







# FILLING & PACKAGING

SEMI-AUTO & AUTOMATIC FILLERS, RINSERS, WASHER-DRYERS, BOTTLING MONOBLOCKS, SCREW CAPPERS, CORK ELEVATORS, SEMI-AUTO & AUTOMATIC LABELERS, DEPALLETISERS, PALLETISERS, PACKERS, CONVEYORS.





## THE LOCATIONS

e have six locations throughout the United States. Our main headquarters is in Pleasantville, NY, just outside of New York City. Our second location with our brand new warehouse is in the Finger Lakes region in Geneva, NY. This office is set to provide our customers with parts and technical service. The third office services the West Coast and serves as a parts, sales, and technical department all in one.



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ith 40 years of experience in the beverage industries, we have been honored to work with the most respected wineries and beverage groups across the United States, Canada and Mexico. Our long term partnerships are the result of the amazing companies and individuals who make up the Prospero portfolio. I believe strongly that respectful cooperation with our vendors and the creativity of our staff, will continue to provide our customers with the cutting edge technology that will exceed their expectations .This catalog will provide you with great information about a wide range of equipment. You can also visit our website at www.prosperocorp.biz and as well please feel free to call us direct. My staff and I look forward to being your beverage equipment supplier. Sincerely,

Tony Prospero

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## **WINERY**

For over thirty years Prospero has been leading supplier of winery equipment throughout North America. expert staff we can provide a customized solution that is right for our customers.

## **BREWERY**

Prospero equipment offers turnkev solutions new brewery start-ups as well as upgrades for existing breweries. We offer complete consultation. sales. and technical support each individual client which provides a meet each breweries particular needs.

## **DISTILLERY**

rapidly growing in North America and Prospero is one of leaders that growing needs. There have available for the spirit producers.

### **CIDER**

the alcoholic beverage

## BOTTLING

Prospero provide complete bottling and packaging equipment sales, service and parts for new and existing wineries. breweries. across the US, Mexico and Canada.

### FULL RANGE OF SERVICES

Prospero Equipment Corp. provides a full range of services. We offer many customizable solutions to meet the demands and needs of each individual client: Champagne, beer, wine, water, or spirits. We handle the equipment needs of many beverages in North America.

#### EXPERIENCE

With over thirty years in the wine/beverage equipment industry Prospero Equipment Corp. has the experience to handle any special needs a client may have. Through the many years of cooperation with our vendors and with our highly trained staff we are prepared to offer many solutions for our clients.

#### PROFESSIONALISM

Through the cooperation with our vendors and utilizing the ingenuity and creativity of our staff, Prospero Equipment Corp. provides a very professional, high quality product. Our catalog represents world leaders in wine/beverage equipment technology with superior quality. By utilizing the most advanced wine/beverage equipment technology Prospero Equipment Corp. is able to offer the best products on the market today.

## COMPLETE SOLUTIONS

Prospero Equipment Corp. offers many solutions and customization for all wine, beer, and beverage needs. A few range of solutions that we provide: new winery start-ups, mobile bottling trailers, existing winery setups, custom crush facilities, and much more. We welcome the opportunity to offer solutions for any new and existing clients.



#### HIGHEST LEVEL OF SERVICES

Prospero Equipment Corp. is one of the leading service providers for beverage equipment in North America. We provide service and technical support to all small, medium, and large-scale wineries and beverage companies. At Prospero, we can promptly take care of any needs a client may have because we have factory-trained technicians and two fully stocked parts offices on both coasts in Geneva, NY and Windsor, CA. We offer the resources of a national company, with the personal service you expect from a local equipment provider.



### TECHNICAL SUPPORT / PARTS

Our technical support team is one of our greatest strengths. With readily available technicians and 24/7 tech phone support we are ready to care of any customers needs that may arise. As well, our fully stocked parts offices on both East and West coast can help with any type of parts needed small or large. Our team is readily available to serve our customers.



#### GRAPE SORTING SYSTEM

Grape Crushers/Destemmer, Must pumps, Grape selection lines.



#### **WINE FILTERS**

Plate & Frame, Horizontal Plates and Rotary vacuum D.E. filters



#### **PUMPS**

Stainless steel flexible impeller pumps.



#### **WINE TANKS**

Tanks for white and red wine fermentation and storage



#### PRESSES & TANKS

-Pneumatic Presses from 5 hl to 130 hl open and closed tank type. -Tanks for white and red wine fermentation and storage



#### **COOLERS**

Chillers, Heat Exchangers, Cooled Tanks.

 $\Omega$ 



#### BREW HOUSES / TANKS

Compact Brewhouse, Micro Brewery, Fermentation & Brite Tanks



#### **BEER FILTERS**

Plate & Frame, Horizontal Plates and Rotary vacuum D.E. filters



#### MICROBIOLOGY

Kegs and Bag-inbox Fillers, Microfiltration, Reverse osmosis



#### **DISTILLATION PLANTS**

Continous & Discontinous Distillation Plants, Tanks.



#### **DISTILL FILTERS**

Plate & Frame, Horizontal Plates and Rotary vacuum D.E. filters



#### **TANKS**

Tanks Distillation Plants.



FILLING & LABFLLING MONOBLOCKS

Filling Monoblocks: Light and High Pressure Mechanical & Electropneumatic, Electropneumatic BIER High Pressure, Automatic Rinsers & Fillers, Automatic Single & Multi Head Corkers & Cappers, Corks & Screw Caps Feeder, Semi Automatic Fillers. Labelling Monoblocks: Automatic Washing & Drying, Automatic Sleeking & Shrinking Capping, Distribution-Capping-Linear Labelling, Mechanical & Electrical Rotating Labelers, Distribution-Capsulating-Rotating-Rotating-Labelling, Washing-Drying-Distribution-Capsulating-Rotating Labelling, Semi Automatic Labellers.



#### LINEAR LABELLERS

Pressure Sensitive Linear Labelling Machines.



#### **GLUE LABELLERS**

Wet Glue and Hot Glue Modular Labellers.



#### **PACKAGING**

Depalletisers, Carton Erectors, Packers, Inserting Machines, Carton Sealers, Conveying, Weight Control, Palletisers, Wrapping Machine.











# NEW FILLERS WITH ELECTRONIC VALVE STILL, GASSED OR SPARKLING WINE WITHOUT COMPROMISE

# A LARGE NEW PLANT FOR LOGISTICS, ASSEMBLY AND SHOWROOM

# A CO2 SAVING OF MORE THAN 1,000 TONS/YEAR GAI ENERGY FROM RENEWABLE SOURCES UP TO 100% EXCELLENCE ACROSS THREE GENERATIONS AS MAIN GOAL

After the Second World War finished, the founding member Giacomo Gai and his wife Elsa started building their first bottling machines when the word "wine" still did not grasp the same values as today. Only then did the concept of enological excellence start to evolve in Italy. Gai explored this concept and got deep into it together with their customers, often leading the way in the field.

1979. Gai designs the monobloc. The idea of combining all the bottling operations in a single machine has become the standard for the entire bottling industry. Gai designed it and continues to be a leader in the field worldwide.

Wine, beer, spirits and more. Over the years, the product range has extended to include still and sparkling wines, beer, P.e.t. wines and more, covering all the process stages "from the product to the finished bottle".

Increasing productivity and constant quality. Productivity has risen from 3,000 bottles/hr to virtually unlimited quantities. Our machines are modular and can be combined by using flexible and customized designs also for very high productions. Each module is built and assembled with Gai's quaranteed quality.

Over 5 continents serving high oenology. We are currently present in all quality-oriented wine districts. Our engineers, together with local representatives, help our customers all over the world to design, install and maintain machinery. 2013. Gai introduces at Simei the new electro-pneumatic valve, suitable for working with still or sparkling wines without compromise. Total control over the filling and cleaning cycle is achieved.

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# GAI MEANS...

Easy to use, reliable and timeless machines.

The highest quality standards from 500 to 15,000 b/h Finest steel both in terms of engineering and appearance Designing of large, customized systems in line with the customer's needs Minimized machine downtime thanks to scheduled maintenance, immediate assistance, constant availability of spare parts which are produced in-house

# THE HEADQUARTERS

Functionality and life quality

We consider quality as an all-encompassing concept at the basis of our relations with people, the environment and the territory. This is the reason why we chose a large open area as our headquarters, which is near to a city and well connected to motorways and airports. The site area includes the plant, a company sports centre, a lake and the parking area. Outdoor and indoor spaces are designed to favor concentration and minimize stress: large open areas, a parking area with maneuvering space, great attention to aesthetic care and cleaning, noise and vibration control also in the factory. After-work sports and social activities are lively.

## GAI HEADQUARTER IN CERESOLE D'ALBA

170,000 m² total site area
27,000 m² buildings
13,000 m² under construction
30,000 m² roadways and yards
100,000 m² grounds
10,000 m² installed photovoltaic panels on theroof tops
4,000 m² photovoltaic panels under construction.

The plant roof tops were rebuilt in 2011 and are covered by photovoltaic and solar thermal panels. Their shed structure with a glazed side facilitates air circulation, turning the factory into a comfortable environment, in addition to the thermal strips on the ceiling that make the environment cool in summer and warm in winter.





The goods loading and unloading area, entirely made of steel and glass, was mainly designed and built in-house.

## WE DO NOT JUST ASSEMBLE, WE MANUFACTURE

The plant is designed and organized to carry out the complete cycle, from designing, to the incoming of raw material, from production to assembly, up to the outgoing of tested machines ready for commissioning. Over 90% of components for start-up and for support are designed and built in house. Gai directly controls every detail, thus ensuring maximum reliability as well as constant and immediate availability of spare parts for the after-sales services.

## LISTENING, SUMMING UP, PROPOSING

The fact that our world-wide customers are masters in wine-production brings many advantages together with great responsibilities: we are and must be the first to set trends and develop technologies for all of us. This was the case for de-aeration in the past and today Gai leads the way thanks to its flexible filler suitable for still and sparkling wines as well as champagne products.

Gai pays attention to new arising demands, picks up the best from different companies and countries, launches a research program and designs a new machine to propose to all its customers.

The main goal is to offer custom-made machines that "are already fitted with everything" and that meet and exceed the industries high production standards consistently.









## ON THE CUSTOMER'S SIDE

Gai is one of the few companies in the world capable of providing the complete suite of bottling and packaging equipment in an efficient and flexible system that will achieve the customer's requirements and productivity goals.

In addition to standard monoblocs with the most requested features, we also manufacture special tailor-made monoblocs and complete processing lines producing up to 15,000 b/h, always ensuring Gai's renowned quality. Our designers interface with the customer's and our resellers' engineers, analyze the problem and design a solution including all the required functions and indicated productivity, with a layout perfectly suiting the costumer's facilities.

Normally, the customer's engineers pre-test the machine at our premises, and our or our resellers' engineers follow the installation and commissioning of the system, and train the customer's staff as well.

Modular machines means flexibility and constant quality.

# **ENERGY AND HEATING SELF-SUFFICIENCY**

Internal non-polluting sources entirely supply the company's energy and heating needs. Energy comes from a combination of natural gas cogeneration and solar power plant. The solar power plant produces up to 1,200 kWs, generating large surpluses which are then introduced in the network.

The state-of-the-art panels cover the plant roof tops, keeping the open area unspoiled and contributing to indoor thermal insulation. Apart from producing energy, the natural gas co-generator feeds the heating/cooling system, thus reducing consumption and pollution to zero. On the whole, we can proudly state that this system reduces CO2 production by more than 1,000 tons/year.



R&D Department. Digital drawings and renderings are printed on paper and then modeled with 3D printers, to check dimensions and appearance.

Solid model check. Also for prototypes a BOM is drawn up with details on everything that is analyzed and created.

The tunnel through which energy, heating and data spread throughout the plant.

The natural gas cogenerator provides up to 730 kW electric power, thus integrating the energy produced by the solar power plant.

The thermal energy produced by the generator is stored in 3 tanks with a total capacity of 220,000 liters to be used when needed.

The solar power plant generates up to 1,200 kWs producing more than 70% of the overall requirements.

The solar thermal panels cover an area of 360 m<sup>2</sup> and generate thermal energy.





The first machine with electric spout. It was first tested at the customers' premises, now it is used for Gai's technical staff training worldwide.

The designing sequence: analysis of the customer's market and samples, study and drawing, detail verification, BOM, information/training of engineers on new products.

Once the customer is at our premises, he conveys to our technicians both needs and details for his machine to be built

## A GROWING COMPANY

The development achieved to date combined with the production and quality objectives now require extensions to the factory and a layout especially designed to meet the new requirements. That's the reason why GAI has decided to almost double its facilities. The extension works have been designed to include:

- New Component Warehouse, a totally automated logistics hub that entirely manages the factory's two main departments: on the one hand, the Workshop producing the components on the other hand, the Assembly Department and the Spare Parts Store using them
- Assembly Department, separated from the Workshop and able to increase productivity and deliveries
- Technical Department, with larger spaces and more equipment in line with the expected development
- a large Showroom with operating machines, where customers, also those having less technical expertise, can test a wide range of different models and where engineers can receive practical training also on machines that are not being produced
- Customer reception, in order to welcome visitors in the best possible way.

The new building will be adjacent to the existing one, on a large plot of land purchased in view of this future development.

#### THE NEW FACILITIES

 $13,000 \text{ m}^2$  of roof /  $29,000 \text{ m}^2$  of floor (on many levels) / 5-story parking garage for 300 cars / Warehouse with 11,000 units of load to 1,000 kg each / Solar power plant of 500 kWp



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# THE KINGDOM OF STAINLESS STEEL

The full processing cycle is carried out in-house, including the production of more than 90% of the components. We handle all the process stages, from steel bars and sheets to the delivery of complete, tested and running machines, investing each year 15% of our turnover to re-engineer our machinery. Steel is the main element in the processing cycle and represents 50% of the value of the finished machine. We only use steel alloys of the highest quality so as to ensure robust and reliable machines and the utmost hygienic working conditions. We carry out continuous research on materials: we test new steel alloys and cutting edge plastics having even better features that can suit our parts, both new and existing ones. Great attention is also given to recycling and separation of raw materials, in order to promote an environmentally-friendly approach.





The parts production area. We constantly re-engineer our machinery in order to continue to be at the forefront in technological innovation.

The robotically controlled CTX Gamma can work over 3 shifts with no operator, starting from the steel bars or a semi-processed piece.

Tank turning, the workstation is designed for pieces with diameter up to 3,000 mm.

"Roof" base of a filler with electric spout.

Milling area with  $10,000 \times 4,000 \text{ mm}$  working field.





## **FULLY AUTOMATED WAREHOUSE**

The automated warehouses represent an important investment in efficiency since they interact with the Production, Assembly and After-sales Departments and ensure such an excellent stock control as to make periodic inventory unnecessary. The automatic bar stock is equipped with 720 loading units providing a unit capacity of 4,000 kg. Pallet rack holding 3,000 containers.



## **ASSEMBLY & TESTING**

In the final assembly phase, the machines are assembled following the specifications and features designed according to the Customer's particular requests. Gai produces every year around 1,000 bottling machines.

Pre-assembly stations. Here repetitive parts are assembled and possibly pre-tested thus ensuring the overall reliability of the fully-assembled machine.



WITH CUSTOMER'S SAMPLES



LIFE-LONG SERVICE



## FILLING

# MONOBLOCS UP TO 3.000 BOTTLES/HOUR SERIE 0 1000S - 1030S · 1300S - 1330S · 1700S - 1730S · 2100S - 2130S · 2600S - 2630S · 3000S - 3030S SERIE 1 1001S - 1031S · 1301S - 1331S · 1701S - 1731S · 2101S - 2131S · 2601S - 2631S · 3001S - 3031S

 SERIE 2
 1002S-4200 · 1302S-4200 · 1702S-4200 · 2102S-4200 · 2602S-4200 · 3002S-4200

 SERIE 3
 1003S-4200 · 1303S-4200 · 1703S-4200 · 2103S-4200 · 2603S-4200 · 3003S-4200

**SERIE 5** 1005S - 1035S · 1305S - 1335S · 1705S - 1735S · 2105S - 2135S · 2605S - 2635S · 3005S - 3035S

**SERIE 6** 1006S-4200 · 1306S-4200 · 1706S-4200 · 2106S-4200 · 2606S-4200 · 3006S-4200

#### **MONOBLOCS OVER 3.000 BOTTLES/HOUR**

**SERIE 6 top** 3606 top · 3606 top - 4006 top - 4006 top - 4006 top - 5006 top - 5006 top-LUX · 6006 top - 6006 top-LUX

**SERIE 6 A** 5006A · 5006A · 6006A · 6006A · 6006A · 10006A · 12006A

#### **HIGH PRESSURE MECHANICAL MONOBLOCS**

**SERIE FM HP** 731 FM HP · 1531 FM HP · 2531 FM HP · 3031 FM HP · 4041 FM HP · 5041 FM HP

SERIE FM BIER 1531 FM BIER · 3031 FM BIER · 5031 FM BIER · 6031 FM BIER · 8031 FM BIER · 10031 FM BIER

#### LINERAR ELECTROPNEUMATIC MONOBLOCS

**MLE** MLE 4-4-1 · MLE 6-6-1

#### **ELECTROPNEUMATIC LIGHT PRESSURE MONOBLOCS**

**SERIE RE LP** 3032 RE LP - 3031 RE LP · 4032 RE LP - 4031 RE LP · 5032 RE LP - 5031 RE LP · 6032 RE LP - 6031 RE LP · 7032 RE LP - 7031 RE LP · 8032 RE LP - 8031 RE LP · 9032 RE LP - 9031 RE LP · 10032 RE LP - 10031 RE LP

#### **ELECTROPNEUMATIC HIGH PRESSURE MONOBLOCS**

**SERIE FE HP** 2032 FE HP - 2031 FE HP · 2532 FE HP - 2531 FE HP

**SERIE RE HP** 3032 RE HP - 3031 RE HP · 4032 RE HP - 4031 RE HP · 5032 RE HP - 5031 RE HP · 6032 RE HP - 6031 RE HP · 7032 RE HP - 7031 RE HP · 8032 RE HP - 8031 RE HP · 9032 RE HP - 9031 RE HP · 10032 RE HP - 10031 RE HP

#### **ELECTROPNEUMATIC BIER HIGH PRESSURE MONOBLOCS**

SERIE FE BIER 3031 FE BIER · 5031 FE BIER

SERIE RE BIER  $\cdot$  6031 RE BIER  $\cdot$  7031 RE BIER  $\cdot$  8031 RE BIER  $\cdot$  10031 RE BIER  $\cdot$  12031 RE BIER  $\cdot$  14031 RE BIER  $\cdot$  16031 RE BIER  $\cdot$  18031 RE BIER

#### **AUTOMATIC**

RINSER 12106W · 12109W · 12110W · 12112P · 12115P · 12116P · 12120P · 12124P · 12128P · 12132P · 12136P · 12140P

FILLERS 21112P · 21114P · 21116P · 22118 · 22120 · 22124 · 23124 · 23128 · 23132 · 23140

#### **AUTOMATIC CORKERS AND CAPPERS**

**SINGLE-HEAD** 4140P · 4192P · 4195P · 4200P · 4210P - 4270P · 4292P · 4295P · 4297P · 4297CP · 4350P · 4395P · 4460P · 4450P · 4142P · 4142P · 4142P · CH

**MULTI-HEAD** 41403 - 41404 - 41405 - 41406 · 42903 - 42904 - 42905 - 42906 · 43903 - 43904 - 43905 - 43906

#### **CORKS AND SCREW CAPS FEEDER**

4140W-800 - 4140W-805 - 4140-800 - 41400-800 - 4140-99100 - 4140-99200 - 4290W-800 - 4290W-805 - 4290-800 - 4290R-800 - 42900-800

#### **SEMI-AUTOMATIC FILLERS**

**SEMI AUTO** 1012 - 2004·2006·2008 - 4040W - 600W

## GAII LABELLING

#### **AUTOMATIC WASHING AND DRYING MACHINES**

**SERIE 5000** 5102W · 5103W · 5104P - 5204P · 5106P - 5206P · 5108P - 5208P · 5112A - 5212A · 5118A - 5218A

#### **AUTOMATIC SLEEKING AND SHRINKING CAPPING MACHINES**

**SERIE 4000** 4701CH · 4501DT - 4501DL - 4501DTL · 4604DL - 4604DTL · 4606DL - 4606DTL · 4503DT - 4636DTL · 4608DL · 4612DL · 4504DT - 4508DT · 4648DTL - 4688DTL · 46812DTL

## DISTRIBUTION-CAPPING-LINEAR LABELLING MONOBLOCS

**SERIE 6000** 6005W · 6013W / 6014W · 6023W / 6024W · 6043W / 6044W · 6406

**VACUUM** 6050-1 · 6050-2 · 6060-2 · 6080-1 · 6080-L · 6080-T

**CHAMPAGNE** 626CH · 6206CH · 6226CH

#### **AUTOMATIC MECHANICAL ROTATING LABELERS**

SERIE 7000/M 7400/M · 7540/M · 7700/M · 7900/M

### **AUTOMATIC ELECTRICAL ROTATING LABELERS**

**SERIE 7000/E** 7400/E · 7540/E · 7700/E · 7900/E

## DISTRIBUTION-CAPSULATING-ROTATING LABELLING MONOBLOCS

**SERIE 8000/M/E** 8410/M · 8400/M · 8540/M · 8410/E · 8400/E · 8540/E

#### WASHING - DRYING - DISTRIBUTION - CAPSULATING - ROTATING LABELLING MONOBLOCS

SERIE 9000/M/E 9213W / 9214W · 9313W / 9314W · 9323W / 9324W · 9343W / 9344W · 9443W / 9444W · 9643W / 9644W · 9316CH · 9406CH · 9400/4M 9400/6M · 9400/4E · 9400/6E

#### **SEMI-AUTOMATIC LABELLERS**

SEMI AUTO 4060 SLEEKER - 4062CH CHAMP. CAPSULER- 501 502 REWINDER · 601 LABELLER · 602 LABELLER · 604 LABELLER



# FROM BOTTLE RINSING TO THE WHOLE PACKAGING



Gai is one of the few companies in the world producing both filling and packaging machines, thus performing all the functions included in the labelling process.

## **FILLING**

## **WINE**

S FAMILY

For still wines from 1,000 to 3,000 b/h. 0, 1, 2, 3, 5, 6 Series, with increasing functions.

MECHANICAL FAMILY

For still wines from 3,000 to 15,000 b/h.

**TOP** Series

**ELECTRO-PNEUMATIC FAMILY** 

For still, sparkling and champagne wines from 500 to 15,000 b/h.h.

HP and LP Series

## **BEER**

**BIER FAMILY** 

For beer from 500 to 18,000 b/h.

Electronic and mechanical series.

## **OILS AND VISCOUS PRODUCTS**

**OILS FAMILY** 

For oils and viscous products from 1,000 to 10,000 b/h.

## **LABELLING**

5000 FAMILY

Washer-dryer from 1,000 to 10,000 b/h.

4000 FAMILY

Capsuler from 1,000 to 10,000 b/h.

6000 FAMILY

Capsuler, linear labeller from 1,000 to 3,000 b/h.

**CH FAMILY** 

Capsuler, linear labeller suitable for the packaging of champagne wines and similar, from 500 to 2,500 b/h.

VACUUM FAMILY

Capsuler and vacuum labeller from 2,500 to 6,000 b/h.

7000 FAMILY

Rotary labeller from 3,000 to 10,000 b/h.

8000 FAMILY

Capsuler, rotary labeller from 3,000 to 10,000 b/h.

9000 FAMILY

Washer-dryer, capsuler, linear or rotary labeller from 1,000 to 4,000 b/h.









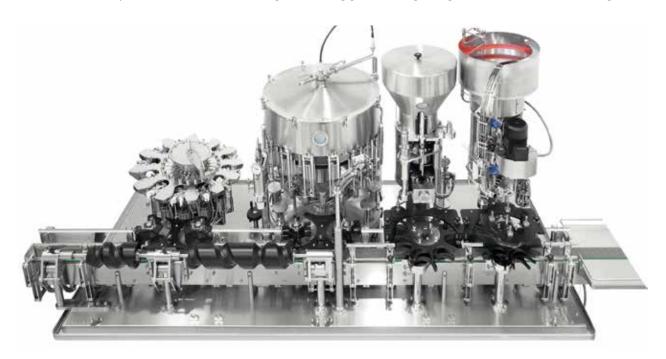
# FILLING - S MODELS 1000-3000B/H

Since 1946 GAI SPA has been designing and building machinery for the bottling of quality wines.

