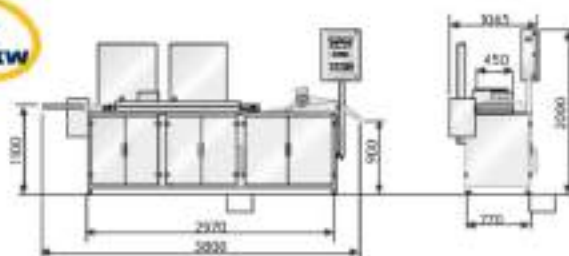
FRYMATIC

gas
30kw



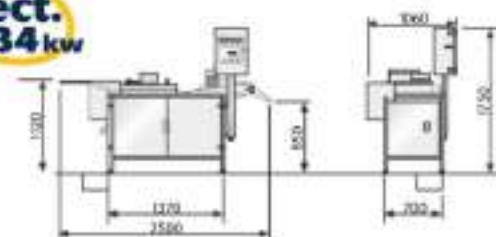
FRYMATIC

gas
60kw



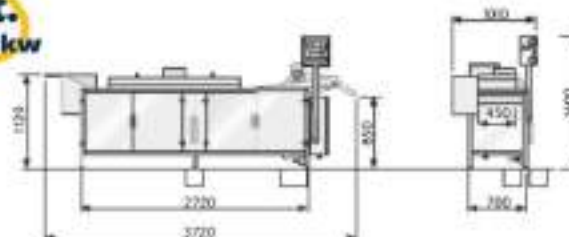
FRYMATIC

elect.
24/34kw



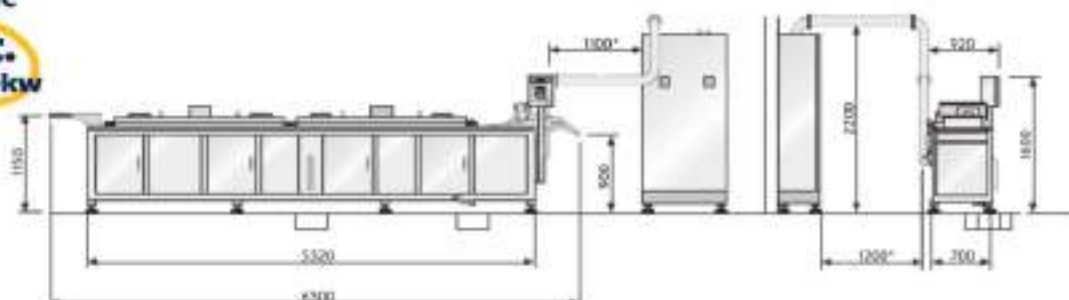
FRYMATIC

elect.
48/72kw



FRYMATIC

elect.
120/144kw



* Minimum value, may vary depending on requirements

TECHNICAL DATA	GAS		ELECTRIC					
	30 Gas	60 Gas	24 Elect.	34 Elect.	48 Elect.	72 Elect.	120 Elect.	144 Elect.
Electrical connection	230/400V 50Hz 3ph +N +T		230/400V 50Hz 3ph +T					
Heating power kW	30	60	24	34	48	72	120	144
Electrical power kW	1,5	1,5	25	35	49	73	121	145
Gas supply connection Ø	1/2"	1"	-	-	-	-	-	-
Frying tank capacity L	160	290	100	100	230	230	430	430
Hourly production rate kg/h*	40	80	40	60	80	120	200	240

* Production rates may vary considerably depending on the temperature, piece size or type of the food for frying. Production data refers to the product entering the fryer.

VERSIONS

Gas: with burners with electronic ignition and safety sensor.

Electric: with incoloy steel heating elements.



APPLIANCE CONSTRUCTED TO HARMONISED STANDARDS AND COMPLETE WITH CE MARKING

ISO 9001 certified manufacturer