From 1980 to date, we have produced more than 15.000 monoblocs offering outputs between 1000 and 3000 bottles/hour, making us the world leader in this market segment. To maintain this leader ship, the projects of the monoblocks have been constantly updated and, in 2015, they have been completely renewed with new "series S". Our policy of continuous research and development combined with extensive investment in leading-edge technology enables us to manufacture more than 90% of the components of our machines in-house. As a result, we can offer high quality products at competitive prices, and guarantee the availability of spare parts over time. In 2015 GAI has nearly doubled the surface of the plant, so increasing the production capacity, and the area devoted to the research and to do the tests on the machines. The expansion has also led to a further improvement of the internal logistics, reducing the delivery times and giving more space to the exhibition area, to support our customers in their choices.

The main advantages of our products are:

- 1) Machines are robust, easy to use and adjustable.
- 2) Simple and safe sterilization.
- 3) Minimal oxidation of wine during bottling.
- 4) A modular design and a wide range of options allows for the machines to be customized according to the specific needs.
- 5) The use of stainless steel and a generous sizing guarantee long-lasting machines and ensure outstanding resale value.





#### RINSING

The bottles are gripped around the neck by a clamp, and rapidly turned upside-down by means of a rack and pinion system. The speed of this system enables longer cycles with the same number of clamps. The nozzle penetrates the bottle neck by 70mm; this depth prevents any interfer-ence between the injected water and the backflow. The injected water must be sterilized by microfiltration. As an alternative, the water can be ozonized, which will also perform a sterilizing action

The rinsing liquid is recovered in a closed circuit, keep-ing the machine dry during the normal working condi-tions. Bottles can also be "seasoned" by recirculating the appropriate product.

This means that a bactericidal liquid can be used to completely sterilize the inside of the rinser, using the dummy bottles supplied with the machine.



#### RINSING AND BLOWING

In this case the nozzle penetrates the neck of the bottle by 75 mm; this depth prevents any swirling in the neck, making the blowing more efficient.

The injection of sterile water is followed by a series of blasts of air which has also been sterilized by microfiltration. The presence of the bottle sets up the machine for the opening of the injector, but the actual injection of the water or air is controlled by external cams, which can easily be modified to increase or reduce injection times.

The water and air circuits are completely separate.

Forced draining alternated with draining by gravity allows for better drainage of the water, minimizing the residue in the bottle and the consumption of air.

The two options/steps can also be used differently, for example by injecting first air and then nitrogen.

The height is standard electrically adjusted.







#### **BOTTLE DE-AERATION AND FILLING WITH INERT GAS**

A high vacuum pump removes approximately 90% of the air from the bottle, after which the bottle is filled with an inert gas. Normally nitrogen is used, but CO2 or a mixture of nitrogen and CO2 can also be used.

Air suction and neutral gas injection only take place if a bottle is present.

Thanks to our special (patented) filling valves, the same atmosphere is created in the filler bowl as in the bottle.

De-aeration reduces average oxygen absorption on filling from an average of 0.6 to 0.09 mg per liter of wine, and the amount of oxygen contained in the head space is reduced from 0.1 to 0.08 mg.



#### **BOTTLE FILLING**

The (patented) filling valves shut off both the flow of wine and the gas backflow; the filler tank is therefore only in contact with the atmosphere created in the bottle, benefiting both the oxidation and the sterility.

The filler valves can operate by gravity or light vacuum. The advantages of light vacuum are as follows:

improved priming of the filling

— guaranteed absence of dripping, even if the bottom seal is not in perfect condition.

With our valve there are no contraindications to the use of a light vacuum: as no air is introduced into the tank, there will be

no oxidation, contamination or reduction in aromas. The filling level can be adjusted individually (from 30 to 90 mm from the mouth rim valve 200-040) or centralized (from 30 to 90 mm from the mouth rim valve 205-040).

The opening of the valve for sterilization can also be centralized or set individually.

Wine is fed from below so that it arrives without oxidation, and above-all so that the tank - which has a conical bottom with drainage in the middle - can be emptied completely. The tank is fully machine tool-worked with a specular inside finish to make it easy to clean and sterilize.

The height of the filler can be adjusted manually or electrically.

The bottle-raising pistons are mechanically- operated with spring thrust and cam return.

The filler rotates on a bearing system. The monobloc's main greasing points are centralized.



#### INJECTION OF NEUTRAL GAS PRIOR TO CORKING

This is a very important operation on account of its many functions:

1) IT DRASTÍCALLY REDUCES OXIDATION. With a filling level of 60 mm and a 45 mm cork, the oxygen is reduced from 1.4 mg to 0.25 mg per liter of wine in corking and from 1,8 to 0,39 mg in 4295 screw capping.

2) IT COMBATS CORK LEAKAGE. The CO2 dissolve into the wine, eliminating the pressure between the wine and the cork

3) THE GAS INJECTOR CAN ALSO BE USE D TO CONTROL THE FILLING LEVEL.

The standard level tolerance is reduced from  $\pm 1$  mm to  $\pm 0.5$  mm.

The gas injector is supplied with a dummy bottle, making it easy to sterilize.



#### **CORKING UNDER VACUUM 4140**

Four stainless steel prismatic guide studs close the cork to a diameter of 16 mm. Extreme care is taken over the making of the corking head, with a roughness of less than 0.05 microns on the surfaces in contact with the cork.

The compression of the cork is slow (105°), with fast fitting of the cork (53°)

The studs box is easily extractable to simplify the maintenance and the cleaning operations.

All models are standard fitted with vacuum corking. The advantages of this system are as follows:

1) no pressure is created in the bottle when the cork is inserted

2) the oxygen trapped between the wine and the cork is further reduced from 0.25 to 0.08 mg per liter (with a 0.75 lt bottle, filling level 60, and 45 mm cork).

AS AN ALTERNATIVE, provision can be made for types of closure other than corks.



#### **CROWN-CAP CAPSULING 4270**

The caps are fed by a vibrating distributor, with a photocell stopping the vibrator when the cap channel is full.

This ensures that the caps are not damaged, and that the vibrator works to its maximum capacity.

The vibrator and the hopper are fixed; only the closure device moves, along with the part of the cap feed channel which collects the caps from the distributor with each cycle.

The spring which provides the pressure of the cap onto the bottle, and the spring which expels the bottle from the cone, are part of the closure device and therefore vary according to the type of cap.

The capsuling column can be fitted with two types of closure (for example, crown and screw capsuling).







### **SCREW-CAP CAPSULING 4295**

The caps are fed by a vibrator, which is stopped by a photocell when the cap channel is full. On the 4292, the caps are distributed straight onto the bottle in the star preceding the closure head. On the 4295, the following operations are performed: 1) injection of inert gas into the bottle neck.

2) washing of the caps with inert gas.

3) introduction of the caps onto the neck of the bottle by pneumatic piston.

The cap closure device has 4 rollers (2 for the screw, 2 for the bottom closure) which can be adjusted independently.

The closure head is fitted with a "No cap no roll" device.

The rotation speed of the head can be adjusted by means of an Inverter in order to optimize the closure and adapt it to the machine's output. Also available is the new 4297 version, which can be used to close aluminium screw caps with a pre-threaded plastic insert. In this case, the cap is purged with inert gas, and dispensing is by pneumatic piston.

The closure is performed with two heads: the first torques on the cap while a gripper holds the base of the bottle, and the second secures it in position.

The height of the cap distributor and the closure head are adjusted together.



#### **MULTI-CLOSING TURRET**

The ..30 ..31 ..35 series monoblocks allow different types of closures on the same column, up to max. 3 closures. Normally this would be natural cork +1 or 2 types of caps (screw, crown 26.5, crown 29.5). The closure heads are ro-tated by 180° (2 closures on the same column) or by 120° (3 closures on the same column).

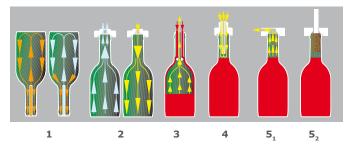
The advantages of this solution compa-red to more separate closure columns are:

- compact and lighter machine
- slightly cheaper machine

The disadvantage is:

- higher skilled operators required for the change-over

With the new Series S, in 2015, GAI has optimized the multi-closing turret making the switch from one type of clo-sure to another much faster and easier. The quality of the closure is the same, when using the single column solution or multiple columns.



# CORKING UNDER VACUUM BOTTLING OXIDATION 4140

This scheme shows the results achieved by the various devices on the oxygen introduced into the wine. The tests were performed using 0.75 lt Bordeaux bottles filled to 60 mm from the mouth rim, and closed using a 45 mm-long cork.

In line 1 the bottle was ripsed (1), filled

- In line 1 the bottle was rinsed (1), filled (3) and corked (5II), with the wine being infiltrated by 0.6 mg/lt of oxygen, and the head space 1.4 mg/lt

In line 2, neutral gas was injected prior, to corking; the oxygen contained in the head space is reduced from 1.4 to  $\,$  0.25 mg/lt.

In line 3 vacuum corking was added; the oxygen in the head space is further reduced from 0.25 to 0.1 mg/lt.

In line 4, de-aeration (2), inert gas injection (4) and vacuum corking (5I) were all enabled, with a final result of 0.09 mg in the wine and 0.08 mg/lt in the head space.

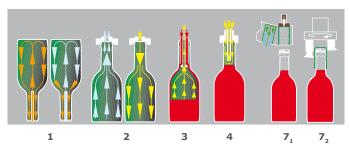
A total reduction from 2 mg/lt to 0.17 mg/lt of oxygen is therefore achieved by using the devices



A: mg/lt O2 ADDED TO THE FILLER
B: mg/lt O2 ADDED TO THE HEAD SPACE







#### **SCREW CAPPER BOTTLING OXIDATION 4295**

This scheme shows the results achieved by the various devices on the oxy-gen introduced into the wine.

The tests were performed using 0.75 lt Bordeaux bottles filled to 30 mm from the mouth rim, and closed using a  $\emptyset$  30x60 mm screw cap.

— In line 1, the bottle has been rinsed (1), filled (3) and capped (7II); 0.6 mg/lt is added

to the wine, and 1.8 mg/lt the head space. In line 2, neutral gas (4) has been injected prior to capping; the oxygen contained in the head space is reduced from 1.9 to 0.20 mg/lt.

in the head space is reduced from 1.8 to 0.39 mg/lt.

In line 3, inert gas (7I) is injected into the screw cap before positioning; the oxygen in the head space is reduced from 0.39 to 0.18 mg/lt.

In line 4, de-aeration (2), inert gas injection (4) and injection of inert gas into the cap (7I) have all been enabled, with a final result of 0.09 mg/lt in the wine and 0.15 mg/lt in the head space.

A total reduction from 2.4 mg/lt to 0.24 mg/lt of oxygen is therefore achieved by using the devices.



A: mg/lt O2 ADDED TO THE FILLER
B: mg/lt O2 ADDED TO THE HEAD SPACE

#### WASHING AND STERILIZATION

The figure shows the filler washing and sterilization cycle using the patented dummy bottle system (op-tional).

It is important to underline that, due to their design and quality of workmanship, our fillers can be sterilized using appro-priate chemical products, hot water, or steam or a combination thereof.

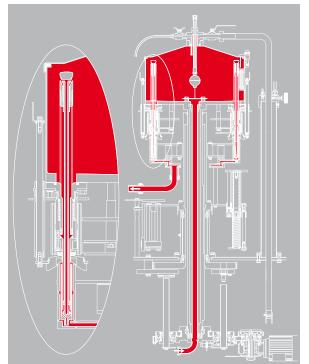
The normal process is the tank is steril-ized first, by pumping or pushing the medium into the filler bowl from below, and removing the medium from above by means of the low vacuum pipe.

Then the tank is lowered onto the dummy bottles until the valves partially open; this will force the sterilizing medium through both the central air return pipe and the wine flow section.

The design of the dummy bottles ensures that the complete wine flow channel and retaining seals come into contact with the sterilizing medium.

A total emptying of the tank is facilitated by the mirror-polished conical base of the filler how!

The return of the dummy bottles into their working position is very fast and simple.



≯ldil <b>≺</b> ↓		STANDARD
h	a	inch (mm) 0.86 (22)÷1.18 (30)
	b	inch (mm) 1.49 (38)÷2.16( 55)
	b*	inch (mm) 1.29 (33)÷2.28 (58)
ė.	di	inch (mm) 0.70(18)÷0.78 (20)
	h	inch (mm) 1.18 (30)÷3.54 (90)
	D	inch (mm) 1.18 (30)÷3.54 (90)
200	Н	inch (mm) 7.08 (180)÷15.75 (400)
	b* Optional	







### FILLER WITH LIGHT DEPRESSION

The patented filling valves shut off both the flow wine and the gas return the filler bowl is therefore only in contact with the bottle's atmosphere, lation and benefiting

reducing oxidation and benefiting sterility. The filler valves can operate by gravity or light depression. The advantages of light depression are the improved priming of the filing and the absence of dripping. Wine is fed from the below so that it arrives in the bow without turbulence or oxidation.



#### GAS INJECTOR

Prior to corking it drastically reduces the oxygen quantity in the bottle's head space. It can also prevent cork leakage when using CO2 which dissolved in

the wine and eliminates the pressure between the wine and the cork. (The injector is supplied with dummy bottle for sterilization).



#### VACUUM CORKER

It slowly compresses the cork and quickly inserts it in the bottle. The 4 Stainless steel studs sit

on a tray that is easily removable for inspection and cleaning. The vacuum guarantees a dramatic reduction of oxygen level in the head space. The entrance and transfer between each station is synchronized by in-feed screws, stars and guides.

guides. Includes In-feed screw and Star set size 80mm for one size of cylindrical bottle 75-79mm.



## Still products up to 3,000 bottles per hour.

The S family is the result of more than 70 years of experience in the field of medium and small sized wine producers, with high quality, reliable and easy-to-use machines. This production segment includes very fine wines and represents our most traditional area of activity, which our reputation was created and consolidated on. A wide range of accessories and extras allows to design machines able to meet the needs of each producer.

## SERIES 0S

FILLING, INERT GAS INJECTION AND VACUUM CORKING.

The basic functions for bottling with the classic cork.



FUNCTION		1000S	1300S	1700S	2100S	2600S	3000S
Filler Valves	n	6	8	10	12	14	16
Gas injector	n	1	1	1	1	1	1
Corker	n	1	1	1	1	1	1
Output	gal /h	198	264	396	528	660	792
	I/h	750	1000	1500	2000	2500	3000
Speed	bott./h	300-1200	400-1600	600-2400	600-3000	600-3000	600-3000
	bott./min	5-20	6,5-26	10-40	10-50	10-50	10-50
Weight	Lbs (Kg)	1985 (900)	2205 (1000)	2425 (1100)	2645(1200)	3090 (1400)	3530 (1600)

<sup>\*</sup>Not binding data.





#### DE/AERATOR

high vacuum pump removes approximately 90% of the air from the bottle and fills it with inert gas. These actions are



## FILLER WITH LIGHT DEPRESSION

The patented filling valves shut off both the flow wine and the gas return the filler bowl is therefore only in contact with the bottle's atmosphere, reducing oxidation and benefiting sterility. The filler valves can operate by gravity or light depression are the improved priming of the filing and the absence of dripping. Wine is fed from the below so that it arrives in the bowl without turbulence or oxidation.



#### GAS INJECTOR

Prior to corking it drastically reduces the oxygen quantity in the bottle's head space. It can also prevent cork leakage when using CO2 which dissolved in

the wine and eliminates the pressure between the wine and the cork. (The injector is supplied with dummy bottle for sterilization).



#### VACUUM CORKER

It slowly com-It slowly com-presses the cork and quickly inserts it in the bottle. The 4 Stainless steel studs sit on a tray that

is easily removable for inspection and cleaning. The vacuum guar-antees a dramatic reduction of oxygen level in the head space. The entrance and transfer between each station is synchro-nized by in-feed screws, stars and

guides. Includes In-feed screw and Star set size 80mm for one size of cylindrical bottle 75-79mm.

# FILLING - S MODELS



Still wines up to 3,000 bottles per hour.

## **SERIES 1S**

De-AERATION, FILLING, INERT GAS INJECTION AND VACUUM CORKING. To reduce wine oxidation, the air is removed from the bottles using a high vacuum pump and inert gas is injected, before filling.



FUNCTION		1001S	1301S	1701S	2101S	2601S	3001S
Deareation	n	1	1	1	1	1	1
Filler Valves	n	6	8	10	12	14	16
Gas injector	n	1	1	1	1	1	1
Corker	n	1	1	1	1	1	1
Outroot	gal /h	198	264	396	528	660	792
Output	I /h	750	1000	1500	2000	2500	3000
Speed	bott./h	300-1200	400-1600	600-2400	600-3000	600-3000	600-3000
	bott./min	5-20	6,5-26	10-40	10-50	10-50	10-50
Weight	Lbs (Kg)	2205 (1000)	2535 (1150)	2765 (1250)	3090(1400)	3640 (1650)	4300 (1950)

<sup>\*</sup>Not binding data.





#### DE/AERATOR

A high vacuum pump removes approximately 90% of the air from the bottle and fills it with inert gas. These actions are

performed only in bottle presence thus avoiding waste of gas.



#### -ILLER WITH **L**IGHT DEPRESSION

The patented filling valves shut off both the flow wine and the gas return the filler bowl is therefore only in contact with the bottle's atmosphere, define and basefine.

bottle's atmosphere, reducing oxidation and benefiting sterility. The filler valves can operate by gravity or light depression. The advantages of light depression are the improved priming of the filling and the absence of dripping. Wine is fed from the below so that it arrives in the bowl without turbulence or oxidation.



#### GAS INJECTOR

Prior to corking it drastically reduces the oxygen quantity in the bottle's head space. It can also prevent cork leakage when using CO2 which dissolved in

the wine and eliminates the pressure between the wine and the cork. (The injector is supplied with dummy bottle for sterilization).



#### VACUUM CORKER

It slowly compresses the cork and quickly inserts it in the bottle.
The 4 Stainless steel studs sit on a tray that

is easily removable for inspection and cleaning. The vacuum guarantees a dramatic reduction of oxygen level in the head space. The entrance and transfer between each station is synchronized by in-feed screws, stars and

guides. Includes In-feed screw and Star set size 80mm for one size of cylindrical bottle 75-79mm.



#### CAPPER

The Monobloc can be supplied with turret suitable to apply Screw-caps, Crown-caps or T-Corks. The caps are fed by a

caps are fed by a vibrating distributor and a photocell in the cap channel automatically stops the machine when caps are missing. GAI can provide a screw-capping system with gas injection or with special heads made for the latest capsules with pre-threaded PVC inserts.

# FILLING - S MODELS



Still wines up to 3,000 bottles per hour.

## SERIES 3S

DE-AERATION, FILLING, INERT GAS INJECTION CORKING AND CAPPING. To reduce wine oxidation, the air is removed from the bottles using a high vacuum pump and inert gas is injected, before filling.



FUNCTION		1003S	1303S	1703S	2103S	2603S	3003S
Deareation	n	1	1	1	1	1	1
Filler Valves	n	6	8	10	12	14	16
Gas injector	n	1	1	1	1	1	1
Corker	n	1	1	1	1	1	1
Capper	n	1	1	1	1	1	1
	gal /h	198	264	396	528	660	792
Output	I/h	750	1000	1500	2000	2500	3000
Speed	bott./h	300-1200	400-1600	600-2400	600-3000	600-3000	600-3000
	bott./min	5-20	6,5-26	10-40	10-50	10-50	10-50
Weight	Lbs (Kg)	3305 (1500)	3415 (1550)	3530 (1600)	3860 (1750)	4190 (1900)	4410 (2000)

<sup>\*</sup>Not binding data.

# 2505 top





The injection of sterile water is followed by a series of blasts of air which has also been sterilized by mircrofiltration. The two steps

can also be used differently, for example by injecting first air and then nitrogen. The height can be adjusted manually or electrically.



#### DE/AERATOR

A high vacuum A high vacuum pump removes approximately 90% of the air from the bottle and fills it with inert gas. These actions are

performed only in bottle presence thus avoiding waste of gas.



#### FILLER WITH LIGHT DEPRESSION

The patented filling valves shut off both the flow wine and the gas return- the filler bowl is therefore only in contact with the bottle's atmosphere, reducing oxidation and benefiting sterility. The filler valves can operate by gravity or light depression. The advantages of light depression are the improved priming of the filling and the absence of dripping. Wine is fed from the below so that it arrives in the bow without turbulence or oxidation. without turbulence or oxidation.



#### GAS INJECTOR

Prior to corking it drastically reduces the oxygen quantity in the bottle's head space. It can also prevent cork leakage when using CO2 which dissolved in

the wine and eliminates the pres-sure between the wine and the cork. (The injector is supplied with dummy bottle for sterilization).



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#### CAPPER

The Monobloc can be supplied with turret suitable to apply Screw-caps, Crown-caps or T-Corks. The caps are fed by a tor and a photo-

vibrating distributor and a photovibrating distributor and a proto-cell in the cap channel automat-ically stops the machine when caps are missing. GAI can provide a screw-capping system with gas injection or with special heads made for the latest capsules with pre-threaded PVC inserts.



## CORKING UNDER VACUUM

The advantages of this system are as follows: - no pressure is created in the bottle when the cork is inserted

- the oxygen trapped between the wine and the cork is further reduced from 0.25 to 0.08 mg per liter (with a 0.75 it bottle, filling level 60, and 45 mm cork).

# FILLING - S MODELS



Still wines up to 3,000 bottles per hour.

## **SERIES 5S**

RINSING, DE-AERATION, FILLING, INERT GAS INJECTION, VACUUM CORKING. This series also includes a rinser, thus allowing to carry out the complete cycle from rinsing to corking.



FUNCTION		1005S	1305S	1705S	2105S	2605S	3005S
Rinser	n	6	9	9	10	12	12
Deareation	n	1	1	1	1	1	1
Filler Valves	n	6	8	10	12	14	16
Gas injector	n	1	1	1	1	1	1
Corker	n	1	1	1	1	1	1
Outmut	gal /h	198	264	396	528	660	792
Output	I/h	750	1000	1500	2000	2500	3000
Smood	bott./h	300-1200	400-1600	600-2400	600-3000	600-3000	600-3000
Speed	bott./min	5-20	6,5-26	10-40	10-50	10-50	10-50
Weight	Lbs (Kg)	3420 (1550)	3968 (1800)	4080 (1850)	4190 (1900)	5732 (2600)	6175 (2800)

<sup>\*</sup>Not binding data.





The injection of sterile water is followed by a series of blasts of air which has also been sterilized by mircrofiltration. The two steps didifferently for

can also be used differently, for example by injecting first air and then nitrogen. The height can be adjusted manually or electrically.



A high vacuum pump removes approximately 90% of the air from the bottle and fills it with inert gas. These actions are in bottle presence

performed only in bottle presence thus avoiding waste of gas.



## FILLER WITH LIGHT

The patented filling valves shut off both the flow wine and the gas return the filler bowl is therefore only in contact with the bottle's atmosphere,

bottle's atmosphere, reducing oxidation and benefiting sterility. The filler valves can operate by gravity or light depression. The advantages of light depression are the improved priming of the filing and the absence of dripping. Wine is fed from the below so that it arrives in the bowl without turbulence or oxidation.



#### GAS INTECTOR

Prior to corking it drastically reduces the oxygen quantity in the bottle's head space. It can also prevent cork leakage when using CO2 which dissolved in

the wine and eliminates the pres-sure between the wine and the cork. (The injector is supplied with dummy bottle for sterilization).



#### VACUUM CORKER

It slowly comcork and quickly nserts it in the bottle.
The 4 Stainless steel studs sit on a tray that

is easily removable for inspection and cleaning. The vacuum guar-antees a dramatic reduction of oxygen level in the head space. The entrance and transfer be-tween each station is synchro-nized by in-feed screws, stars and

guides. Includes In-feed screw and Star set size 80mm for one size of cylindrical bottle 75-79mm.



The Monobloc can be supplied with turret suitable to apply Screw-caps,

Screw-caps, Crown-caps or 1-Corks. The vibrating distributor and a photocell in the cap channel automatically stops the machine when caps are missing. GAI can provide a screw-capping system with gas injection or with special heads made for the latest capsules with pre-threaded PVC inserts.



## CORKING UNDER VACUUM

The advantages of this system are

# FILLING - S MODELS

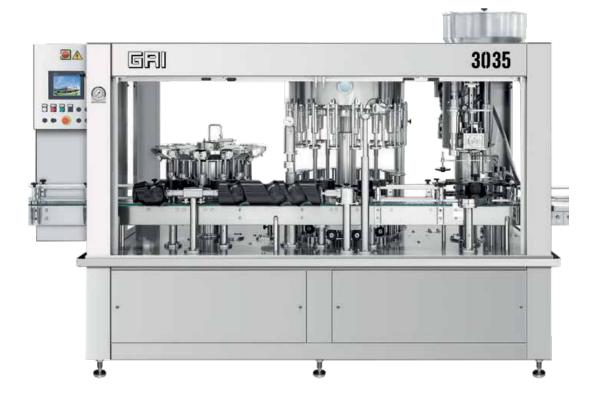


Still wines up to 3,000 bottles per hour.

## SERIES 35S

RINSING, DE-AERATION, FILLING, INERT GAS INJECTION, VACUUM CORKING-CAPPING ON A SINGLE ROTATING COLUMN.

This series includes the option of a second bottle closure on the same column of the cork.



Function		1035S	1335S	1735S	2135S	2635S	3035S
Rinser	n	6	9	9	10	12	12
Deareation	n	1	1	1	1	1	1
Filler	n	6	8	9	10	12	16
Gas injector	n	1	1	1	1	1	1
Corker+Capper	n	1+1	1+1	1+1	1+1	1+1	1+1
Outout	gal/h	198	264	396	528	660	792
Output	l/h	750	1000	1500	2000	2500	3000
Speed	bott./h	300-1200	400-1600	600-2400	600-3000	600-3000	600-3000
Speed	bott./min	198	264	396	528	660	792
Weight	Kg	3970 (1800)	4190 (1900)	4410 (2000)	4630 (2100)	5620 (2550)	6285 (2850)

<sup>\*</sup>Not binding data.





The injection of sterile water is followed by a series of blasts of air which has also been sterilized by mircrofiltration. The two steps differently for

can also be used differently, for example by injecting first air and then nitrogen. The height can be adjusted manually or electrically.



#### DE/AERATOR

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performed only in bottle presence thus avoiding waste of gas.



The patented filling valves shut off both the flow wine and the gas return the filler bowl is therefore only in contact with the bottle's atmosphere, reducing oxidation and benefiting sterility. The filler valves can operate by gravity or light depression are the improved priming of the filing and the absence of dripping. Wine is fed from the below so that it arrives in the bowl without turbulence or oxidation.



#### GAS INJECTOR

Prior to corking it drastically reduces the oxygen quantity in the bottle's head space. It can also prevent cork leakage when using CO2 which dissolved in

the wine and eliminates the pres-sure between the wine and the cork. (The injector is supplied with dummy bottle for sterilization).



#### VACUUM CORKER

It slowly com-presses the cork and quickly inserts it in the bottle. The 4 Stainless steel studs sit

on a tray that is easily removable for inspection and cleaning. The vacuum guarantees a dramatic reduction of oxygen level in the head space. The entrance and transfer between each station is curchers. tween each station is synchro-nized by in-feed screws, stars and

guides.
Includes In-feed screw and Star set size 80mm for one size of cylindrical bottle 75-79mm.



can be supplied with turret suitable to apply

suitable to apply Screw-caps, Crown-caps or T-Corks. The caps are fed by a vibrating distributor and a photocell in the cap channel automatically stops the machine when caps are missing. GAI can provide a screw-caping system with gas a screw-caps with gas a system with gas a screw-caps with gas a system with gas a a screw-capping system with gas injection or with special heads made for the latest capsules with pre-threaded PVC inserts.



### CORKING UNDER VACUUM

The advantages of this system are as follows:
- no pressure is created in the bottle when the cork is inserted

- the oxygen trapped between the wine and the cork is further reduced from 0.25 to 0.08 mg per liter (with a 0.75 it bottle, filling level 60, and 45 mm cork).

# FILLING - S MODELS

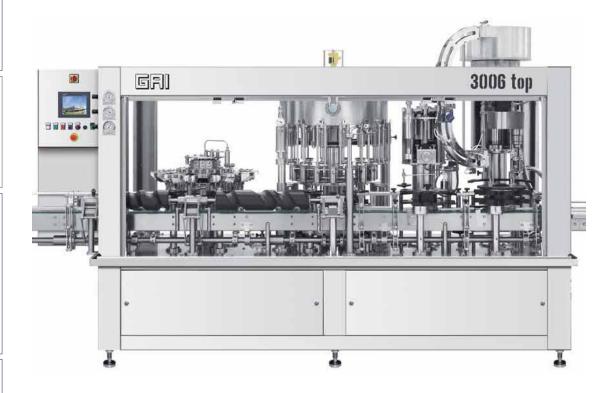


Still wines up to 3,000 bottles per hour.

## SERIES 6S

RINSING, DE-AERATION, FILLING, INERT GAS INJECTION, VACUUM CORKING, CAPPING.

Like the 5 Series, it includes the option of adding a column for a second closure according to the customer's needs. The presence of two columns allows to switch from one type of closure to another in a very fast and easy way. This is currently the most complete and popular serie sold by Gai.



FUNCTION		1006S	1306S	1706S	2106S	2606S	3006S
Rinser	n	6	9	9	10	12	12
Deareation	n	1	1	1	1	1	1
Filler Valves	n	6	8	10	12	14	16
Gas injector	n	1	1	1	1	1	1
Corker	n	1	1	1	1	1	1
Capper	n	1	1	1	1	1	1
Outunt	gal /h	198	264	396	528	660	792
Output	I /h	750	1000	1500	2000	2500	3000
Speed	bott./h	300-1200	400-1600	600-2400	600-3000	600-3000	600-3000
	bott./min	5-20	6,5-26	10-40	10-50	10-50	10-50
Weight	Lbs (Kg)	4630 (2100)	4740 (2150)	5070 (2300)	5230 (2400)	6835 (3100)	7495 (3400)

<sup>\*</sup>Not binding data.





# LIGHT DEPRESSION/GRAVITY



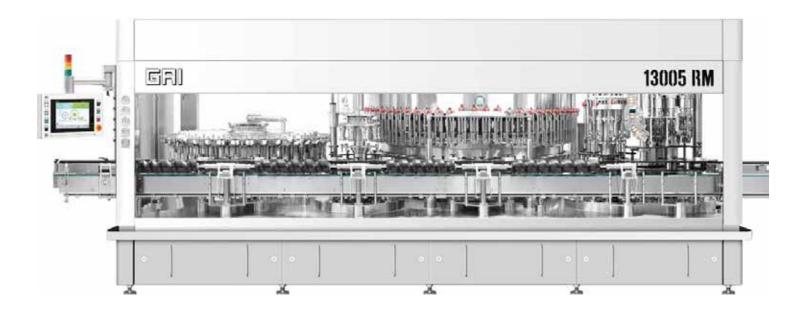
STILL WINES FROM 3,000 TO 15,000 BOTTLES/HOUR.

These machines have been designed for large scale bottling producers and offer a wide range of options to combine different functions in a flexible manner, depending on the the customer's needs. Great efforts have been made to design extremely reliable machines suitable for long work shifts and requiring minimum and easy maintenance. Moreover, the machines have been automated as much as possible.

## SERIES TOP

IT PERFORMS RINSING, DE-AERATION, GRAVITY FILLING, INERT GAS INJECTION, VACUUM CORKING, CAPPING.

With outputs of over 3,000 b/h, the single-head corker used in the previous series is replaced by a multi-head corker.

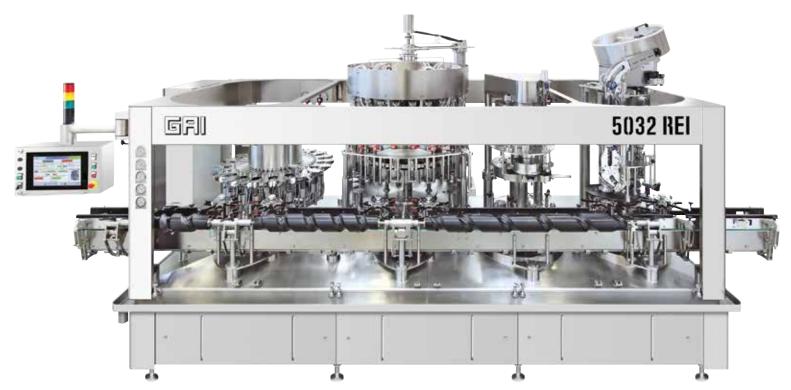


FUNCTION		3606 top	4006 top	5006 top	6006 top	8006 top	10006 top
Rinser	n	15	16	20	24	28	32
Deareation	n	4	4	4	6	6	8
Filler Valves	n	18	20	24	24/28/32	28/32/36	32/36/40
Gas injector	n	4	4	4	6	6	8
Corker	n	3	3	4	5	6	8
Capper	n	3	3	4	5	6	6
Outmut	gal /h	875	990	1190	1190/1390/1585	1390/1585/1785	1585/1785/1980
Output	I/h	3300	3750	4500	4500/5250/6000	5250/6000/6750	6000/6750/7500
Speed	bott./h	1000-4000	1000-4500	1200-6000	1500-7500	2000-9000	2000-10000
Speed	bott./min	16-66	16-75	20-100	25-125	33-150	33-166

\*Not binding data.



















### Bottling changed by Gai's Patents

Over 100 million bottles produced in the first 2 years from their launch in 2013, steadily growing orders from different markets and sectors, including the most difficult ones. The electro-pneumatic spout or 'UNICA' valve represents a radical upturn that immediately revealed as a great advantage and is now required by an increasing number of new customers.

- Sparkling and still wine without compromise.
- Output increase up to 30% more for sparkling wines.
- Level adjustment from 25 to 100 mm from the top of the mouth, in an automatic and centralized way with no manual intervention. It can be performed even with the machine running.
- Filling cycle with total repeatability, possibility to store the correct working sequence. All the stages keep the set duration also when speed is changed. Total control over the filling operation is granted.
- Optimized sterilization by opening and washing one circuit at a time, always with the proper pressure and for the necessary time, in a totally automatic way also thanks to the dummy bottles.
- Automatic dummy bottles (for machines with 20 or more spouts and manual ones for 12 and 16 spouts). They are always present on the machine and they are automatically and simultaneously inserted, even with time setting, with no manual intervention. They optimize sterilization because they allow to open or close the drain pipe according to the circuit that needs washing.

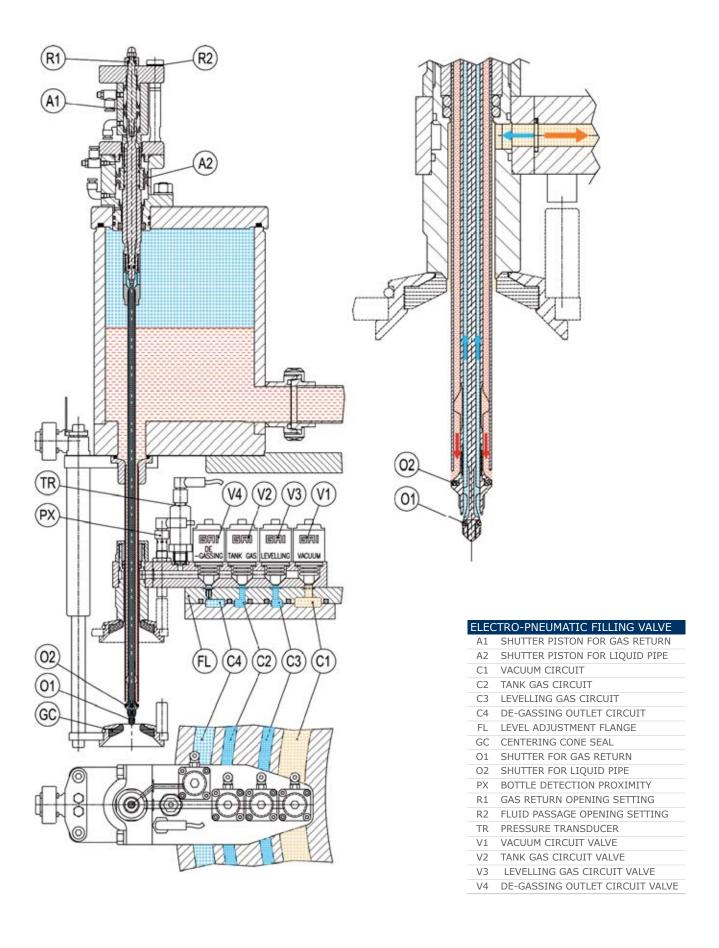














# **ELECTRO-PNEUMATIC VALVE**

### FILLING FEATURES

### 1. FLEXIBLE FILLING

This valve is suitable for bottling still, sparkling and champagne products.

All the operating parameters:

- vacuum in bottle- working pressure (from 0 to 8 bar)
- filling level (from 25 to 100 mm)
- de-gassing procedure

are set on the control panel and can be changed with no manual intervention. Hence, it is possible to quickly switch from one product to another. Bottling can be carried out under optimal conditions since oxidation is minimized and maximum sterility is guaranteed.

### 2. LEVEL ADJUSTMENT

The level can be adjusted in an automatic and centralized way, with a 25 to 100 mm adjustment range from the rim, with no manual intervention. Filling heights can be adjusted while the machine is operating. The valves have been designed to ensure precise filling height and tolerance is reduced to 0.5 mm by using the automatic levelling device.

# 3. STRUCTURE WITH DOUBLE TUBE WITH LOWER CLOSING

The filling and return gas tubes are closed when the required filling height is nearly reached, thus ensuring precise filling heights even without using the auto-levelling device. However, it is recommended that the auto-levelling device be used as it significantly reduces the quantity of product contained in the gas return tube before the beginning of the next filling cycle. If concerned about the return to tank of this minimum amount of product, E2 should be chosen so as to offer a better solution with gas return to a separate tank. This structure brings remarkable advantages during the de-gassing phase since the perturbation caused by the de-gassing of the product in the gas return tube is completely eliminated. This is significant for the production of champagne—type wines.

### 4. AUTOMATIC DUMMY BOTTLE

All the dummy bottles on the machine are automatically and simultaneously positioned with no manual intervention (for monoblocs with 20 spouts or more).

The dummy bottles optimize sterilization because the drain pipe can be opened or closed according to the circuit that needs to be washed. GAI's dummy bottle is under specific patent.

### 5. SECURE STERILIZATING CYCLE

The electro-pneumatically actuated valves, together with the dummy bottles with discharge circuit, guarantee effective and well defined sterilizing cycles. The process improves sterilization, but also ensures for it to be securely carried out on any circuit on the filler.

The machines are linked to an automatic CIP system and the sterilizing cycle is carried out without the operator being present, thus improving the plant production timing.

### 6. OPERATING CYCLE ITERATION

The filling cycle, managed with timing phases, ensures maximum repeatability. Thus, the operating cycle is not affected by speed variations on the production line. This time management improves operating phases. The operating cycle may be personalized according to the type of product to be bottled, thus enhancing work quality as well as productivity. Timing is determined in 1000th of a second and repeatability is around 100th of a second.

### 7. BOTTLE DETECTION

The proximity sensor on the edge of every spout is able to detect the presence of the bottle and enables the filling cycle to be started exactly when the bottle is held on the cone. This occurs without waiting for the bottle-lifting piston having completed its stroke as it happens in the traditional pressure fillers. Thus, the proximity sensor ensures proper operation and filler productivity.

### 8. PRESSURE TRANSDUCER

The pressure transducer, on the edge of every spout, allows to check the bottle pressure step by step so as to control that the filling cycle is carried out correctly and to detect any anomalies or malfunctions. These controls allow to detect:

- top seal unscrewing
- insufficient vacuum degree
- e xploded bottle or missing seal on the cone
- pressure trend during de-gassing.

Moreover, it is possible to check the efficiency of every single filling valve.

# 9. FOUR ELECTRO-PNEUMATIC VALVE STRUCTURE

Four electro-pneumatic valves are used to separately control the following circuits:

- 1. vacuum
- 2. tank gas
- 3. auto-levelling
- 4. de-gassing.

In comparison with the systems that use three valves only, the tank gas valve enables pressure compensation in bottle without using the return gas tube (it avoids sprinkling product residues inside the bottle) and without using "new" gas per each bottle. The vacuum valve, at the bottom of the valve body duct, automatically "cleans" it every time a filling cycle takes place. The electro-pneumatic valves and the in-feed pipes placed near the filling spouts minimize the pipe volumes, thus reducing gas consumption, increasing productivity and ensuring an easy and proper filler sterilization.

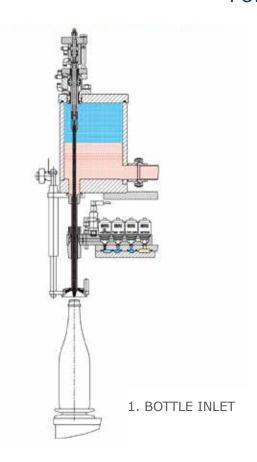
### 10. FORMAT SAVING

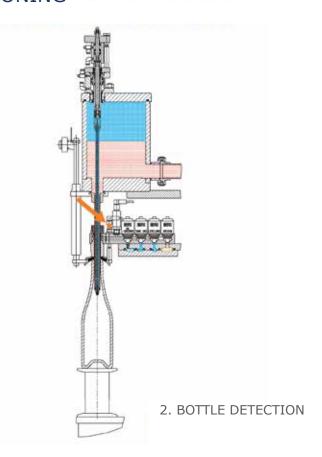
The filling cycle can be set by using the control panel and it does not require any manual intervention on the filler. Saving cycles and recalling them simplify and speed up the format changing operation. This guarantees a more uniform production.

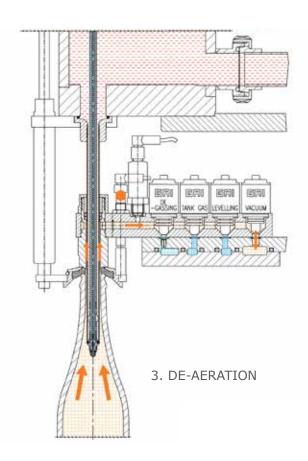
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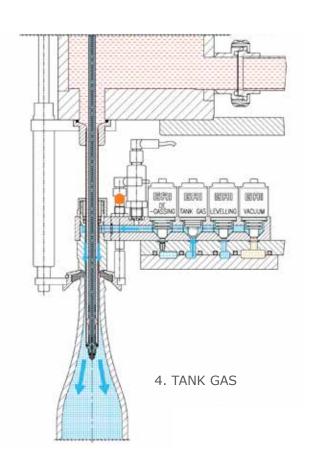


### **FUNCTIONING**



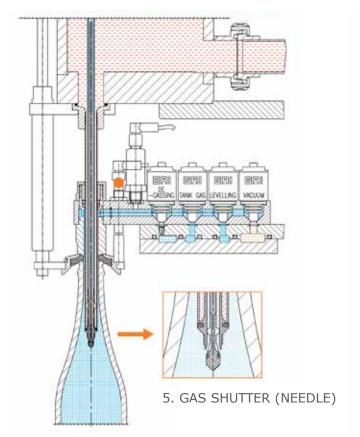


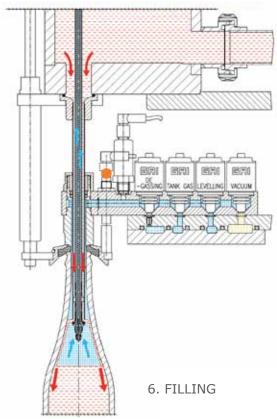


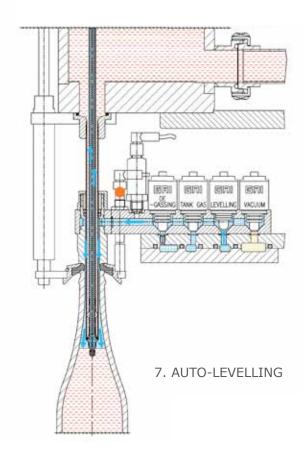


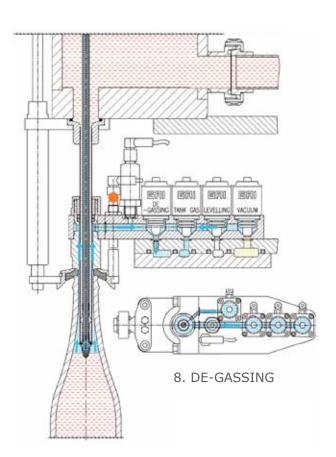


### **FUNCTIONING**









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# LINEAR FILLING - MLE MODELS



43

### Still products up to 3,000 bottles per hour.

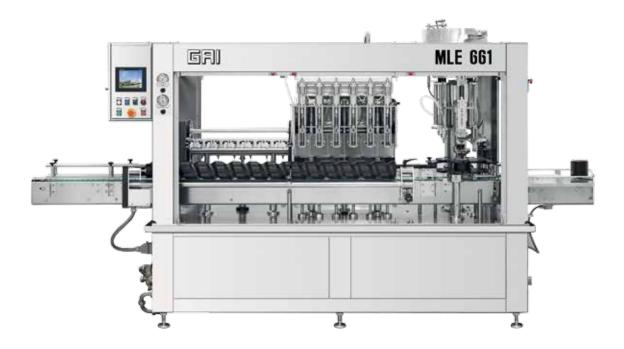
The MLE Monoblock is a Linear Fully Automatic bottling machine.

4 or 6 nozzles for rinsing, 4 or 6 nozzles for filling and single head for crowning or corking. The machine has been designed to bottle high quality products using the new Electro-Pneumatic Filling Valve "UNICA" able to work with still and sparkling products without compromises.

# MLE / MLE BIER

RINSING, FILLING, CROWNING/CORKING.

The basic functions for bottling, you can fill both carbonated and non-caorbonated products.





FUNCTION		4-4-1	6-6-1
Rinser	n	4	6
Filler	n	4	6
Contropressure	bar/psi	0÷8 / 0÷115	0÷8 / 0÷115
Production	gal/h	139	198
Still wine	It /h	525	750
Production	gal/h	99	139
Sparkling wine	It /h	375	525
Production Still wine	bott./h	700	1000
Referred to 0,75L bottle format	bott/min	12	17
Production Sparkling wine	bott./h	500	700
Referred to 0,75L bottle format	bott/min	8	12
Production Beer	bott./h	900	1200
Referred to 0,33L bottle format	bott/min	15	20
Weight	lbs (Kg)	1765 (800)	1875 (850)

<sup>\*</sup>Not binding data.





## SERIES RE LP



### STILL WINES FROM 1,000 TO 15,000 BOTTLES/HOUR.

#### Rinsing, complete filling cycle at a low pressure with the electro-pneumatic spout, vacuum corking, capping.

The LP series machines have been designed for still or lightly sparkling products.

Filling valves are similar to the valves present in the HP series without the degassing circuit.

In this case, the operating pressure goes from 0 to 1 bar. De-aeration, filling, gas injection are all carried out on the filling turret.

In addition to all the advantages of the electric spout, these machines bring other two main advantages: greater compactness and optimal working conditions compared to traditional machines.

In particular, the seal is always tight on the bottle preventing the product from getting in contact with air between one phase and the another.



<b>FUNCTION</b>		3032RELP	4032RELP	5032RELP	6032RELP	7032RELP	8032RELP	9032RELP	10032RELP
Rinser	n	12	16	20	20	24	28	32	36
Filler Valves	n	20	20	24	28	32	36	40	45
Corker	n	1	3	4	4	5	6	6	8
Capper	n	1	3	4	4	5	6	6	8
Still wine	gal /h	792	792	990	1188	1387	1585	1783	1981
production	I/h	3000	3000	3750	4500	5250	6000	6750	7500
Speed	bott./h	1000-3000	1500-4000	1500-5000	1500-6000	1500-7000	2000-8000	2000-9000	2000-10000
	bott./min	16-50	25-66	25-83	25-100	25-116	33-133	33-150	33-166

\*Not binding data.



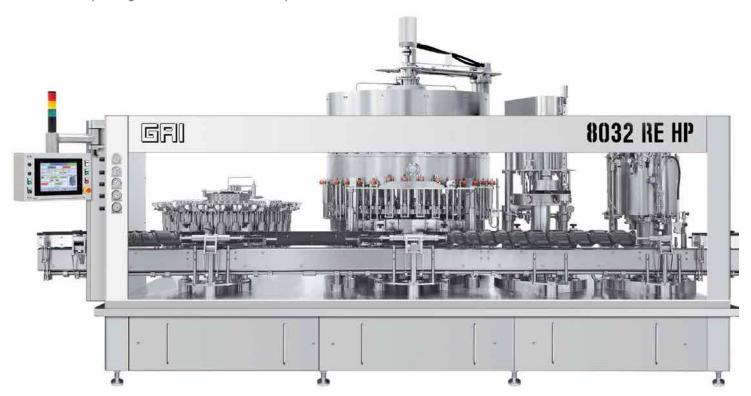


# SERIES RE HP



Still, champagne and sparkling wines from 3,000 to 10,000 bottles/hour.

Rinsing, still or sparkling wine complete filling cycle with electropneumatic spout, vacuum corking, capping. The HP Series is the most flexible and complete series belonging to the range with electric spout, suitable for bottling both sparkling and still wines without compromise.







<b>FUNCTION</b>		2032FEHP	2532FEHP
Rinser	n	12	12
Filler Valves	n	12	16
Corker	n	1	1
Capper	n	1	1
Still wine pro-	gal /h	475	635
duction	I/h	1800	2400
Sparkling wine	gal /h	290	370
production	I/h	1100	1400
Snood	bott./h	600-3000	600-3000
Speed	bott./min	10-50	10-50

<sup>\*</sup>Not binding data.

<b>FUNCTION</b>		3032REHP	4032REHP	5032REHP	6032REHP	7032REHP	8032REHP	9032REHP	10032REHP
Rinser	n	12	16	20	20	24	28	32	36
Filler Valves	n	20	20	24	28	32	36	40	45
Corker	n	1	3	4	4	5	6	6	8
Capper	n	1	3	4	4	5	6	6	8
Still wine pro-	gal /h	792	792	990	1188	1387	1585	1783	1981
duction	I/h	3000	3000	3750	4500	5250	6000	6750	7500
Sparkling wine	gal /h	475	475	595	713	832	950	1070	1188
production	I/h	1800	1800	2250	2700	3150	3600	4050	4500
Consider	bott./h	1000-3000	1000-4000	1500-5000	1500-6000	1500-7000	2000-8000	2000-9000	2000-10000
Speed	bott./min	16-50	16-66	25-83	25-100	25-116	33-133	33-150	33-166

<sup>\*</sup>Not binding data.



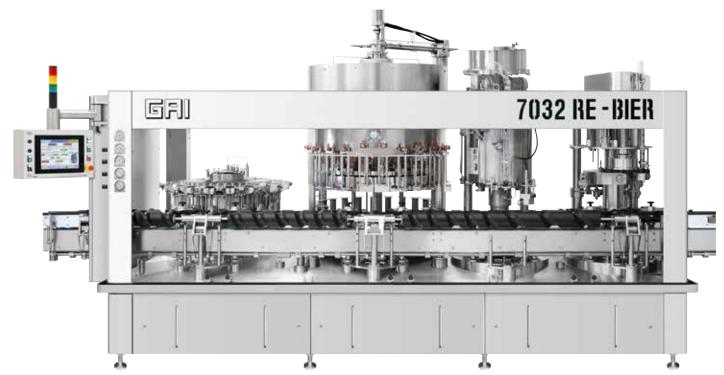


## **SERIES BIER**



### BEERS FROM 1,000 TO 18,000 BOTTLES/HOUR.

Quality beers have long been an area of great interest for Gai. We have created specific machines for these products keeping in mind their typical problems, from their particular sensitivity to oxidation, to the various sizes of bottles to be filled and capped. This family also includes mechanical and electro-pneumatic series, with all the advantages implied by this second solution.







Function		1531 FM-BIER	3031 FM-BIER	5031 FM-BIER
Rinser	n	9	12	16
Filler	n	8	12	16
Crown/Capper	n	1	1	3
Output	gal /h	132	290	450
Output	l/h	500	1100	1700
Speed	bott./h	500-1500	600-3000	1000-5000
	bott./min	8-25	10-50	16-83

503 FE-BIE	3031 FE-BIER
	12
	12
	1
4.	290
17	1100
1500-50	1000-3000
25-	16-50

Function		6031 RE-BIER	7031 RE-BIER	8031 RE-BIER	10031 RE-BIER	12031 RE-BIER	14031 RE-BIER	18031 RE-BIER
Rinser	n	16	20	24	24	28	32	40
Filler	n	20	24	28	32	36	40	50
Crown/Capper	n	4	4	6	6	8	10	10
Output	gal /h	554	686	792	898	1056	1240	1585
Output	l/h	2100	2600	3000	3400	4000	4700	6000
Smood	bott./h	1500-6000	1500-7000	2000-8000	2000-10000	2500-12000	3000-14000	3000-18000
Speed	bott./min	25-100	25-116	33-133	33-166	41-200	50-233	50-300

<sup>\*</sup>Not binding data.











# LABELLING SERIES 5000 (5001-5002-5003) AUTOMATIC WASHER-DRYER

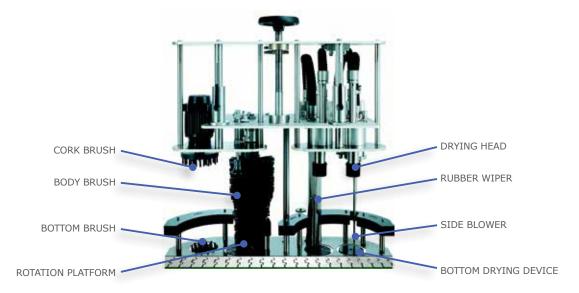
GAI has been designing and building automatic external bottle washer dryers machinery since 1990.

The primary objective is to fully satisfy the needs and the expectations of the quality wine producers, who want an aesthetically perfect bottle, as well as the need to assist the labelling process.

In this regard the Gai washer dryers, thanks to the patented system, assure a high quality of cleanness and dryness of the bottle.

The main characteristics of these machines are:

- Highly compact (easy to insert into existing bottling line and into little places).
- Complete washing of the bottles (removal of dirt and residues to glass manufacture from the complete bottle surface, including the (cork) closure area and the bottle bottom).
- Total drying of the bottles:
- complete dying of the cork (closure) and bottle neck for a risk-free capsuling
- drying of the bottle body to obtain a precise and enduring adhesion of the labels
- total drying of the bottle bottom to avoid moisture within the packing carton and to allow for possible wrapping of bottles with protective paper wrapping without the risk of rips
- simple and quick adjustment (height adjustment of all positions occurs simultaneously by means of a single operation. Drying heads fits all type of bottles)
- possibility to by-pass the machine when not in use
- Anti-condensation device which allows for direct labeling onto bottles, even if bottles have condensation on the surface, without altering the wine temperature. Gai manufactures machines with production speed from 1.000 to 10.000 b/





#### WASHING

The washing of the bottles is done using ro-tating nylon brushes that have been wetted by a fine water spray . (Generally cold water is used, preferably with limited hardness). Brushes change according to bottles dimen-sions, no other settings are needed. The bottles are put in rotation in the op-posite direction of the brush (2) using the platforms . In this way the cleaning action of the brushes ensures the perfect cleaning of extremely dirty bottles too. The brush, by virtue of its rotating action, is self cleaning and the wastewater leaves the machine through the discharge pipe.

The brushes achieve the complete cleaning of the entire bottle surface:

- (1) cork brush: cork area and bottle mou-th
- (2) body brush: neck, shoulder and bottle body
- (3) bottom brush: bottle bottom
- (4) bottom brush "CH": bottle bottom for "champagne bottles" (Optional).



#### RYING

The drying of the bottle is done using:

- (1) The drying head dries the bottle neck and the cork while the bottle is rotating. The drying heads and the holding hea-ds (drying and washing side) are set all together.
- (2) The wiper blade positions itself auto-matically against the bottle sides.
- A large portion of the water, which is to be found on the bottle walls, is caught by the wipers and the water runs down by means of gravity.
- (3) The side blower can be adjusted accor-ding to the diameter of the bottle. The air, forced through the lateral blowers while the bottle is rotating, is added to the air flow of drying head. The resul-ting combined air-flow remains against the bottle surface and blows the water downward. The air used by devices (1) and (3) is produced by the machine.
- (4) The bottom drying device is a platform equipped with a central jet. Compressed air is forced into the jet and in this man-ner the bottle bottom is dried.



### **ANTI-CONDENSATION DEVICE**

his device (OPTIONAL) temporarily removes condensation from the bottle surface in order to allow for direct labelling of bottles. This process occurs without altering the temperature of the contents of the bottle.

The system improves the overall performance even when there is no Condensation present. The air blower is positioned very close to the bottle and its effect is of short duration. Heated air therefore only warms the exterior glass surface of the bottle. Wine temperature is not effected. If bottles are then packed into cartons, the sealed cartons insulate the bottles from surrounding conditions thereby preventing the reappearance of condensation. This system consists of heating elements (1) that heats the air.

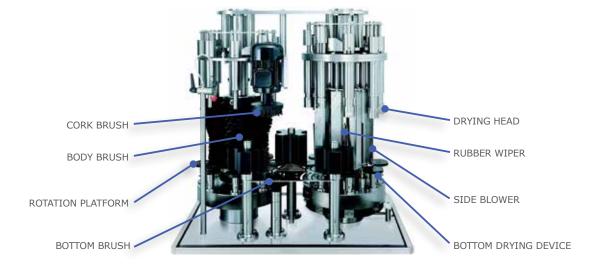
The temperature is adjusted by means of a timer located on the control panel.

The cork (closure) is not exposed to the hot air.



# LABELLING SERIES 5000 (5004-5006-5008-5112-5118) ROTATING AUTOMATIC WASHER-DRYER







#### WASHING

The washing of the bottles is made with rotating brushes that have been wetted by a fine water spray (5). (Generally cold water is used, preferably with limited hardness). The bottles are rotated in the opposite di-rection of the brush (2) using the platforms (4). In this way the cleaning action of the brushes ensures even the perfect cleaning of extremely dirty bottles. The brush, by vir-tue of its rotating action, is self-cleaning and the wastewater leaves the machine through the discharge pipe.

The brushes achieve the complete cleaning of the entire bottle surface:

(1) body brush: cork area and bottle mouth

(2) body brush: neck, shoulder and bottle body

(3) bottom brush: bottle bottom

For sparkling wine corks fi tted with wires, it is possible to the clean the bottle neck with a special brush (optional).



#### **DRYING**

Bottle drying has two phases:

I) heads (1) dry the cork (closure), the neck and the shoulder of the bottles, to ensure perfect capsuling.

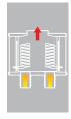
The wipers (2) large portion of the water ac-cumulates against the wipers and by gravity runs down to bottle, (they are self adjusting against the bottle body).

II) when drying is completed the head stops blowing and the wiper moves away from the bottle.

The side blowers (3) are simultaneously adjustable according to the bottle diameter. The airfl ow is very close to the bottle and thereby assures a perfect dryness of the bottles.

The side blowers are 380 mm high and thereby accommodate most bottle types and sizes. The machine has an automatic system that adjusts the airfl ow based on the bottle size.

The platform (4) is equipped with a central jet. Filtered compressed air is forced into the jet and in this manner the bottle bottom is dried.



#### **ANTI-CONDENSATION DEVICE**

This device temporarily removes con-densation (1) (optional) in order to allow the direct labeling of bottles, which have condensation on their surface. This process occurs without altering the tem-perature of the contents inside the bottle. The system improves the overall performance even when there is no condensa-tion.

The air blower is located very close to bottle, and its effect is of short duration. Heated air therefore only warms the exterior glass surface of the bottle. Bottles are then packed into cartons, the sealed cartons insulate the bottles from surrounding conditions thereby preventing the reappearance of condensation.

This system consists of heating elements (1) that heats the air. The temperature is adjusted by means of a display located on the control panel and controlled by a tem-perature probe (2).

The cork (closure) is exposed to the hot air for a very short period only and the contents' temperature remains virtually unaffected.









### WASHING AND DRYING THE BOTTLE.

The first phase of the packaging process. These machines feature the intermittent or carousel configuration, which Gai has exclusive rights on. Thanks to this kind of configuration the machines are very compact and with excellent performances. The 5000 family consists of 8 models from 1,000 to 10,000 b/h.





Function		5101	5102	5103
Washing station	n	1	6	8
Drying station	n	1	6	8
Speed	bott./h	400-1000	400-1600	400-2400
	bott./min	6-17	6-26	6-40
*Not binding data.				

Function		5104	5106	5108	5112	5118
Washing platforms	n	4	6	8	12	18
Drying platforms	n	4	6	8	12	18
Speed	bott./h	500-2500	600-3500	800-4500	1500-7000	2000-10000
	bott./min	8-41	10-58	13-75	25-116	33-166

<sup>\*</sup>Not binding data.





# LABELLING SERIES 4000: AUTOMATIC CAPSULERS FOR SHRINKING, POLYLAMINATE AND TIN CAPSULES



#### **CAPSULE DISPENSER**

The caps distribution takes place on the entering screw.

The operation of the dispenser is managed from a PLC, that syncronises the functions of the dispenser with the machine.

A photoelectric cell authorizes the caps distribution only if the bottle is corked.

During the distribution the bottle neck is centered by a gripper.

The capsule is pushed on the bottle neck through a piston, that can also drive caps with a minimal clearance compared to the bottle neck; or it is pushed from a blow in the case of the rotary dispenser.

A second piston adjusts perfectly the capsule to ensure the quality of the sleeking of the higher part.

The ejector nozzles settings are determined by the length and diameter of the capsules. Screw adjustments are quick and precise.

The glass of distribution is changed for capsules of different diameter and length.

Rotary dispenser 4608D-408, a complete re-design, operates using a special cam system making the dispenser precise and reliable. This allows the cup to be oriented appropriately during both the capsule distribution and its dispensing of the capsule onto the bottle. The cam is better suited to longer work periods and when operating at high distribution speeds.

The progress of the capsules is controlled by a conveyor belt for the dispenser 4606D and 4608D, by gravity for 4603D.

The autonomy is of 300-600 capsules for 4603D, and of 600-1200 capsules for 4606D and 4608D.

The dispenser 4608D-408 is characterized by a needles system for the separation of the capsules.

This kind of system is also available, on request, for the 4606D-408, with extra charge.







4603D - 408

4606D - 408

4608D - 408

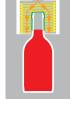
#### **SHRINK CAPSULES HEAD**

Good heat-shrink capsuling requires the following:

- capsules of good quality
- correct coupling between capsule and bottle
- a good shrinker

The main advantages of our heat-shrink capsuling heads are:

- high unitary rating of 1,5 kW
- extended irradiation surface area
- precise temperature regulation by means of an electronically-controlled resistance. The temperature reached can be read on a display
- accurate ventilation. The flow of air accompanying the movement of the bottle is adjustable in terms of both hase and intensity
- a pneumatic safety device raises the heads when the capsuling machine stops to avoid burning and breaking.



#### TIN AND POLYLAMINATE CAPSULES HEAD

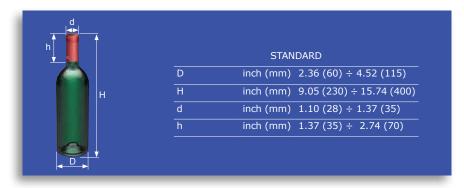
The conditions required for good sleeking of tin and polylaminate capsules are as follows:

capsules / bottles of good quality

• minimum clearance between the capsule and the bottle

The ADVANTAGES of our sleekers can be sum-med up as follows:

- the ROLLERS are very hard (highly wear-resistant), with bushings made of a special self-lubricating material
  the RODS on the rollers are made of stain-less steel, with pins which are ground, rolled and hardened
- the SPINDLE holding the rods is a single piece made of stainless steel
   the CAPSULE-PRESS is large with a hexa-gonal section
- the ROTATION SPEED of the spindles is adjustable by Inverter from 1,000 to 2,000 r.p.m.
- the DIRECTION OF ROTATION can be clockwise or counter-clockwise
- the CAM used to move the head down (or the bottles up) is slow one way and fast on the way back.









### APPLYING HEAT-SHRINKING, POLYLAMINATE OR FOIL CAPSULES.

Various technical detail solutions have been conceived to guarantee constant quality and perfect final results overall In the case of heat-shrinking capsules continuous temperature control ensures constant quality. In the case of polylaminate or foil capsules the sleekers are controlled by an inverter, thus eliminating mechanical operations on the heads and allowing to reverse the rotation direction.



	4501	4604	4606	4636
n	1	1	1	1
n	1	1	1	3
bott./h	800-2500	800-2500	1000-3000	1000-4000
bott./min	13-41	13-41	16-50	16-66
n	1 opt.	4	6	6
bott./h	800-1200	800-2500	1000-4000	1000-4000
bott./min	13-20	13-41	16-66	16-66
	n bott./h bott./min n bott./h	n 1 n 1 bott./h 800-2500 bott./min 13-41 n 1 opt. bott./h 800-1200	n     1     1       n     1     1       bott./h     800-2500     800-2500       bott./min     13-41     13-41       n     1 opt.     4       bott./h     800-1200     800-2500	n         1         1         1           n         1         1         1           bott./h         800-2500         800-2500         1000-3000           bott./min         13-41         13-41         16-50           n         1 opt.         4         6           bott./h         800-1200         800-2500         1000-4000

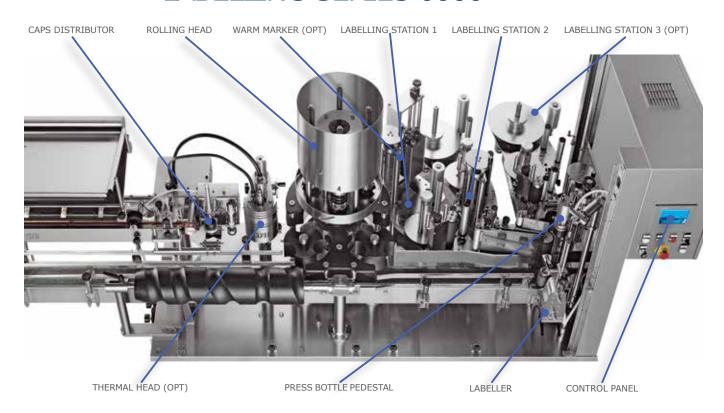
<sup>\*</sup>Not binding data.

Function		4608	4612	4648	46812
Head dispenser	n	6	6	6	6
Shrinking heads	n	-	-	4	8
Shrinking speed	bott./h	-	-	1200-6000	2000-10000
	bott./min	-	-	20-100	33-166
Sleeking heads	n	8	12	8	12
Sleeking Speed	bott./h	1200-6000	2000-10000	1200-6000	2000-10000
	bott./min	20-100	33-166	20-100	33-166

<sup>\*</sup>Not binding data.

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#### **CAPSULE SUPPLIER**

Capsule distribution is performed while the bottle is in the in-feed screw, and the bottle is centered by a gripping device. A capsule will only be distributed if the photoelectric cell detects that a cork is present.

The operation of the dispenser is controlled via a PLC. The capsule is pushed over the bottle neck by a pneumatic piston, ensuring capsules with fine tolerances are correctly positioned, before final placement is effected by a second pneumatic piston. Changes of capsule material, and length of capsule are easily accommodated by quick and precise screw regulation. The cap distribution cup needs to be changed for different diameter and length caps. On the 4606D the cap feed is by a conveyor system, while the 4603D is by gravity feed. Magazine capacity is 300-600 for the 4603D, and 600-1200 for the 4606D.

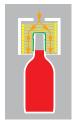
If requested, the device 4606D-407 can be equipped with needles system with a supplement.







4606D - 407



#### **SHRINK CAPSULES HEAD**

Good heat-shrink capsuling requires the following:

- capsules of good quality
- correct placing of the capsule on the bottle
- a good radiation surface on the shrink-head

THE MAIN ADVANTAGES of our heat-shrink capsuling heads are:

- HIGH UNITARY RATING of 1,5 Kw
- EXTENDED IRRADIATION SURFACE AREA
- PRECISE TEMPERATURE REGULATION by electrical means and read on the machine display
- ACCURATE AND ADEQUATE VENTILATION, both in volume and intensity to optimise application
- A PNEUMATIC SAFETY DEVICE that raises the head when the capsuling machine stops, avoiding burning and bottle breakage.





#### **TIN AND POLYLAMINATE CAPSULES HEAD**

he requirements for good sleeking of tin and polylaminate capsules are

- · capsules of good quality
- · bottles of good quality
- minimum clearance between capsule and bottle neck and precise fit on bottle mouth

To summerize, the ADVANTAGES of GAI sleekers are:

- the ROLLERS are made from very hard and high wear resistant material, with bushes made from self-lubricating material
- the RODS on the rollers are made of stainless steel, and pins which are ground, rolled and hardened
- the SPINDLE holding the rods is a single piece made of stainless steel
- the CAPSULE PRESS is large with a hexagonal section
- the ROTATION SPEED of the spindles is 1000 to 2000 r.p.m, controlled by inverter
- the DIRECTION OF ROTATION can be clockwise or counter-clockwise
- the CAMS used to move the head down, or bottles up, is slow one way, and fast the other, ensuring good roll-on

On the 6013-6014-6023-6024 units, the bottle is secured during capsuling by a pneumatic mechanism, stopping bottle rotation.

The 6043 unit ensures superior capsule application by using 4 roll-on heads.

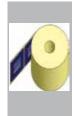


#### THRUST TROLLEY AND BOTTLE ROTATION ROLLER

The combined construction qualities of GAI machines, and their extensive labelling knowledge has resulted in a new, high quality linear labelling machine.

A photoelectric cell detects bottle presence, and the thrust carriage pushes the bottle against the rotation/press roller to apply the label. The robust thrust carriage slides on ball bushes, and is adjustable with double tilt to accommodate bottles with a taper of 1.5 degrees.

The bottle rotation roller has its own drive-motor controlled by inverter and combined with an encoder linked with the dispensing speeds of the label stations, which in turn are controlled by the PLC. The PLC in turn controls all other signals for notch detection, cap spots etc. The complete machine is managed by the PLC, controlled by a touch screen panel. Each model has two options, with 3 or 4 labelling stations.



#### **LABELLING STATION**

Labelling machine quality is determined by labelling head quality. GAI labelling stations made are manufactured after great analysis, without compromise and utilising modern technology.

The supports ensure no vibration. Easily visual number indicators assist with precise height adjustments.

Angular adjustment of the certification station allows for easy application of shoulder labels, combined with numerical measuring precision. A second angular adjustment aids in the correct positioning of a neck label.

The stepper motors on each station cater for  $\pm$  1 mm application tolerance. Station construction ensures rigidity, with precise labelling application. The paper route is clearly marked on each station, aiding operator efficiency.

### 1. PHOTOCELL UNIT

With the new support, an ultrasonic photocell (optional) can be fitted to read clear labels together with an optical photocell to read non-transparent labels. Which photocell to use can be selected on the panel and stored for each bottle format.

#### 2. PAPER INFEED UNIT

The paper infeed unit is the heart of the labelling station. It has been designed with a profile that maximizes the grip and prevents the paper from slipping on the roller. Special springs recover any play, guaranteeing consistent operation over time and in different working conditions.

### 3. REEL BRAKING/PAPER TIGHTENING UNIT

This innovative independent spring-operated unit is used to brake the reel and then tighten the paper. This means that the tightness of the paper is constant, which is a fundamental requirement for high quality labelling.

### 4. PAPER RECOVERY UNIT

GAI is introducing a new technique for the recovery of the paper after the label has been peeled off. A connecting rod system facilitates both the blocking and releasing of the paper. The difference in internal diameter produced makes it easy for the paper to be removed at the end of operations.





STANDARD					
D	inch (mm)	2.36 (60) ÷ 4.52 (115)			
H with caps supplier	inch (mm)	9.05 (230) ÷ 15.74 (400)			
H without caps supplier	inch (mm)	6.69 (170) ÷ 15.74 (400)			
d	inch (mm)	1.10 (28) ÷ 1.37 (35)			
h	inch (mm)	1.37 (35) ÷ 2.74 (70)			
		1.5° MAX			
H0 label	inch (mm)	0.39 (10) ÷ 10.62 (270)			
H1 label	inch (mm)	7.48 (190) MAX			
H2 label	inch (mm)	7.48 (190) MAX			
L1 label	inch (mm)	0.98 (25) ÷ 11.81 (300)			

		OPTIONAL
	3	NECK LABEL
	4	DOUBLE SIDE ADHESIVE NECK LABEL
	5	SHOULDER LABEL COLLAR
	6	SECOND BACK LABEL
	7	SIDE REFERENCE MARK SEARCH UNIT
	8	BOTTOM REFERENCE MARK SEARCH UNIT
)	9	PRESS BOTTLE PEDESTAL
	10	"2" CENTERING WITH "1" ALREADY EXISTING
	11	LABELS CENTERING ON CAP SPOT
)	12	WARM MARKER







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A multifunction monobloc with capsule dispenser, capping and self-adhesive linear labell ER. From  $1,\!000$  to  $3,\!000$  b/H.

These efficient and easy-to-use machines ensure high and consistent quality, thanks to their ability to store bottles data in order to repeat them over time. They are a valuable investment thanks to their renowned sturdiness and long lifetime.



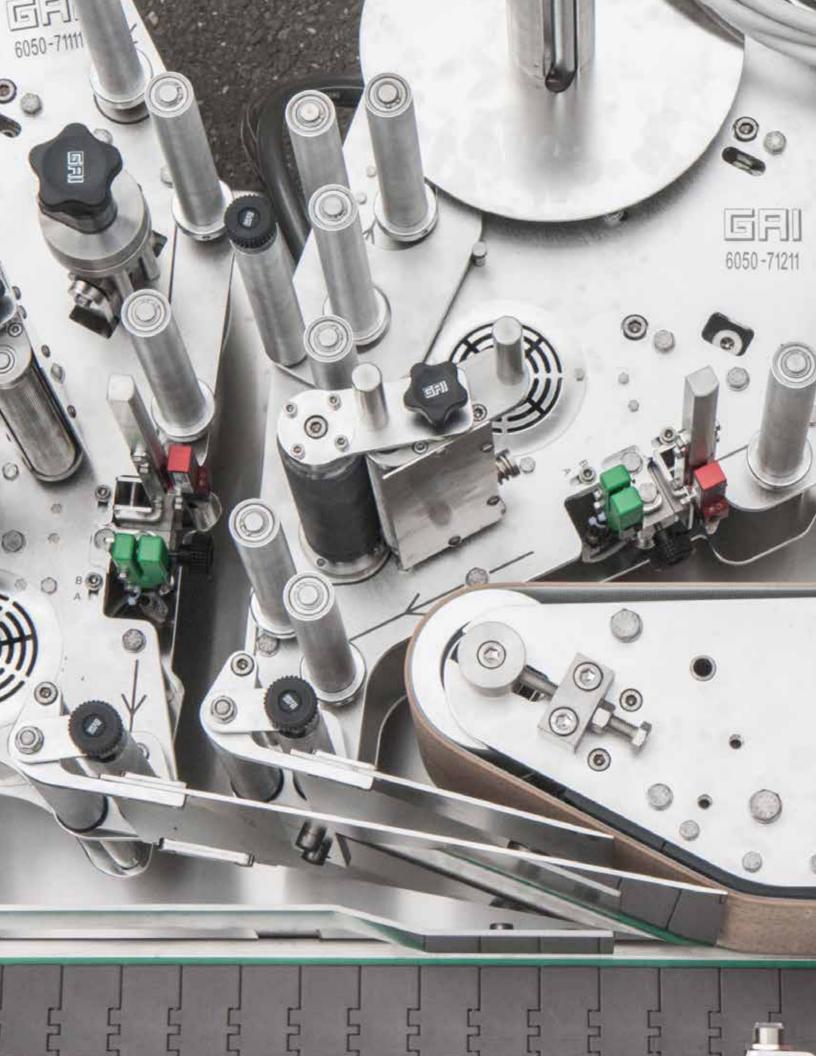


Function		6005	6013	6014
Head dispenser	n	1	1	1
Capsule capacity	n	300-600	300-600	300-600
Shrinking heads	n	1 opt	1 opt	1 opt
Shrinking speed	bott./h	800-2000	800-3000	800-3000
	bott./min	13-33	13-50	13-50
Sleeking heads	n	1	1	1
Sleeking Sneed	bott./h	800-1200	800-1200	800-1200
Sleeking Speed	bott./min	13-20	13-20	13-20
Label stations	n	2 max	3 max	4 max

<sup>\*</sup>Not binding data.

Function		6023	6024	6043	6044
Head dispenser	n	1	1	1	1
Capsule capacity	n	300-600	300-600	300-600	300-600
Shrinking heads	n	1 opt	1 opt	1 opt	1 opt
Shrinking speed	bott./h	1000-2500	1000-2500	800-3000	800-3000
	bott./min	16-41	16-41	13-50	13-50
Sleeking heads	n	2	2	4	4
Sleeking Speed	bott./h	1000-2000	1000-2000	1000-2500	1000-2500
	bott./min	16-33	16-33	16-41	16-41
Label stations	n	3 max	4 max	3 max	4 max

<sup>\*</sup>Not binding data.



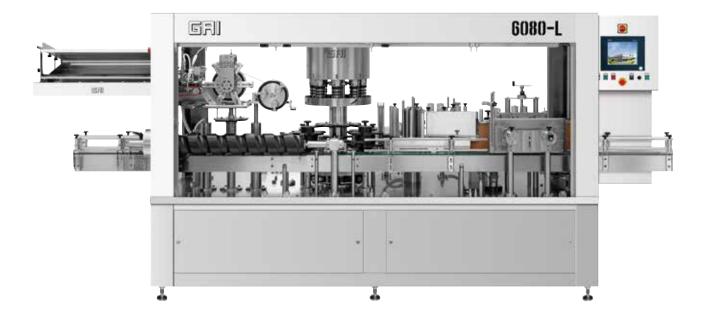


# LABELLING SERIES VACUUM



### VERSATILITY OF VACUUM LABELING.

These machines perform capping and labeling. The latter is carried out with the vacuum technology, particularly popular in the United States because of its speed and flexibility.



Function		6050E-1	6080E-1
Head dispenser	n	-	-1
Capsule capacity	b/h	-	-
Shrinking heads	n	-	-
Shrinking anod	b/h	-	-
Shrinking speed	bott./min		-
Sleeking heads	n	-	-
Sleeking Speed	b/h	-	-
	bott./min	-	-
Labeller speed	b/h	1000-4000	2000-6000
Labellei Speed	bott./min	16-66	33-100
Labeling stations	n	1 max	1 max

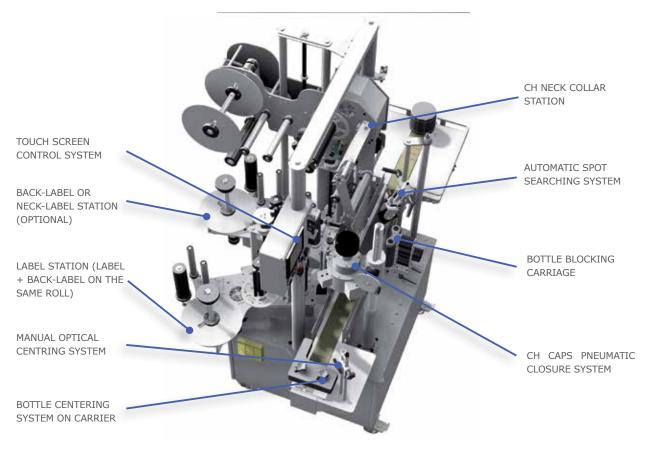
6080-T	6080-L	6060-2	6050-2
6	6	1	-
600-1200	600-1200	600-1200	600-1200
4	-	1	1
2000-6000	-	1500-3000	1500-3000
33-100	-	25-50	25-50
-	8	6	-
-	2000-6000	-	-
-	33-100	-	-
2000-6000	2000-6000	1000-4000	1000-4000
33-100	33-100	16-66	16-66
2 max	2 max	2 max	2 max

<sup>\*</sup>Not binding data.





# LABELLING SERIES CH (626CH)



The packaging of a bottle of wine immediately conveys the quality of the product it contains. For this reason, the quality of the capsuling and labelling is of

vital importance as this gives an immediate impression of the product.

In addition to the automatic "champagne" type models, GAI has now completed the range by offering a semi-automatic version suitable for small producers, or for larger producers that require small batch production.

These machines undertake the following operations:

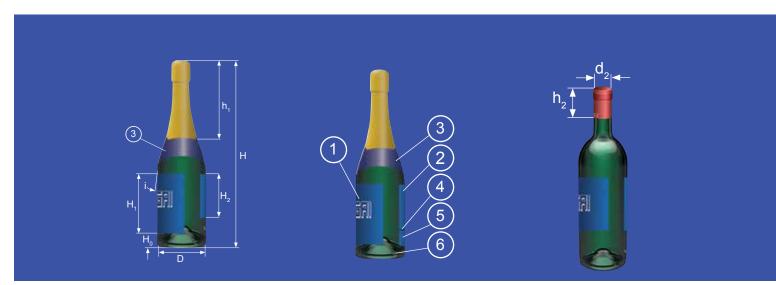
- manual orientation of "champagne" capsules. An optical sensor is used to detect a spot or refe-rence mark on the capsule.
- Champagne capsule pleating with four pleats is undertaken by a single pneumatic head.
- labelling by up to three stations: a station for cham-pagne collar, a body label station (or a body and back label on the same reel), a back or neck label
- station. Optical orientation on request.
   the use of polylaminate or PVC heat shrinking heads (optional). Head movement is controlled by a dedicated cam system.

The movement of the bottles is intermittent.

Specific accessories can be ordered to facilitate label-ling of still wines.

Machine operations are controlled by a centralized touch screen panel.

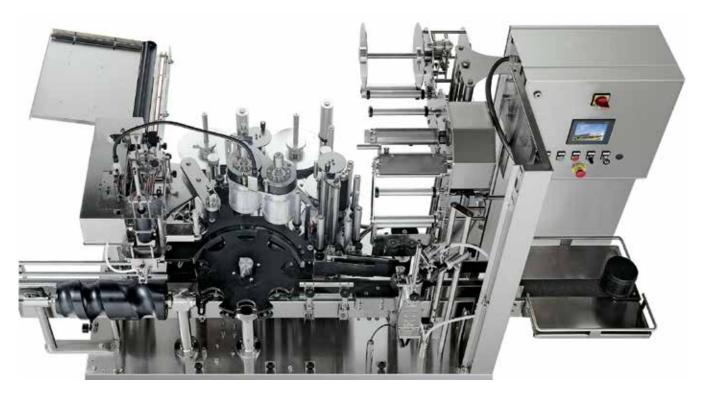
All data referring to bottle size and labels applied can be saved.





# LABELLING SERIES CH 6206 CH - 9316 CH - 9416 CH





A bottle's packaging immediately conveys an idea of the quality of the product it contains.

This is why the quality of the capsuling and labelling is a reflection of the value of the product itself.

The 'champagne' bottle packaging range is designed to meet the needs of small and medium-sized producers.

The CH monoblocs perform the complete bottle-packaging cycle. In particular, the 6206CH handles the fol-lowing functions:

- -distribution of sparkling wine cap-sules, after checking the presence of the cork. A system of needles is a standard fitting which helps to extract the capsules in the most difficult cases
- -capsuling, creating 4 creases and then folding in two separate processes, fol-lowing optical orientation of the capsule. The bottle is moved between the various steps involved in the capsuling by a star, with a special device which prevents the bottle from rotating and losing its orienta-tion.

- labelling, with up to 4 stations, includ-ing the sparkling wine neck label, two body labels, and an optional 4th station (body or sticker).

Centering is ensured by performing the labelling operation with a second orienta-tion to the capsuling.

The 9316CH and 9416CH also perform the following operations:

- washing and subsequent drying of the body of the bottle, the cork and the bottom of the bottle.
- temporary elimination of any sur-face condensate (optional) to allow for labelling following cold bottling.

All the machines fitted with special acces-sories can also package "standard" bottles of wine.

The machines can be fully-controlled using a centralized touch screen console.

**STANDARD** 

All the bottle format data are stored in order to simplify machine operation.

D	inch (mm)	2.36 (60) ÷ 4.52 (115)
H with caps supplier	inch (mm)	9.05 (230) ÷ 15.74 (400)
(exduding 626CH)	,	() ()
H without caps supplier	inch (mm)	6.69 (170) ÷ 15.74 (400)
i		1.5° MAX
H0 label	inch (mm)	0.39 (10) ÷ 10.62 (270)
H1 label	inch (mm)	7.48 (190) MAX
H2 label	inch (mm)	7.48 (190) MAX
L1 label	inch (mm)	0.98 (25) ÷ 7.87 (200)
3 - NECK LABEL PAPER	inch (mm)	8.66 (220) MAX

inch (mm) (130) MAX

OPTIONAL					
H1 label	inch (mm)	7.48 (190) MAX			
H2 label	inch (mm)	7.48 (190) MAX			
h2 (only for 626CH)	inch (mm)	1.37 (35) ÷ 2.74 (70)			
d2 (only for 626CH)	inch (mm)	1.10 (28) ÷ 1.37 (35)			
4		CK LABEL, (or shoulder o neck label 3is applied)			
5	SIDE REFERE	NCE MARK SEARCH UNIT			
6	BOTTOM REFE	RENCE MARK SEARCH UNIT			
	"2" CENTERING	WITH "1" ALREADY EXISTING			
	WARM MARK	ER			
	PRESS BOTTI	LE PEDESTAL			
	SHOULDER L	ABEL COLLAR (excl.626CH)			
	SPINNING HE	EAD (only for 626CH)			
	HEAT SHRINK	ING HEAD (only for 626CH)			







## THE COMPLETE CHAMPAGNE PACKAGING CYCLE, ALSO SUITABLE FOR STILL WINE

These are machines belonging to the 6000 series to which a turret for the capsule and a station dedicated to the champagne neck label are added. The same machine can easily shift to bottle still wines. Functions can include simple capsuling and labelling or the complete Champagne packaging cycle, from washing and drying to the neck label.



Function		626CH
Head dispenser	n	-
CH Pneumatic heads	n	1
Camerila elective encod	bott./h	600
Capsule closure speed	bott./min	10
Shrinking heads	n	1 opt
Christian annud	bott./h	600
Shrinking speed	bott./min	10
Sleeking heads	n	1 opt
Clasking Coast	bott./h	600
Sleeking Speed	bott./min	10
Label stations + nech label	n	max 2+1
district to the state of the st		

*Not	binding	data
IVUL	Dilluling	uata.

Function		6206CH	6226CH	9316CH	9416CH
Washing + drying station	n	1	1	1+1	1+1
Head dispenser	n	1+1	1+1	1	1
CH Pneumatic heads	n	800-1800	800-1800	1+1	1+1
Canacila alactica anada	bott./h	13-30	13-30	800-1800	800-1800
Capsule closure speed	bott./min	1 opt	1 opt	13-30	13-30
Shrinking heads	n	800-2500	1000-2500	1 opt	1 opt
a	bott./h	13-42	13-42	800-2400	800-2500
Shrinking speed	bott./min	1 opt	1 opt	13-40	13-43
Sleeking heads	n	800-1200	1000-1200	1 opt	1 opt
Clasking Coast	bott./h	13-20	16-20	800-1200	800-1200
Sleeking Speed	bott./min	max 3+1	max 3+1	13-20	13-20
Label stations + nech label	n			max 3+1	max 3+1

<sup>\*</sup>Not binding data.





# LABELLING SERIES 7000: ROTARY LABELLER LABELLING SERIES 8000: CAPS - DISTRIBUTION -

**CAPSULATING - LABELLING** 

### LONG AUTONOMY CAPS SUPPLIER (ONLY FOR 8000 SERIES)



The capsules are dispensed on infeed screw. The dispenser is controlled by a PLC, which synchronizes its functions with the movements of the capsuler.

A photocell authorizes the dispensing of a capsule only if the bottle is corked. The neck of the bottle is centred by a pneumatic clamp, and the capsule is pressed onto the neck by a pneumatic piston. Capsules should have a minimal clearance from the neck of the bottle.

A second pneumatic piston adjusts the capsule so it is perfectly positioned for sleeking.

Quick, precise screw adjustments correctly position the discharge nozzles for height and length. Capsules of a different diameter and length can be used by changing the dispenser cup. The 4606D-408 dispenser, uses a belt feed conveyor. The capsule magazine takes 600 - 1,200 capsules. An optional needle system for separating the capsules can be fitted to the 4606D-408 at an extra cost.

### SHRINK CAPSULES HEAD (ONLY FOR 8000 SERIES)



Good heat-shrink capsuling requires the following: capsules of good quality

- correct coupling between capsule and bottle
- · a good sleeker with an adequate number of heads

The main advantages of our heatshrink capsuling heads are:

- high unitary rating of 1,5 kW
- extended irradiation surface area
- · precise temperature regulation by means of an electronically controlled thermostat. The temperature reached can be read on a digital display
- accurate ventilation. The flow of air accompanying the movement of the bottle is adjustable in terms of both phase and intensity
- a pneumatic safety device raises the heads when the capsuling machine stops to avoid burning and breaking. The heat-shrink capsule output is: - on the single-head machine 3000 bottles/hour - on the 3 heads machine 4000 bottles/hour.

### TIN AND POLYLAMINATE **CAPS HEAD** (ONLY FOR 8000 SERIES)



The conditions required for good sleeking of tin and polylaminate capsules are as follows:

- capsules of good quality
- bottles of good quality
- minimum clearance between the capsuleand the bottle. The ADVANTAGES of our sleekers can be summed up as follows:
- the ROLLERS are very hard (highly wearresistant), with bushings made of a special self-lubricating material • the RODS on the rollers are made of stainless steel,
- with pins which are ground, rolled and hardened

  the SPINDLE holding the rods is a single piece made of stainless steel
- the CAPSULE-PRESS is large with a hexagonal section • the ROTATION SPEED of the spindles is adjustable by Inverter from 1,000 to 2,000 r.p.m.
- the DIRECTION OF ROTATION can be clockwise or anti-clockwise
- the CAM used to move the head down (or the bottles up) is slow one way and fast on the return.

### LONG AUTONOMY CAPS SUPPLIER



The rotary labeller is the most versatile machine: it allows the labelling of cylindrical, conical and shaped bottles. These machines are manufactured with primitive diameter turrets 432, 540, 720, 1080 mm.

The choice is depending on the numbers of labelling stations and the required working speed according to bottles/hour. The movement of the labelling plates is by mechanical or electronic cam. In the case of mechanical cam the bottle makes a predetermined sequence of movements; it can be customized according to the bottle to be labelled and to the combinations of labels.

The turret with electronic plates allows more flexibility than the mechanical plates: it is necessary when the orientation of the label must be made with an optical sensor. Furthermore it is advisable when you have to put transparent or particularly long labels. The "electronic cam" (with electronic chip developed by Gai) independently drives the stepper motor on each plate. It is possible to pre-set the movement of the step motor, the direction and the time, as well as the speed of the movement.

This allows several bottle labelling combinations, and making the machine the most flexible in the market. Starting from the model 7540, the machine can be equipped with pincers that automatically adjusted to the diameter of cylindrical and conical bottles.

### LABELLING STATIONS

The labelling stations are entirely designed and manufactured inside our company.

Platform rotation is obtained by the use of stepper motors (7400 and 7540 series) or by brushless motors (7700- 7900 and all 8000 series).

in stainless and Label stations made in vertical, horizontal and angular movement. All setting are displayed with particular numeric indicators.

The paper path is marked on the station to make easier the replacement of the bobbin. Label station managing is centralized on the control board. A special station for the application of certification or DOCG seals (with double sided tape) is also available. The seal can have either a "i" or a collar band position. The stations are accurate a range of ±1mm of standard application.





### LONG AUTONOMY CAPS SUPPLIER



The bottle platforms can have either mechanical or electrical movement control. Electrical control is via stepper motors. Three different kinds of platforms (plates) are available.

a) Universal plate with base made from anti-rotation rubber

b) Bottle centring and expulsion plate. This plate ensures the bottle is correctly centred and, as a result, ensures a more uniform label application. It is recom-mended for noncylindrical bottles and when running at high speeds. Each bot-tle type has its own designed centring ring (1) and expulsion device (2), to aid in the containers exit from the labelling machine carousel. The plates can be easily changed over to the standard universal plate (3) c) Bottle bottom reference mark search plat.

### BOTTLE BOTTOM REFERENCE MARK



Each rotary labeller from GAI, both mechani-cal and electronic, can be provided with the bottom or lateral mark searching device. The bottom mark search is made during the first step of bottle rotation, on the carousel of the labeller.

In the case of the mechanical machine, the dragging of the bottle is made through a "free-wheel" system, and not through the reference mark. The blocking device (5) allowing the reference mark search, is oper-ated by an external cam, that works only in the search phase. In the case of an electronic machine, the detection unit searching the reference mark is in a plastic material and slides on the bottle, reducing wear to a minimum, thus increasing the service life of the insert itself.

With the bottle bottom reference mark, there is a plate similar to the one for centering, consequently very precise and suitable for high speeds. As for the centering plates, GAI puts a great amount of attention into the study of the couplings plates-bottle samples: to switch from one format to another , it will be necessary to replace the centering ring (1), the

expulsion plate (2) and eventually the detection unit (3) , in order to always get the maximal labelling precision. It is equipped with a specific kit, in case of switching form the plates with the bottle bot-tom reference mark to the centering plates or expulsion plates or universal ones.

### **ELECTRONIC SEARCHING SYSTEMS**



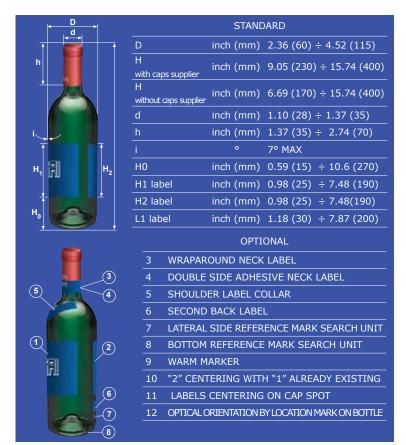
GAI offers a wide range of solutions on se-arching systems. There are 4 types: bottle bottom reference mark, spot search on the caps, search mark on the bottle body and label search on already labelled bottles.

The spot search on the bottle cap occurs with a photocell, in standard optical UV versions, in order to work with each kind of cap-spot (the adjustment is easy thanks to a "self-learning system").

Furthermore, it can be proposed that the orientation, in such a way to apply a label to another one already present on the bottle. With special optical fiber sensors it is pos-sible to orient the labels to marks on the bottle glass or compared to the join of the glass molds.

GAI's search system on the labellers is reliable and precise thanks to the internal development of sensor management softwa-re, the careful selection of hardware components and the continuous tests carried out. In order to reduce the maintenance costs and to speed up the sensor adjustments, GAI has developed the solution "plate tracking", (starting from 8540 model and hi-gher) allowing it to perform the orientations of the bottle by using 1 or 2 photocells (de-pending on the production speed), instead of the installation of 1 sensor for each plate.

### ELECTRICAL - MECHANICAL DRIVEN MACHINE



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# LABELLING SERIES 7000-8000



### ROTARY LABELLING FOR HIGH SPEEDS AND MANY DIFFERENT BOTTLE SHAPES.

The 7000 family has been designed to work from 3,000 b/h to over 10,000 b/h. Rotary labelling ensures excellent output and quality and allows to bottle products of any size, even noncylindrical, strongly conical or particularly-shaped bottles. Bottles can be moved in a mechanical, predetermined and repetitive way or in an electronic way so as to suit different needs. The 8000 family also includes wine capping, with capsule dispenser, heat shrinking and rolling.



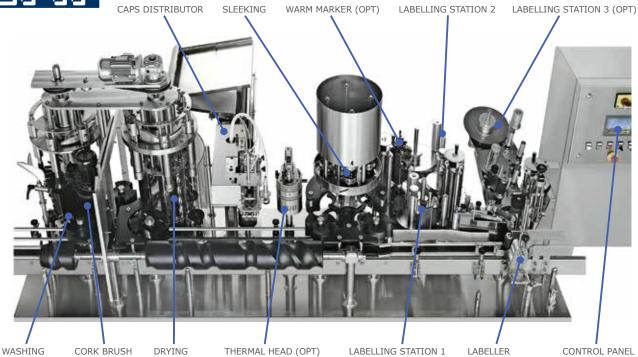


Function		7400-4	7400-6	7540-4	7540-6	7540-8
Plates	n	4	6	4	6	8
1 - 1 - 11 - 11 - 11 - 11	b/h	1000-3000	1500-4500	1000-3000	1500-4500	2000-6000
Labeller speed	bott./min	16-50	25-75	16-50	25-75	33-100
Labeling stations	n	3 max	3 max	4 max	4 max	4 max
Function		7700-6	7700-8	7700-10	7700-12	7900-16
Plates	n	6	8	10	12	16
I - b - H - · · · · · · · ·	b/h	1500-4500	2000-6000	2500-7500	3000-9000	4000-12000
Labeller speed	bott./min	25-75	33-100	41-125	50-150	66-200
Labeling stations	n	4 max	4 max	4 max	4 max	4 max (5)
*Not binding data.						

		8400-4	8400-6	8540-4	8540-6
Head dispenser	n	1	1	1	1
Shrinking heads	n	1	1	1	1
Shrinking speed	b/h	1000-3000	1500-3000	1000-3000	1500-3000
	bott./min	16-50	25-50	16-50	25-50
Sleeking heads	n	6	6	6	6
Sleeking Speed	b/h	1000-3000	1500-4000	1000-3000	1500-4000
	bott./min	16-50	25-66	16-50	25-66
Labelling plates	n	4	6	4	6
Labeller speed	b/h	1000-3000	1500-4000	1000-3000	1500-4000
	bott./min	16-50	25-66	16-50	25-66
Labelling stations	n	3 max	3 max	4 max	4 max

<sup>\*</sup>Not binding data.







#### **WASHING**

The washing of the bottles is done using ro-tating nylon brushes that have been wetted by a fine water spray . (Generally cold water is used, preferably with limited hardness). Brushes change according to bottles dimen-sions, no other settings are needed. The bottles are put in rotation in the op-posite direction of the brush (2) using the platforms. In this way the cleaning action of the brushes ensures the perfect cleaning of extremely dirty bottles too. The brush, by virtue of its rotating action, is self cleaning and the wastewater leaves the machine through the discharge pipe.
The brushes achieve the complete cleaning of the entire bottle surface:

- (1) cork brush: cork area and bottle mou-th
- (2) body brush: neck, shoulder and bottle body
- (3) bottom brush: bottle bottom (4) bottom brush "CH": bottle bottom for "champagne bottles" (Optional).



#### DRYING

The drying of the bottle is done using:

- (1) The drying head dries the bottle neck and the cork while the bottle is rotating. The drying heads and the holding hea-ds (drying and washing side) are set all together.

(2) The wiper blade positions itself auto-matically against the bottle sides.

A large portion of the water, which is to be found on the bottle walls, is caught by the wipers and the water runs down by means of gravity.

- (3) The side blower can be adjusted accor-ding to the diameter of the bottle. The air, forced through the lateral blowers while the bottle is rotating, is added to the air flow of drying head. The resul-ting combined air-flow remains against the bottle surface and blows the water downward. The air used by devices (1) and (3) is produced by the machine.
- (4) The bottom drying device is a platform equipped with a central jet. Compressed air is forced into the jet and in this man-ner the bottle bottom is dried.



#### **ANTI-CONDENSATION DEVICE**

his device (OPTIONAL) temporarily removes condensation from the bottle surface in order to allow for direct labelling of bottles. This process occurs without altering the temperature of the contents of the bottle.

The system improves the overall performance even when there is no Condensation present. The air blower is positioned very close to the bottle and its effect is of short duration. Heated air therefore only warms the exterior glass surface of the bottle. Wine temperature is not effected. If bottles are then packed into cartons, the sealed cartons insulate the bottles from surrounding conditions thereby preventing the reappearance of condensation. This system consists of heating elements (1) that heats the air.

The temperature is adjusted by means of a timer located on the control panel

The cork (closure) is not exposed to the hot air.



### **DISPENSING**

The capsules are dispensed on the infeed screw.

The dispenser is controlled by a PLC, which synchronizes its functions with the move-ments of the capsuler.

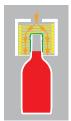
A photocell authorizes the dispensing of the capsule only if the bottle is corked. The neck of the bottle is centered by a pneu-matic clamp, and the capsule is pressed onto the neck by a piston, which can fit capsules with only a minimum clearance from the neck of the bottle. A second pneumatic piston adjusts the capsule so the top is perfectly positioned for sleeking.

Rapid, precise screw adjustment posi-tions the discharge nozzles in height and length.

Capsules of a different diameter and length can be used by changing the dispenser glass.

The feeding of the capsules is controlled by a belt conveyor.





#### SHRINK CAPSULES HEAD

Good heat-shrink capsuling requires the following:

- · capsules of good quality
- correct coupling between capsule and bottle
- a good shrinker

The main advantages of our heat-shrink capsuling heads are:

- high unitary rating of 1,5 kW
- extended irradiation surface area
- precise temperature regulation by means of an electronically-controlled resistance. The temperature reached can be read on a display
- accurate ventilation. The flow of air accompanying the movement of the bottle is adjustable in terms of both hase and intensity
- · a pneumatic safety device raises the heads when the capsuling machine stops to avoid burning and breaking.



#### TIN AND POLYLAMINATE CAPSULES HEAD

The conditions required for good sleeking of tin and polylaminate capsules are as follows:

- capsules / bottles of good quality
- minimum clearance between the capsule and the bottle

The ADVANTAGES of our sleekers can be sum-med up as follows:

- the ROLLERS are very hard (highly wear-resistant), with bushings made of a special self-lubricating material
  the RODS on the rollers are made of stain-less steel, with pins which are ground, rolled and hardened
- the SPINDLE holding the rods is a single piece made of stainless steel
- the CAPSULE-PRESS is large with a hexa-gonal section
- the ROTATION SPEED of the spindles is adjustable by Inverter from 1,000 to 2,000 r.p.m.
- the DIRECTION OF ROTATION can be clockwise or counter-clockwise
- the CAM used to move the head down (or the bottles up) is slow one way and fast on the way back.



## THRUST TROLLEY AND BOTTLE ROTATION ROLLER

The combined construction qualities of GAI machines, and their extensive labelling knowledge has resulted in a new, high quality linear labelling machine.

A photoelectric cell detects bottle presence, and the thrust carriage pushes the bottle against the rotation/press roller to apply the label. The robust thrust carriage slides on ball bushes, and is adjustable with double tilt to accommodate bottles with a taper of 1.5 degrees. The bottle rotation roller has its own drive-motor controlled by inverter and combined with an encoder linked with the dispensing speeds of the label stations, which in turn are controlled by the PLC. The PLC in turn controls all other signals for notch detection, cap spots etc. The complete machine is managed by the PLC, controlled by a touch screen panel. Each model has two options, with 3 or 4 labelling stations.



#### LABELLING STATION

Labelling machine quality is determined by labelling head quality. GAI labelling stations made are manufactured after great analysis, without compromise and utilising modern technology. The supports ensure no vibration. Easily visual number indicators assist with precise height adjustments. Angular adjustment of the certification station allows for easy application of shoulder labels, combined with numerical measuring precision. A second angular adjustment aids in the correct positioning of a neck label.

The stepper motors on each station cater for +/- 1mm application tolerance. Station construction ensures rigidity, with precise labelling application. The paper route is clearly marked on each station, aiding operator efficiency.

#### PHOTOCELL UNIT

With the new support, an ultrasonic photocell (optional) can be fitted to read clear labels together with an optical photocell to read nontransparent labels. Which photocell to use can be selected on the panel and stored for each bottle format. PAPER INFEED UNIT

The paper infeed unit is the heart of the labelling station. It has been designed with a profile that maximizes the grip and prevents the paper from slipping on the roller. Special springs recover any play, guaranteeing consistent operation over time and in different working conditions.

REEL BRAKING/PAPER TIGHTENING UNIT This innovative independent spring-operated unit is used to brake the reel and then tighten the paper. This means that the tightness of the paper is constant, which is a fundamental requirement for high quality labelling.

#### **PAPER RECOVERY UNIT**

GAI is introducing a new technique for the recovery of the paper after the label has been peeled off. A connecting rod system facilitates both the blocking and releasing of the paper. The difference in internal diameter produced makes it easy for the paper to be removed at the end of operations.





#### **STANDARD** D inch (mm) 2.36 (60) ÷ 4.52 (115) 9.05 (230) ÷ 15.74 (400) H with caps supplier inch (mm) 6.69 (170) ÷ 15.74 (400) H without caps supplier inch (mm) inch (mm) 1.10 (28) ÷ 1.37 (35) 1.37 (35) ÷ 2.74 (70) inch (mm) 1.5° MAX H0 label inch (mm) 0.39 (10) ÷ 10.62 (270) H1 label inch (mm) 7.48 (190) MAX H2 label 7.48 (190) MAX inch (mm) L1 label inch (mm) 0.98 (25) ÷ 7.87 (200)

## **OPTIONAL**

3	NECK LABEL	

- DOUBLE SIDE ADHESIVE NECK LABEL
- SHOULDER LABEL COLLAR
- SECOND BACK LABEL
- SIDE REFERENCE MARK SEARCH UNIT
- BOTTOM REFERENCE MARK SEARCH UNIT
- PRESS BOTTLE PEDESTAL
- "2" CENTERING WITH "1" ALREADY EXISTING
- LABELS CENTERING ON CAP SPOT
- WARM MARKER





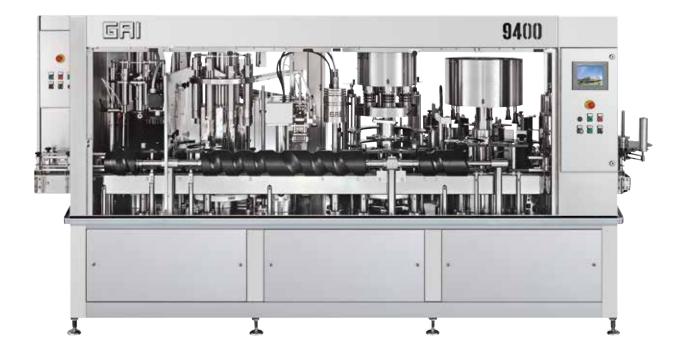


## LABELLING SERIES 9000



## ANY PACKAGING FUNCTION ON A SINGLE BASE.

The 9000 family is the full expression of Gai's flexibility: operations can be combined in any possible way, based on a single block that avoids mid transport, thus synchronizing the various stages and minimizing the overall dimensions.



Function		9400-4	9400-6
Washing-drying station	n	1+1	1+1
Head dispenser	n	1	1
Shrinking heads	n	1	1
Shrinking speed	b/h	1000-3000	1000-3000
Sill liking speed	bott./min	16-50	16-50
Sleeking heads	n	6	6
Sleeking Speed	b/h	1000-3000	1500-4500
Sleeking Speed	bott./min	16-50	25-75
Labelling stations	n	3 max	3 max
Labeller plates	n	4	6

<sup>\*</sup>Not binding data.

Function		9213	9313	9323	9343	9443	9643
Washing-drying station	n	1+1	1+1	1+1	1+1	1+1	1+1
Head dispenser	n	1	1	1	1	1	1
Shrinking heads	n	1 opt					
Shrinking speed	b/h	800-1600	800-2400	1000-2000	1000-2400	1000-2500	1000-2500
Shrinking speed	bott./min	13-26	13-40	16-33	16-40	16-41	16-41
Sleeking heads	n	1	1	2	4	4	4
Sleeking Speed	b/h	800-1200	800-1200	1000-2000	1000-2400	1000-2500	1000-2500
	bott./min	13-20	13-20	16-33	16-40	16-41	16-41
Labelling stations	n	3 (4 opt)					
Labeller plates	n	-	-	-	-	-	-

<sup>\*</sup>Not binding data.

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# **GRAVITY FILLER** 2004 - 2006 - 2008

GAI GRAVITY FILLERS can easily fill 500 to 700 bottles an hour. Utilizing a simple float valve in the filler bowl automatically controls the flow of wine to the filler. Adjustment for different bottle sizes and fill height is simple and fast.

MODEL	2004	2006	2008
SPOUTS nr.	4	6	8
PRODUCTION It/h	320-400	480-600	640-800
WEIGHT Lbs.	17	23	66
BOTTLE SPECIFICATIONS	2004	2006	2008
DIAMETER mm.	60-115	60-115	60-115
HEIGHT mm.	180-370	180-370	180-370
FILLER LEVEL mm.	60-80	60-80	60-80

<sup>\*</sup>Not binding data.



## FOILER 4060

Bench capper roller suitable for tin and polylaminate capsules.

- Holding base/ Switch / Three Phase Motor

MODEL	4060
SPEED B/H	800
WEIGHT KG/LBS	22/48
POWER KW	0.16
FITTINGS	
PRE-SLEEKER	YES
BOTTLE SPECIFICATIONS	4060
DIAMETER MM/INCH	60-115/2.36-4.52
HEIGHT MM/INCH	180-370/7.08-14.57
NATURAL CORK SPECIFICATION	
DIAMETER MM/INCH	28-35/1.10-1.37
DATA NOT BINDING	



## CORKING 4040

The GAI 4040 vacuum corker is a durable machine designed with an automatic cork feed and a cork dust removal feature. The hopper holds 1,000 corks and automatically feeds the corks into the jaws. The corking jaws can be removed for cleaning without the use of tools and no adjustment is required when reinstalling them.



## FILLER/CORKER 600

MODEL	600
SPOUTS nr.	12
PRODUCTION lt/h	900-1200
SPEED b/h	1.000
WEIGHT Lbs.	1100
POWER Hp	1.47
FITTINGS	
HIGH VACUUM CORKING	YES
NATURAL CORK / CAPS DATES	600
DIAMETER	22-30
HEIGHT	38-55
BOTTLE SPECIFICATIONS	
DIAMETER mm.	60-115
HEIGHT mm.	220-400
FILLER LEVEL mm.	55-80
DATA NOT BINDING	



The GAI 600 is a semi-automatic, twelve spout rotary gravity filler with the new GAI 4040 vacuum corker. This combination allows for a cost effective and efficient filling and corking system up to 1,200 bottles per hour.



## SEMI-AUTOMATIC LABELING MACHINE





Model		601	602	604
Speed	b/h	600	600	600
Weight	lb.	110	200	165
Power	Kw	0.2	0.4	0.2

<sup>\*</sup>Not binding data.

## 601 SINGLE LABEL SPOOL CONICAL CONTAINERS

The GAI 601 is suitable to label cylindrical containers and with an additional accessories will label slightly tapered containers (max. taper  $1.5^{\circ}$ ). The GAI 601 applies a single label, front or back labels on a single spool. The label station is equipped with a single-phase motor. An ink stamp or thermal transfer printer can be installed upon request. Production speeds:  $\sim 600$  bottles per hour.

## 602 DUAL LABEL SPOOL CONICAL CONTAINERS

The GAI 602 is suitable to label cylindrical containers and with an additional accessories will label slightly tapered containers (max. taper  $1.5^{\circ}$ ). The GAI 602 applies front and back labels on separate spools. The label station is equipped with a single-phase motor. An ink stamp or thermal transfer printer can be installed upon request.

Production speeds:  $\sim$  600 bottles per hour.





## 604 SINGLE LABEL SPOOL SOUARE AND CONICAL CONTAINERS

The GAI 604 is suitable to label square and cylindrical containers and with the additional accessories, will label slightly tapered containers (max. taper 1.5°). The GAI 604 can apply a label on square and cylindrical containers, applying the front and back labels on a single spool. An ink stamp or thermal transfer printer can be installed upon request.

Production speeds: ~ 600 bottles per hour.

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## **CORK FEEDERS**

Cork feeders GAI 4140-80001 or GAI 41400-80000 are needed for all multi head GAI corkers. Single head corker are fitted with a dedicated hopper for corks: model 4140W-80000 or 4140-80001 are recommended.

Corks are conveyed through a pipe (length up to 6 meters), directly feeding the single-head or multi-head corker. The design ensures that it easy to empty the feeder to change cork sizes.

The advantages of the cork feeders are:

- 1. Easy loading of corks: the cork hopper loading height is +/- 1,200mm above ground-level, making operation easy for operator (if no cork feeder is used, the single-head corker hopper has a loading height of at least 2 meters)
- 2. Greater autonomy: capacity of corks range from 2,000 to 12,000.
- 3. Cork dust reduction: there is a significant decrease in dust at the corking head.
- 4. Security of cork feed: feeders are fitted with a photocell to detect the minimum cork load level in the feeling pipe, ensuring that the machine stops in the absence of corks.

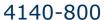
## 4140W-800

THE CORKS FEEDER 4140W-800 was designed to be combined with an automatic single-head GAI corker. When ordered in combination with a machine order, it replaces the hopper. It is fixed at the base of the monobloc and the electrical controls are mounted within the electrical board of the monobloc.

The functioning of the 4140W-800 is completely mechanical: the corks move from the hopper T into tube t, the corks elevator C aligns them with the feeding tube TA, and the plunger P pushes them upwards.

The corks can't return due to the holding mechanism R. A photocell, assembled on the cork in-feed tube ensures the feeder works when there is an absence of corks, and stops it, in case of corks accumulation.

The speed of the 4140W-800 is 3.000 corks/hour, as per the maximum speed of a single-head corker.



THE CORKS FEEDER 4140-800 can be matched to an automatic single-head corker or to a multi-head corker, as it has a hopper that holds about 3.500 corks and a maximum speed of about 6.000 corks/hour.

The functioning of the 4140-800 is the following: the corks move from the hopper T into the tube t, thanks to the cams mechanism MC· the wheels R1 and R2 made of silicone rubber (food grade) push the corks into the feeding tube TA. A photocell, assembled on the cork in-feed tube ensures the feeder works when there is an absence of corks, and stops it, in case of corks accumulation.

The 4140-800 could be considered as an alternative to the 41400-800 for 3 or 4 heads cork turret. Hopper capacity about 3,500 corks

Max speed 6,000 corks/hour



## 41400-800

THE CORKS FEEDER 41400-800 was designed for GAI multi-heads corkers. It has a capacity of about 10.000 corksand a speed of 9.000 corks/hour, so can be matched to a maximum of a 6 head corker. The functioning of the 41400-800 is the following: the corks fall from the large hopper TG into the small hopper TP, due to the conveyor belt NT. The photocell FC puts in action and stops NT, thereby maintaining a constant level of the corks in TP.

This aspect makes the operation easier of the cams mechanism MC, which orients the corks between the hopper TP and the tube t. From here the wheels R1 and R2 of silicone rubber (food grade) push the corks into the feeding tube TA. A photocell, assembled on the cork infeed tube ensures the feeder works when there is an absence of corks, and stops it, in case of corks accumulation.

Hopper capacity about 10,000 corks Max speed 9,000 corks/hour





## CAPSULE FEEDERS



Capsule feeders are essential components both for mono-head and multi-head cappers.

The hopper installed on the single head machines has an operating capacity of approximately 100 caps

(format  $30 \times 60$ ). A proximity sensor detects the level of caps in the hopper and when insufficient a signal starts the capsule conveyor belt. The conveyor belt transports the capsules from the capsule feeder hopper to the hopper on the machine. This process automatically stops when the proximity sensor detects an adequate level of capsules in the machine hopper.

The advantages of utilizing a capsule feeder are:

- 1. Easy loading of capsule: the loading hopper opening is approximately 1,200mm from ground level, making the operation very easy for the operator.
- 2. Greater autonomy than manual loading of the selecting hopper. According to the different models, the loading range is from 2,500 to 9,000 capsules.
- 3. Better capsule orientation: by keeping a constant level of capsules in the hopper, (without overloading), superior production volumes can be achieved in capsule selecting and orientation.



## 4290W-800

THE SCREW CAP FEEDER 4290W-800 was designed to be combined with the GAI automatic single-head capper.

In case of order with a monobloc, it is fixed at the base of the monobloc. The electrical control components are housed within the electrical board of the monobloc.

In case of subsequent order (4290W-805) the feeder is provided with support feet and it is equipped with an autonomous electrical board.

The hopper assembled on the screw capper has a limited volume, so, a caps feeder is necessary. Hopper capacity about 2,000 capsule

Max speed 3,500 capsule/hour



## 4290-800 / 4290R-800

THE FEEDER 4290–800 model with discharge outlet at 2600 mm from ground-level, was designed for the GAI automatic single-head capper.

The 4290R–800 model is very similar and has a discharge outlet at 3000 mm from ground-level. It is therefore suitable for the GAI multi-head cappers, with vibrating hopper or mechanical feeder.

The vibrating hopper or the mechanical feeders are cap orien- tators. These work well if they have constant caps supply. A cap feeder is an essential complement for cappers.

Hopper capacity about 4,000 capule

Max speed 8,000 capsule/hour



## 42900-800

THE FEEDER 42900–800 was designed for use with GAI automatic multi-head cappers.

The vibrating hopper or the alveolar feeder are cap orientators that work well if they have a constant caps loading a caps feeder is

an essential complement for cappers.

Hopper capacity about 7,000 capule

Max speed 12,000 capsule/hour

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## SIFA FLUID FOOD TECHNOLOGIES AND AUTOMATION



SIFA designs, engineers, constructs, develops and installs complex and technologically advanced plants. SIFA is leader in the separation market segment with its tangential microfiltration lines and is equally advanced in other separation methods, incl. flotation, traditional filtration, microfiltration, ultrafiltration, nanofiltration and inverse osmosis. SIFA is the only company that produces filters customized to meet individual process requirements and engineers and produces all types of membranes. It has a long experience and offers an excellent range of machines and products for barrel filling, bags-in-box and automated systems for the cleaning and sanitization of microfiltration and bottling plants .











MICHORIOLOGY



## **MASTERKEG**



For the washing and filling of the kegs, SIFA suggests Masterkeg, a range of machines projected and realized with particular attention to the sanitary aspect and available in different sizes and models. The whole structure of the machine, such as the parts that get in contact with the liquid are entirely made up in stainless steel inox AISI 304.

The filling-head has been studied with particular attention in order to avoid any contact of the product to the air and to grant the filling in full sterility. The washing system has been studied to ensure:

- a) A good washing
- b) The verifying and check of the rinsing
- c) The check at every final working phase of the missing presence of liquid in the keg, controlling that way any undesired pouring and also giving the certainty of the correct discharge phases.

The machines are prearranged for the connection to the steam generator, for the hot sterilization of the tanks. The control and check features are placed in a hermetically sealed control panel and managed electronically by a PLC.

Our valves for the check of the washing and filling cycles, are made up in bloom-turned stainless steel inox, and thanks to their excellent intern finish, permits an easy-wash and sterilization, avoiding a settle of dirt.

Moreover, the special solid structure in stainless steel grants an excellent resistance to the wear and reduces to the minimum the ordinary maintenance.

The range: There is a vast range of installations, divided by hourly production and by different automatism levels.



#### MODEL

- · Masterkeg compact MW 01 S
- · 01 MB compact Masterkeg S
- · Masterkeg compact MW 11 S
- · 11 MB compact Masterkeg S

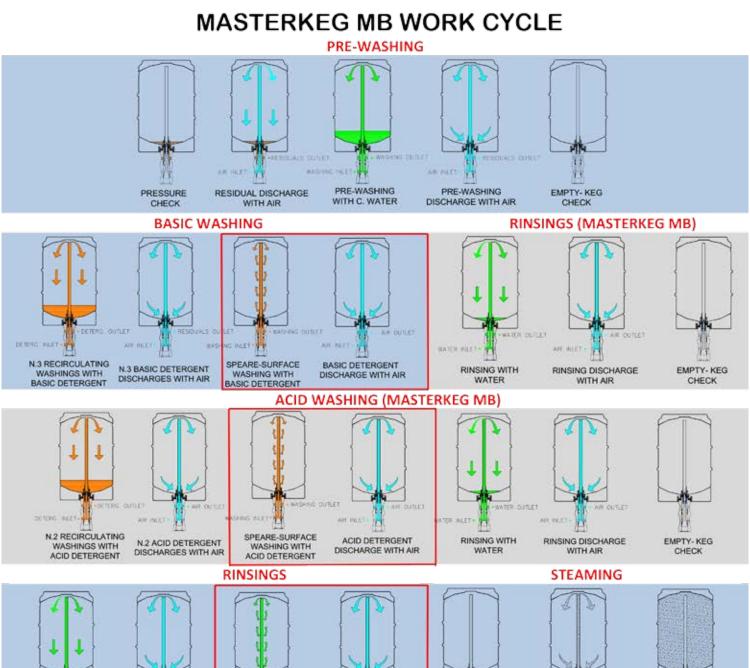
### EQUIPMENT

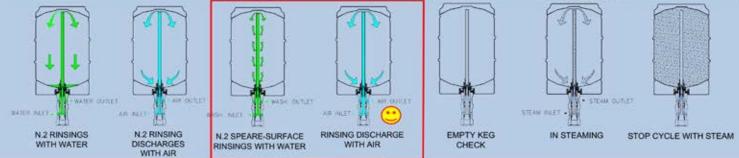
- · Stainless steel frame
- $\cdot$  Steel Pipe Product aisi 304/316 L
- · Electric steel AISI 304 L
- · Power cable 5 m
- · Feet adjustable support
- · Regulators type of stem
- · Function washing and filling by PLC
- · Operator interface with touch screen
- $\cdot$  Sensor detection fluid to the end of each stage of washing and rinsing vaporization (no condensation)
- · Filling with pressure sensor and maximum liquid level detection
- · Heating detergent through pocket steam or electric resistance
- $\cdot$  Electric socket for connection of pump power
- · Cip tank for basic detergent
- · Cip tank for acid detergent
- · Recirculation pumps basic detergent
- · Recirculation pumps basic detergent and acid
- · Kit for cleaning and sanitizing filling heads
- · Use and maintenance manual Italian and English

#### CYCLES

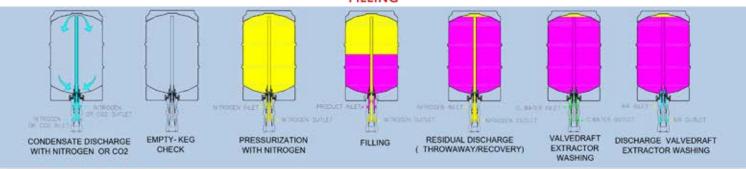
- · Pre
- · Dry basic
- · Acid wash (on MB)
- · Rinse
- Vaporization
- · Riempiemento

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## FILLING



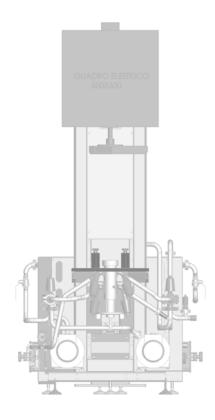
OPTIONAL: CHECK 2000

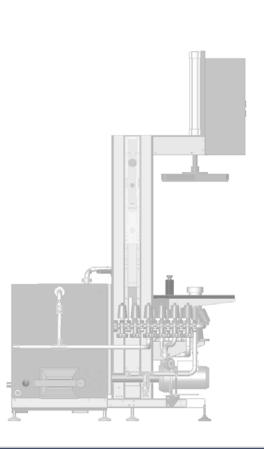
CONDUCTIVITY METER CONTROL FOR RESIDUALS ABSENCE



## **MASTERKEG**







FEATURES MB 01 S	
Range of filling kegs	2.64-13.20 gal
Product treated	Beer
Washing heads	/
Filling heads	/
Heads fill / wash	1
Accuracy counts liters	± 0:20 %
Average accuracy of	± 1.5% filled
Anti accident	Dual start buttons cycle
Resistance to disinfection	Water -Chemical- Vapor
PRODUCTIONS	
Production kegs by hour	max 20/30 - 5 gal
Production kegs by hour	max 50 - 4.22 gal
CONSTRUCTION MATERIALS	
Material of construction	AISI 304 L
Material in contact with the liquid	Aisi 304/316L/EPDM/PTFE/Silicon
DIMENSIONS AND WEIGHTS	
Work surface height	33.46-34.25 (inch)
Dimensions WxDxH	47.24 x 62.99 x 92.51 (inch)
Weight	948 ( lbr )
ELECTRICITY	
Installed power filler	1.5 (kW)
Power resistors	4.5 (kW) if present
Number of phases	3/PE
Voltage	400 ( VAC )
Frequency	50 (Hz)
UTILITIES	
Nater flow max	951.01 ( gal / h )
Pressure	2-2.5 (bar )
Air pressure	6 ( bar )
Air consumption	200 (N I / min)
Nitrogen pressure	6 (bar)
Consumption nitrogen	67 (N I / min)
Water pressure	3 ( bar)
Water consumption	105.66 (l/h)
Water flow rate	951.01 (l/h)
Steam heating	52.91 (lbr/h)
Steam sterilization	26.45 (lbr / h )
CONNECTIONS	
Product	DN 25
Compressed air	slide valve 3/8"
Nitrogen	3/8"
Heating steam cleaner	1/2"
Steam sterilization	1/2"
Water	3/4"
Power Supply	3P + E 16A





# AUTOMATIC LABELER T3 WINE



The ENOS Euro labeling machine comes equipped with step motors along with an electronic variable speed drive. Suitable for the application with adhesive system of:

- Front and back label on cylindrical bottles equipped with:
- Electro-mechanical emergency stop activated in case of failure in automatic packaging cycle and also can be used in manual mode for maintenance operations.
- Machine is supplied with drive, return idler, accumulation board and plastic chain.
- Machine operates with compressed air.
- All machines can be supplied upon request with hot sealing system.





# AUTOMATIC LABELER T3 BEER

The ENOS Euro T3 BEER labeling machine is like the machine enos t3 WINE however is not equipped with:

- Closure Device
- Distributor with electronic plateau

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## MAK 01-1 LABELLING FOR SMALL NUMBERS

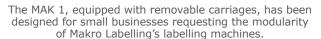




MAK 01, MAK 02 and MAK 1 are Makro Labelling designed labelling machines for companies which do not require high speed productions. The machines maintain the special characteristics of Makro Labelling technology and are equipped with mechanical or electronic bottle holder plate rotation. The 520/780-mm carousel is covered with AISI 304 stainless steel sheet metal. MAK 01, MAK 02 and MAK 1 are produced in various cold and hot glue, self-adhesive or combined versions. On request, the optical centring device (4, 6, 8, 9, 10 or 12 plates) can be installed on these three models. The innovative Follower optical centring device can be installed on the MAK 02. Production speeds vary from 1.500 b/h to 12.000 b/h.

MODEL	TURRET DIAMETER	LABELLING UNITS	NUMBERS OF THE PLATFORMS
MAK 01	20.47"	4/5	4, 6, 8, 10, 12
MAK 02	30.70"	4/5	6, 8, 9, 10, 12
MAK 1	20.47"	4	4, 6, 8, 10, 12







The machine's structure is equipped with a holder unit fitting system.



The machine's structure is equipped with a holder unit fitting system.

### MODULARITY, FLEXIBILITY, PRACTICALITY.



These are the three key concepts that synthesise the style and philosophy of a dynamic company which has made technological innovation its strength. This is what the market requires and what Mak-ro Labelling, currently an international point of reference in the field of industrial labelling machines for the beverage, food, home and personal care and pharmaceutical industries offers its customers. The more than thirty years of experience of its founders, a solid international sales network, timely pre- and post-sales service, combined with operational flexibility and the ability to anticipate the demands of a constantly evolving market, guarantee satisfaction of any labelling requirements.

Makro Labelling: evolving technology for great numbers



# MAK 2-8 LABELLING FOR LARGE NUMBERS

The MAK 2, 3, 4, 5, 6, 7 and 8 labellers meet the requirements of medium and large companies: they are equipped with special applications and manage high production speeds. Cold and hot glue, self-adhesive o combined versions are available. Makro Labelling, in perfect synergy with its technical office, is able to develop special machines, fitting special and custom applications upon the customer's request.

The following labels can be applied by these machines: body, neck, neck wrap, back, "I" "U" seals etc, while production speeds vary from 1,500 b/h to 60,000 b/h.

MODEL	TURRET DIAMETER	LABELLING UNITS	NUMBERS OF THE PLATFORMS
MAK 2	30.70"	4	
MAK 3	40.94"	5	
MAK 4	53.14"	6	
MAK 5	61.41"	7	6-42
MAK 6	70.86"	7	
MAK 7	83.70"	8	
MAK 8	94.4"	8	





Hot melt and cold glue labeller for wraparound and partial labels Machine for wraparound label applications using a hot melt system on various sizes of glass or plastic bottles. The machine can be fitted with a cold glue or self-adhesive partial-label application unit. The speed of this model is 22,000 b/h.



A cold glue labelling machine for body, neck, medallion and back label applications at a speed of 4,500 b/h.



# WET GLUE UNIT makro





Unit for medium productions at speeds of up to 25.000 b/h

- Anticorrosive treatment with Niploy.
- Labelling unit fitted on movable trolley, made in AISI 304 and complete of regulation of the axis X-Z.
- Labelling unit motorised with brushless motor fitted on reduction gear.
- Labelling unit available in 2, 3, 4, 5, 6 or 8 divisions for different production speeds and label lengths.

## MAK ROLL FEED

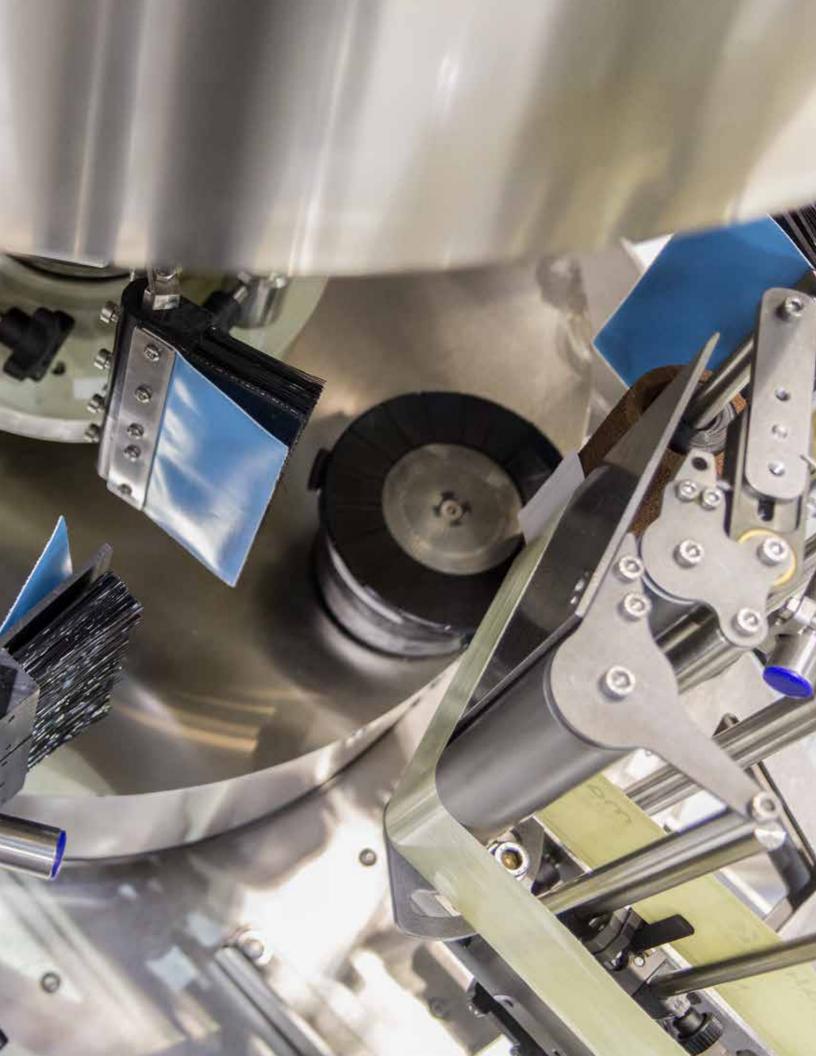
## Large volume labeller with wrap-round plastic labels

MAK RLF is the new series of rotary labellers for various formats of PET bottle. The use of wrapround plastic labels on a reel with hot melt application has maximum economic benefits for production with respect to traditional OPP or pre-cut paper la-bels. The MODULARITY of the MAK Roll Feed, a particular feature of Makro Labelling technology, enables the roll feed unit to be replaced with a hot melt unit for pre-cut, wet glue or self-adhesive labels, satisfying the need for maximum production and configuration flexibility. Designed for the high-volume PET labelling market (water and soft drinks sectors in particular), MAK Roll Feed labellers offer a production speed of 6,000 b/h to 40,000 b/h.



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## THE EXPERIENCE

From the experience of its founders, a company specialized in edge-cutting technology

Extremely flexible and simplified mechanical technologies for indestructible machines: this is the guideline characterizing our production.

Starting from 1998, the year when it was established in Canelli by the brothers Angelo e Giuseppe Bene, OMBF has focused its production on a specific market segment reaching high levels of specialization in the supply of machines for the enological sector and also with the new generation, who has recently joined the staff, the company continues in the research of edge-cutting technological solutions to meet the most diverse needs of the enological sector.

To the customers choosing OMBF quality, the company can ensure precise technical advice starting from the analysis of the specific needs of every single producer to study and define customized solutions for any type of production and stage of the enological process. With their thirty years of experience in the branch of enological machines, the brothers Angelo and Giuseppe Bene can support you personally from the purchase to the installation of the equipment and then with the after sales service.

Our company is characterized by a very long experience in the enological sector, high levels of professional competence, direct contact with the customer and its operators, punctual deliveries and efficient after sales service, and constant availability of spare parts.

The great passion, the continuous technological research and the deep knowledge of all aspects of the sector make of OMBF a dynamic company always aimed at finding innovative solutions to meet the needs of a market in continuous evolution and always working with the aim of the full satisfaction of all customers.

## **OUR TERRITORY**

OMBF is located in Canelli, a town famous worldwide for the production of spumante.

In fact it is in Canelli that around 1850 the first Italian "champagne" was produced with the vinification of the autochthonous variety of Moscato that gave origin to the first sweet sparkling wine, Asti.

Nowadays Canelli hosts a lot of historical wineries producing from Moscato, Barbera, Dolcetto, Cortese and Chardonnay, wines well-known all over the world and obtained from the typical varieties of the region: Asti (o Asti Spumante), Moscato d'Asti, Barbera d'Asti, Dolcetto d'Asti, Cortese dell'Alto Monferrato, Freisa d'Asti.

Canelli with its wonderful hills, underground cellars, and wines, first of all Asti Spumante, belongs to a unique "cultural landscape", since it is a result of the combined work of nature and man, that on 22nd June 2014 was inscribed in the UNESCO World Heritage "vineyard landscapes of Piedmont: "Langhe-Roero and Monferrato".

Besides shaping the landscape, such an important presence of wine estates, led to an industrial evolution of the region started about 30 years ago. Nowadays a number of companies producing machines for the enological sector form an important industrial district specialized in equipments for the beverage branch so giving a remarkable contribution to local economy.

It is in these hills that OMBF gives life to new ideas!





# BENCH WIRE-HOODER 2013S-GB/1





The bench wire-hooder is apt to the wire-hooding with 4-post wire-hoods with or without cap on glass bottles with capacities from 0.375 to 1.5 litres. The format change is performed through the simple substitution of the bottle holding cup. The machine is operated pneumatically. The wire-hood is loaded in the wire-hooding head manually, then the bottle is positioned on the bottle holding cup and the working cycle is started by pressing a two-hand control. When the cycle is completed the wire-hood is closed on the bottle but the eyelet is not folded against the bottle neck; this operation is made by hand. A front safety panel makes the machine exempt from risks, protecting the operator from accident caused by bottle breakage. The machine with the same characteristics is also available in the version for bottles with capacities from 3 to 6 litres.

## CONSTRUCTIVE CHARACTERISTICS

Model 2013S-GB/1 is completely manufactured with stainless steel, food-grade plastic materials, and steel alloys. All components of the machine are easily accessible to facilitate cleaning and maintenance, so guaranteeing long term duration.

The machine is equipped with Safety guards and Certificate of conformity compliant to the EC regulations.

TECHNICAL DATA		
MODEL	2013S-GB/1	
MAX. HOUR OUTPUT	300 b/h	
AIR FEED PRESSURE (BAR)		
MASS OF THE MACHINE	220.46 lbr	
	DATA NOT BINDING	

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# SEMI - AUTOMATIC HOOD MACHINE 2001S-2TR/1

The semiautomatic wiring machine is suitable for the application and closure of wire-hoods. Following wire-hoods can be applied 4-POST WIRE-HOODS WITH and WITHOUT CAP.

The machine is suitable for cylindrical glass bottles with  $\emptyset$  from 55 to 115 mm and with a maximum height of mm. 375.

It is mechanically and pneumatically driven. The wire-hoods are loaded by introducing the wire-hoods in the traditional O.M.B.F chute and removing the wire-hood holding rod. The working process starts by putting the bottle on the related holding plate and pushing the two buttons of the two-hand control. When the working process ends the machine stops automatically and no part of it remains in movement. The distribution of the wire-hoods is automatic. The front safety guard avoids damages and accidents caused by unexpected breakages and other problems. The machine is mounted on four wheels and is equipped with the instructions maintenance and spare parts, a certificate of conformity in compliance with the CE norms.

Upon request it is possible to have a special version of the machine for the treatment of bottles of bigger sizes. Our range already includes semiautomatic wire-hooders for bottles from Lt. 3 to Lt. 6 with automatic and manual feed.

### CONSTRUCTIVE CHARACTERISTICS

Model 2001S-2TR/1 is completely manufactured with stainless steel, food-grade plastic materials, and steel alloys. All components of the machine are easily accessible to facilitate cleaning and maintenance, so guaranteeing long term duration.

The machine is equipped with Safety guards and Certificate of conformity compliant to the EC regulations.

#### **OPTIONS AND ACCESSORIES**

Manual revolving feed system, formed by 9 tubes (capacity 900/ 1,200 pcs), for wire-hood autonomy.



TECHNICAL DATA			
MODEL	2001S-2TR/1		
MAX. HOUR OUTPUT	800 b/h		
TYPE OF BOTTLE	Glass H from 9.44 to 14.56 inch +/-5 D from 2.75 to 4.52 inch +/-2		
TYPE OF WIRE-HOODING	4 wires with cap 4 wires without cap		
MASS OF THE MACHINE (LBR)	440.9 lbr		
AIR FEED PRESSURE (BAR)	6		
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.04		
MAIN FEED TENSION	380V 50Hz*		
AUXILIARY FEED TENSION	24V 50Hz*		
POWER INSTALLED (KW)	0,25		
WIRE HOOD SYSTEM CAPACITY	250 pcs		
*(on-demand customization)	DATA NOT BINDING		



## SEMI - AUTOMATIC MONOBLOCK CORKING + WIRE HOODER - 2003-MS-TG1





TECHNICAL DATA	
MODEL	2003MS-TG/1
MAX. HOUR OUTPUT	800 b/h
TYPE OF BOTTLE	Glass H from 9.44 to 14.56 inch +/-5 D from 2.75 to 4.52 inch +/-2
MAIN FEED TENSION	220V (480V opz.) 3PH 6oHz*
AUXILIARY FEED TENSION	24V 60Hz*
POWER INSTALLED (KW)	1.75
WEIGTH (LBR)	881.8
WIRE-HOODER	
TYPE OF WIRE-HOODING	4 wires with capsule 4 wires without capsule
AIR FEED PRESSURE (BAR)	6
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.04
POWER INSTALLED (KW)	0.25
WIRE HOOD SYSTEM CAPACITY	250 pcs
CORKER	
CORK TYPE (MUSHROOM-STYLE/FLAT)	H max 2.04 mm D max 1.22 mm
POWER INSTALLED (KW)	1.5
MAGAZINE CAPACITY PCS	160
*(on-demand customization)	DATA NOT BINDING

This SEMI-AUTOMATIC MONOBLOC provides both corking and wire-hooding in a single machine. It can be used for bottling in glass containers with a diameter ranging from 55 to 115 mm and a maximum height of 375 mm.

The corker, made of stainless steel and equipped with safety guards, is suitable for the application of champagne corks and its target includes small and medium sized producers. On demand and at an extra charge (see Options), it is possible, the application of straight wine corks with the same machine. The closing system of the corker consists of four jaws of hardened stainless steel ground with centesimal tolerance and is easy to disassemble for cleaning or sterilization. It can process corks with a maximum diameter of 30 mm and a maximum height of 52 mm. The machine is started by placing a bottle on the holding plate, and is operated through a two-hand control and it stops at the end of the cycle. The corks distribution is automatic. The corks are loaded manually by means of a steel tube, but they can be fitted with a magazine for the automatic distribution (optional).

The wire-hooding machine is used for wire-hood distribution and closure. The following types of wire-hoods can be used: 4-POST WIRE-HOOD WITH CAP and 4-POST WIRE-HOOD WITHOUT CAP. The machine is operated partly mechanically and partly pneumatically. The wire-hoods are loaded inside the traditional tube produced by O.M.B.F., placing the wire-hoods in it then taking out the support rod (capacity of 250 pcs). The bottle is positioned on a special support plate and the working cycle is started through a two-hand control. At the end of the working cycle the machine stops automatically and no parts of its remain in movement. The wire-hoods are distributed automatically.

On demand, the machine can be in wheeled version.

CONSTRUCTIVE FEATURES

The 2003MS-TG/1 model is completely manufactured with stainless steel, food-grade plastic materials, and steel alloys. All components of the machine are accessible to facilitate cleaning and maintenance, so guaranteeing long term duration.

The machine is equipped with Safety guards and Certificate of conformity compliant to the EC regulations.

OPTIONS AND ACCESSORIES

WIRING MACHINE

Manual revolving feed system, formed by 9 tubes (capacity 900/ 1,200 pcs), for wire-hood autonomy

CORKING MACHINE

Manual revolving feed system, formed by 20 tubes (capacity 160 corks), for bi-directional and uni-directional corks

Mechanical hopper (capacity 1.000 corks) only for bidirectional corks

Kit for corking with straight wine corks

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## **SEMI - AUTOMATIC TRIBLOCK**

## CORKER+WIRE-HOODER+CAPPING MACHINE FOR CHAMPAGNE FOILS - 2014S-MTGC/1

This MANUAL TRIBLOC provides corking, wire-hooding and capsuling in a single machine. It can be used for bottling in glass containers with a diameter ranging from 55 to 115 mm and a maximum height of 375 mm.

The capping machine, made of stainless steel and equipped with safety guards, is suitable for the application of champagne corks and its target includes small and medium sized producers. On demand and at an extra charge (see Options), it is possible, the application of straight wine corks with the same machine. The closing system of the corker consists of four jaws of hardened stainless steel ground with centesimal tolerance and is easy to disassemble for cleaning or sterilization. It can process corks with a maximum diameter of 30 mm and a maximum height of 52 mm. The machine is started by placing a bottle on the holding plate, and is operated through a two-hand control and it stops at the end of the cycle. The corks distribution is automatic. The corks are loaded manually by means of a steel tube.

The wire-hooder is apt to the wire-hooding with 4-post wire-hoods with or without cap. The format change is performed through the simple substitution of the bottle holding cup. The machine is operated pneumatically. The wire-hood is loaded in the wire-hooding head manually, then the bottle is positioned on the bottle holding cup and the working cycle is started by pressing a two-hand control. When the cycle is completed the wire-hood is closed on the bottle but the eyelet is not folded against the bottle neck; this operation is made by hand.

The capsuling is suitable for the application of large sparkling wine capsules with maximum length of mm. 125/130. Its functioning is only pneumatic and the it does not need power but only compressed air. The application of capsules take place by 2 pneumatic membranes (the first fold and the second smooth down) with vertical movement of the turret. The work cycle starts by resting the bottle on a plane, after which the operator will put by hand the capsule on the bottle (the machine haven't automatic feed) and through a two-hand control, the work cycle starts. The moment in which the operation is complete, the machine automatically stops, as do all its units.

A front safety panel makes the machine exempt from risks, protecting the operator from accident caused by bottle breakage.

On demand, the machine can be in wheeled version.

The machine, with the same characteristics, is also available in the special version for bottles with capacities from 3 to 6 litres.

### CONSTRUCTIVE CHARACTERISTICS

The model 2014S-MTGC/1 is completely manufactured with stainless steel, food-grade plastic materials, and steel alloys. All components of the machine are accessible to facilitate cleaning and maintenance, so guaranteeing long term duration.

The machine is equipped with Safety guards and Certificate of conformity compliant to the EC regulations.



The semiautomatic capping machine for champagne caps, with the same technicalcharacteristics, is also available as stand-alone machine.



TECHNICAL DATA	
MODEL	2014S-MTGC/1
MAX. HOUR OUTPUT	300 b/h
TYPE OF BOTTLE	Glass H from 7.48 inch to 14.7 inch. +/- 5 D from 2.16 inch to 4.52 inch. +/- 2
FEED TENSION	380V 50Hz* (24V)
TOTAL POWER INSTALLED (KW)	1.50
AIR FEED PRESSURE (BAR)	6
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.07
TOTAL MASS OF THE MACHINE (LBR)	661
TYPE OF CORK (NATURAL CHAMPAGNE)	H max 2.04 inch • D max 1.22 inch
CORK FEED TUBE	Capacity 10/15 pcs
TYPE OF WIRE-HOOD	4 leg wire-hood with/without cap
WIRE-HOOD FEED	manual in single wire-hooding head
TYPE OF FOILS	Champagne foils, max length 5.11 inch
CAP FEED	manual on the bottle
*(on-demand customization)	DATA NOT BINDING



## SEMI - AUTOMATIC TRIBLOCK



## FILLER+ CORKER+ WIRE-HOODING MACHINE - 2011S-MRTG/1



TECHNICA	L DATA
MODEL	2011S-MRTG/1
MAX. HOUR OUTPUT corcker - wire hooding	200-300 b/h Filler - 800 b/h
TYPE OF BOTTLE (Glass)	H from 5.90 to 14.9 inch +/-5 D from 1.96 to 4.48 inch +/-2
MACHINE WEIGHT (lbr)	1212.5
MAIN FEED TENSION	220V (480V opz.) 3PH 6oHz*
AUXILIARY FEED TENSION	24V 60Hz*
POWER INSTALLED (KW)	1.75
ISOBARIC	FILLER
TYPE OF PRODUCT	Effervescent / still drinks
AIR FEED PRESSURE (BAR)	6
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.07
FILLING VALVES (N.)	4
CORK	ER
CORK TYPE (MUSHROOM-STYLE/FLAT)	• H max 2.04 inch • D max 1.22 inch
POWER INSTALLED (KW)	1,5
TUBE POWER CAPACITY CAPS 10/15 PCS	Standard
MANUAL REVOLVER MAGAZINE- (for unidirectional and bidirectional corks)	- CAP. 160 PCS - Option
MECHANICAL HOPPER (for bidirectional corks)	Option CAP. 1000 PCS
WIRE-HO	ODER
TYPE OF WIRE-HOODING	• 4 wires with cap • 4 wires without cap
AIR FEED PRESSURE (BAR)	6
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.04
WIRE-HOOD ROD CAPACITY 250 PCS	Standard
MANUAL REVOLVER MAGAZINE	CAP. 800/1200 PCS - Option
*(on-demand customization)	DATA NOT BINDING

Suitable for the bottling in glass containers with a diameter 50 mm to 114 mm and a maximum height of 380 mm. Machine is equipped with 4 filling valves that enable the filling of two bottles at a time. Two filled bottles are removed from one side while the other side fills the newest placed bottles. Corker for natural champagne corks. Adaptation kit available to apply natural wine corks with the same turret. Manual cork loading. Automatic cork distribution of corks with 30 mm max. Ø and 52 mm height. Corking unit consists of four hardened steel jaws which can be easily disassembled for cleaning and sterilization. Machine is operated through a two-hand control and stops at the end of every cycle.

WIRE-HOODING TURRET is suitable for the application of:

- 4-leg wire-hood with cap and 4-leg wire-hood without cap.
- Wire-hoods are loaded with O.M.B.F. stick for 20 wire-hoods and are distributed automatically.
- Bottle is positioned on a support and the cycle is started through a 2-hand control.
- The filler can reach a production of 200/300 bottles per hour (with optimal conditions).
- By request the machine can be supplied in a wheeled version.
- By request the machine is available also in the version consisting of filler / crown caps.

### MACHINE EQUIPPED WITH:

- Set of size parts for one format of glass bottles. Additional formats will be calculated separately.
- Operation and maintenance manual.
- Safety guards in compliance to the EC regulations.
- Tool kit with appropriate wrenches.
- Certification of conformity compliant to the EC regulations

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## SEMI - AUTOMATIC TRIBLOCK FOR PLASTIC CHAMPAGNE CORKS - 2011S-MRTG/1 CC

MODEL

THE SEMI-AUTOMATIC TRIBLOCK VERSION Suitable for the bottling with effervescent drinks, for the application and closure of plastic champagne T-corks and 4-post wire-hoods with/without cap.

Machine is equipped with 4 filling valves that enable the filling of two bottles at a time. Two filled bottles are removed from one side while the other side fills the newest placed bottles. Corker for natural champagne corks. Adaptation kit available to apply natural wine corks with the same turret. Manual cork loading. Automatic cork distribution of corks with 30 mm max. Ø and 52 mm height. Corking unit consists of four hardened steel jaws which can be easily disassembled for cleaning and sterilization. Machine is operated through a two-hand control and stops at the end of every cycle.

WIRE-HOODING TURRET is suitable for the application of:

- 4-leg wire-hood with cap and 4-leg wire-hood without cap.
- Wire-hoods are loaded with O.M.B.F. stick for 20 wire-hoods and are distributed automatically.
- Bottle is positioned on a support and the cycle is started through a 2-hand control.
- The filler can reach a production of 200/300 bottles per hour (with optimal conditions).
- By request the machine can be supplied in a wheeled version.
- By request the machine is available also in the version consisting of filler / crown caps.

#### MACHINE EQUIPPED WITH:

- Set of size parts for one format of glass bottles. Additional formats will be calculated separately.
- Operation and maintenance manual.
- Safety guards in compliance to the EC regulations.
- Tool kit with appropriate wrenches.
- Certification of conformity compliant to the EC regulations



MODEL	20113-11110/1		
MAX. HOUR OUTPUT corcker - wire hooding	200-300 b/h Filler - 800 b/h		
TYPE OF BOTTLE (Glass)	H from 5.90 to 14.9 inch +/-5 D from 1.96 to 4.48 inch +/-2		
MACHINE WEIGHT (lbr)	1212.5		
MAIN FEED TENSION	220V (480V opz.) 3PH 6oHz*		
AUXILIARY FEED TENSION	24V 60Hz*		
POWER INSTALLED (KW)	1.75		
ISOBARIC	FILLER		
TYPE OF PRODUCT	Effervescent / still drinks		
AIR FEED PRESSURE (BAR)	6		
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.07		
FILLING VALVES (N.)	4		
CORKER			
CORK TYPE (MUSHROOM-STYLE/FLAT)	• H max 2.04 inch • D max 1.22 inch		
POWER INSTALLED (KW)	1,5		
TUBE POWER CAPACITY CAPS 10/15 PCS	Standard		
MANUAL REVOLVER MAGAZINE- (for unidirectional and bidirectional corks)	- CAP. 160 PCS - Option		
MECHANICAL HOPPER (for bidirectional corks)	Option CAP. 1000 PCS		
WIRE-HO	ODER		
TYPE OF WIRE-HOODING	• 4 wires with cap • 4 wires without cap		
AIR FEED PRESSURE (BAR)	6		
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.04		
WIRE-HOOD ROD CAPACITY 250 PCS	Standard		
MANUAL REVOLVER MAGAZINE	CAP. 800/1200 PCS - Option		

**TECHNICAL DATA** 

2011S-MRTG/1



## SEMI - AUTOMATIC TRIBLOCK FOR CLASSICAL CHAMPAGNE METHOD - 2011S-MRTG/1 MC





TECHNICAL DATA	
MODEL	2011S-MRTG/1 MC
VERSION	Productions of sparkling wines with the classical Champagne method
TYPE OF BOTTLE (Glass)	H from 5.90 to 14.96 inch. +/-5 D from 1.96 to 4.48 inch. +/-2
MAIN FEED TENSION	380V 50Hz*
DIMENSIONS OF THE MACHINE	26.57x73,42 inch
POWER INSTALLED (KW)	2
MASS OF THE MACHINE (LBR)	1433

DISGORGING/DOSAGE LIQUER/LEVELLING		LIQUER/LEVELLING
	MAX OUTPUT HOUR	200-300 bt/h
	TYPE OF PRODUCT	Sparkling with the dassical Champagne method
	COMPRESSED AIR CONSUMPTION	52.83/79.25 gal/h

	CORKING
MAX OUTPUT HOUR	600-800 bt/h
TYPE OF CORK	• H max 52 mm • D max 31 mm
CORK FEED TUBE	Capacity 10/15 pcs: Standard
MANUAL REVOLVER MAGAZINE	Cap. 160 pcs: Option
MECHANICAL HOPPER	Cap. 1000 pcs: Option

WIRE-HOODING	
MAX OUTPUT HOUR	600-800 bt/h
TYPE OF WIRE-HOOD	<ul><li>4 leg wire-hood with cap</li><li>4 leg wire-hood without cap</li></ul>
AIR FEED PRESSURE (BAR)	6
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.04
WIRE-HOOD ROD	Cap. 250 pcs: Standard
MANUAL REVOLVER MAGAZINE	Cap. 900/1200 pcs: Option

#### **TECHNICAL FEATURES**

The SEMIAUTOMATIC TRIBLOCK assembles in a single machine the functions of Semi-automatic monoblock – disgorging, dosage (addition of liqueur) and levelling, corking and wire-hooding (for small to medium productions of champagne, sparkling wines with the classical champagne method). It is suitable for the bottling in glass containers with a diameter ranging from 55 to 115 mm and a maximum height of 375 mm.

The first station performs the disgorging, the dosage and the leveling and consists on the following items: A device for the manual disgorging and 4 valves; one for the disgorging, i.e the elimination of a part of wine, if necessary to reach a pre-established level in the bottle, a valve for the dosage, i.e. addition of liqueur, with liqueur tank equipped with a device regulating the quantity of liqueur to be introduced in the bottle, nitrogen inlet and pressure gauge for the control of the pressure, and two valves for the levelling of the wine. The four valves allow performing all operations of dosage and levelling in automatic mode: the operator has just to position the bottle on the support plate suitable for all workable formats.

For the automatic supply of the wine tank located at side of the liqueur tank and used to maintain the wine at a constant pressure, a system consisting of a support for the bottle and a valve, located outside the lower part of the chassis is applied. The operator puts the bottle on the support and fills it to feed the tank. After completing this part of the production cycle the operator discharges the bottle that goes to the corking station and then to the wire-hooding station and restarts the working cycle by loading a new bottle.

The corker, made of steel and equipped with a safety device, closes with natural champagne corks and is suitable for small or medium productions.

The closing system of the corking unit consists of four hardened steel jaws ground with centesimal tolerances and can be easily demounted for cleaning and sterilization. It can treat corks with 30 mm max. Ø and 52 mm height. After the bottle is put on the holding cup, the machine is operated through a two-hand control and stops at the end of every cycle. The distribution of the corks is automatic. The corks are loaded manually through a steel tube.

The wire-hooding machine is suitable for the application of the wire-hoods and their closure. It is possible to apply the following types of wire-hoods: 4-leg wire-hood with cap and 4-leg wire-hood without cap. Its operation system is mechanical and pneumatic; the wire-hoods are loaded on the traditional O.M.B.F. stick which is then taken out (capacity of the stick: 250 wire-hoods).

The wire-hoods are distributed in automatic. The bottle is positioned on a suitable support and the cycle is started through a 2-hand control. When the cycle is completed the machine stops and no part remains in movement.

The front safety panel prevents any accident due to breakages.

The machine consists of a structure completely manufactured of stainless steel AISI 304 formed by a wheeled chassis for the support on the floor and a frame fixed to the chassis and bearing all devices for the production cycle.

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## COMPACT SEMIAUTOMATIC LINE FOR

CHAMPAGNE - DISGORGING/DOSAGE (ADDITION OF LIQUEUR)/LEVELLING + CORKING (CHAMPAGNE) + WIRE-HOODING MACHINE + 1-SEAT MIXER FOR "LIQUEUR" MIXING - 2013S-MRTGR/1

The compact semiautomatic line assembles in a single machine the functions of Semi-automatic monoblock – disgorging, dosage (addition of liqueur) and levelling, corking, wire-hooding and mixer for the mixing "liqueur" (for small to medium productions of champagne, sparkling wines with the dassical champagne method). Apt to the bottling in glass containers from 0,375 Lt to 1,5 Lt.

The first station performs the disgorging, the dosage and the leveling and consists on the following items: A device for the manual disgorging and 4 valves; one for the disgorging, i.e the elimination of a part of wine, if necessary to reach a pre-established level in the bottle, a valve for the dosage, i.e. addition of liqueur, with liqueur tank equipped with a device regulating the quantity of liqueur to be introduced in the bottle, nitrogen inlet and pressure gauge for the control of the pressure, and two valves for the levelling of the wine. The four valves allow performing all operations of dosage and levelling in automatic mode: the operator has just to position the bottle on the support plate suitable for all workable formats.

For the automatic supply of the wine tank located at side of the liqueur tank and used to maintain the wine at a constant pressure, a system consisting of a support for the bottle and a valve, located outside the lower part of the chassis is applied. The operator puts the bottle on the support and fills it to feed the tank. After completing this part of the production cycle the operator discharges the bottle that goes to the corking station and then to the wire-hooding station and restarts the working cycle by loading a new bottle.

The corker, made of steel and equipped with a safety device, closes with natural champagne corks and is suitable for small or medium productions. The closing system of the corking unit consists of four hardened steel jaws ground with centesimal tolerances and can be easily demounted for cleaning and sterilization. It can treat corks with 30 mm max. Ø and 52 mm height. After the bottle is put on the holding cup, the machine is operated through a two-hand control and stops at the end of every cycle. The distribution of the corks is automatic. The corks are loaded manually through a steel tube. The wire-hooding machine is suitable for the application of the wire-hoods and their closure. It is possible to apply the following types of wire-hoods: 4-leg wire-hood with cap and 4-leg wire-hood without cap.

Its operation system is mechanical and pneumatic; the wire-hoods are loaded on the traditional O.M.B.F. stick which is then taken out (capacity of the stick: 250 wire-hoods).

The wire-hoods are distributed in automatic. The bottle is positioned on a suitable support and the cycle is started through a 2-hand control. When the cycle is completed the machine stops and no part remains in movement. The line is completed by the mixer working in automatic mode to mix the

"liqueur" introduced in the bottle at the first station.

The electrical control of the machine is performed through PLC software. The front safety panel prevents any accident due to breakages

The machine includes a conveyor belt for the transport of the bottles with supports for easier management of the operator/s' work and the bottle inlet to for the mixer working in automatic mode. An accumulation table is fitted at the end of the machine at the discharge of the mixer for the bottles accumulation is equipped with motorized driving head for the control of the conveyor belt.

The machine consists of a structure completely manufactured of stainless steel AISI 304 formed by a wheeled chassis for the support on the floor and a frame fixed to the chassis and bearing all devices for the production cycle.



TECHNICAL	DATA
MODEL	2013S-MRTGR/1
AVERAGE OUTPUT	300 b/h
TYPE OF BOTTLE	Glass H from 5.90 to 14.96 inch. +/- 5 D from 2.75 to 4.52 inch +/- 2
MAIN FEED TENSION	380V 50Hz*
AIR FEED PRESSURE (BAR)	6
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.10
TOTAL POWER INSTALLED (KW)	2.6
DIMENSIONS OF THE MACHINE (INCH)	49.2x129.9
TOTAL MASS OF THE MACHINE (LBR)	1763.7

#### DISGORGING/DOSAGE LIQUER/LEVELLING

TYPE OF PRODUCT Sparkling with the classical Champagne method

	CORKI	ING
	TYPE OF CORK	H max 52 mm - D max 31 mm
	CORK FEED TUBE	Capacity 10/15 pcs: Standard
	MANUAL REVOLVER MAGAZINE	Cap. 160 pcs: Option
	MECHANICAL HOPPER	Cap. 1000 pcs: Option

WIRE-H	OODING
TYPE OF WIRE-HOOD	4 leg wire-hood with/without cap
WIRE-HOOD ROD	Cap. 250 pcs: Standard
MANUAL REVOLVER MAGAZINE	Cap. 900/1200 pcs: Option

## SEAT MIXER HORIZONTAL DRUM TIPPER n° 1 bottles load tunnel

\*(on-demand customization) DATA NOT BINDING



# SEMI-AUTOMATIC CROWN CAPPING MACHINE 2008S-TC/1





TECHNIC	CAL DATA
MODEL	2008S-2TC/1
MAX. HOUR OUTPUT	600 b/h
TYPE OF BOTTLE	Glass H from 9.44 to 14.56 inch. +/-5 D from 2.75 to 4.52 inch. +/-2
TYPE OF CORK	Crown diameters 1.02", 1.14", 1.20" 30,5)
CROWN CAP RUNNER (CAP. 25 PCS)	Standard
MANUAL CAP FEEDER (MECHANICAL HOPPER WITH HANDWHEEL)	Option
AUTOMATIC CAP FEEDER (VIBRATORY FEEDING)	Option

AIR FEED PRESSURE (BAR)	6
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.52
TOTAL MASS OF THE MACHINE (LBR)	970.03 +/-
MECHANICAL MODEL	
AIR FEED PRESSURE (BAR)	3
AIR CONSUMPTION AT 3 BARS (GAL/SEC)	0.26
MAIN FEED TENSION	380V 50Hz*
AUXILIARY FEED TENSION	24V 50Hz*
TOTAL POWER INSTALLED (KW)	1,5
TOTAL MASS OF THE MACHINE (LBR)	551.1

PNEUMATIC MODEL

DATA NOT BINDING

THE MECHANICAL VERSION IS HIGHLY RECOMMENDED FOR PRODUCTION OF CHAMPAGNE

The semi automatic crowner mod. 2008-TC/1 is for use in small and medium manufacturing plants and is suitable for the application of crown corks with a diameter of 26, 29 or 30.5. It can process cylindrical glass bottles with a diameter of 55 mm. to 115 mm. and with a maximum height of 375 mm. Its production is 600 bott/h.

It can apply standard crown corks, crown corks with bidule and twist-off crown corks.

The corks are loaded manually, using a little channel which can contain around 40, however, on request it is possible to apply a cork feeder that works automatically.

The bottles can be lifted pneumatically (using a cylinder which is lifted by compressed air) or mechanically (using a lever with a bearing that runs on a lifting cam), for more secure closure of the bottle using mechanical movements (due to champagne bidule cork problems).

The work cycle starts by putting the bottle on the specific plate and operating the machine using a two hand command; when the working cycle is completed, the machine stops automatically and no part of it remains in movement.

The front guard makes the machine hazard-free, protecting against any possible accidents caused by breakage. The machine can be assembled on four wheels or on fixed feet.

#### CONSTRUCTIVE FEATURES

Model 2008S-TC/1 is completely manufactured with stainless steel, food-grade plastic materials, and steel alloys. All components of the machine are accessible to facilitate cleaning and maintenance, so guaranteeing long-term duration.

The machine is equipped with Safety guards and Certificate of conformity compliant to the EC regulations.

VERSIONS AVAILABLE: PNEUMATIC OPERATION MECHANICAL OPERATION

### PNEUMATIC VERSION

Air supply pressure (Bar): 6

Air consumption at 6 Bar (L/sec.): 0.20

Machine mass: 200 Kg.

### MECHANICAL VERSION

Particularly recommended for champagne production (crown cork+bidule) and for twist-off crown corks.

Air supply pressure(Bar): 3

Air consumption at 3 Bar (L/sec.): 0.10

Main power voltage: 380V 50Hz (modified on request) Auxiliary power voltage: 24V 50Hz (modified on request)

Power installed: 1.5 Kw Machine mass: 250 Kg.

## OPTIONS and ACCESSORIES

Automatic cork loader with support flange on machine (Vibration feeder with: vibrating unit control panel with on/off switch + potentiometer to vary vibration intensity)

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# AUTOMATIC MINI WIRE-HOODER 2015-MDC/10

#### CONSTRUCTIVE FEATURES

The 2015A-MDC/10 model is completely manufactured with stainless steel, food-grade plastic materials, and steel alloys. All components of the machine are accessible to facilitate cleaning and maintenance, so guaranteeing long term duration.

The machine is equipped with Safety guards and Certificate of conformity compliant to the EC regulations.

## OPTIONS AND ACCESSORIES

- -Magazine of revolver type, capacity of 1,500 wire-hoods
- -Magazine of revolver type MINI, capacity of 900 wire-hoods
- -Additional wire-hood connection device, rapid change (consisting of head connection  $+\ 2$  wire-hood heads)

## BOTTLE FORMAT CHANGE

- -Complete screw unit + 1 screw
- -Additional screw
- -Additional set for format change (carrousel + conveyor) for standard (cylindrical) bottles

#### SPECIAL CONTROL DEVICES

- -Photocell detecting the presence of the wire-hood at the discharge of the machine  $% \left( 1\right) =\left( 1\right) \left( 1\right$
- -Photocell controlling the bottle accumulation at the discharge



TECHNICAL DATA	
MODEL	2015A-2TR/10 MINI VERSION
MAX. HOUR OUTPUT	900/1000 B/H
TYPE OF BOTTLE	Glass H from 9.44 to 12.79 inch. +/- 5 D from 2.16 to 4.52 inch. +/- 2
WIRE HOOD TYPE	4-POST WIRE-HOODS WITH/WITHOUT CAP
MACHINE MASS (LBR)	1763.7
DIMENSIONS (inch)	47.2 X 41.3 X 114.1
MAGAZINE WITH CAPACITY OF 250 PCS	STANDARD

DATA NOT BINDING



## AUTOMATIC WIRE HOODING MACHINE





The automatic wire-hooding machine model 2002A-2TR10 was designed to meet the needs of small and medium beer producers. The machine works a mechanical-pneumatic combined system. The bottle is moved by a 1.5 Kw engine, the wire-hood is treated with a pneumatic system (a compressor of at least 150 liters at 6 bars).

- Machine head height adjustability for bottles 0.75 to 1.5 liters.
- Three styles of wire-hood distributors are available.
- Wire-hood holding rod system.
- Revolver rotating loading device on top of the machine.
- Bottom loading wire-hood distributor that contains 1500 wire-hoods.
- Four wire-hoods with capsule or without capsule are possible for distribution.

### OPTIONAL ACCESSORIES (WIRING MACHINE):

- Wire-hoods loading device 2500 +/- from the bottom.
- Rotating loading device (revolver) 1500 +/-.
- Closing / locking head, price per unit.
- Device for scroll application.

#### ADDITIONAL BOTTLE OPTIONS:

- Change parts for different bottle formats.
- Cork and wire-hood detector.
- Output detector for bottle obstruction.
- Head connection set.
- Stainless steel piston.
- Piston reduction ring.

The machine is available in TWO VERSIONS differing only for the throughput and the safety guards, which are lighter in the JUNIOR version. The components, the mechanisms and the operation of the machines are exactly the same and maintain the same level of quality.

STANDARD version: throughput from 1,200 to 2,800 b/h.

JUNIOR version: throughput up to 1,200 b/h

TECHNICAL DATA				
MODEL	2002A-2TR/10			
MAX. HOUR OUTPUT	2,800 b/h (1200 b/h junior version)			
TYPE OF BOTTLE	Glass H from 9.44 to 14.56 inch +/- 5 D from 2.75 to 4.52 inch +/-2			
TYPE OF CAGE	4 wires with capsule 4 wires without capsule			
MACHINE WEIGHT (LBR)	1984.1			
AIR FEED PRESSURE (BAR)	6			
AIR CONSUMPTION AT 6 BARS 0.1				
MAIN FEED TENSION	220V (480V opz.) 3PH 6oHz			
AUXILIARY FEED TENSION 24V 60H				
POWER INSTALLED (KW)	1.5			
FEEDING UNIT 250 WIREHOOD CAPACITY Standar				
ROTATING LOADING DEVICE 1,500 PCS. CAPSULE Options				
BOTTOM LOADING DEVICE 2,500 PCS. CAPSULE	Oprtional			
*(on-demand customization)	DATA NOT BINDING			

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## AUTOMATIC MONOBLOCK CORKING + WIRE HOODING - 2005-MTG/10

Corking and wiring Monoblock from 1,200 to 2,800 bottles / hour, 380 Volts/50 Hz/3-phase.

The automatic Monoblock combines 2 functions: corking and wiring.

The automatic corker is suitable for the application of Champagne corks, natural "one- way or unidirectional" corks with ø maximum of 30 mm. The machine is equipped to work cylindrical glass bottles from ø to 55 mm up to 115 mm and a height from 190 mm -to 380 mm.

Unidirectional/one-way corks need to be manually inserted in the right position or using an orientation elevator available as an additional option. Bi-directional Champagne corks can be loaded by an automatic feed device (additional price).

#### OPTIONAL ACCESSORIES (WIRING MACHINE):

- Wire-hood loading device 2,500 +/- from the bottom.
- Rotating loading device (revolver) 1,500 +/-.
- Closing / locking head , price per unit.
- Device for additional bottle formats.
- Additional change parts for cylindrical bottles.
- Cork and wire-hoods detector for missing closure.
- Head connection set.
- Stainless steel piston.
- Piston reduction ring.

The Monoblock is available in TWO VERSIONS differing only for the throughput and the safety guards, which are lighter in the JUNIOR version. The components, the mechanisms and the operation of the monoblock machines are exactly the same and maintain the same level of quality:

STANDARD version: throughput from 1,200 to 2,800 b/h.

JUNIOR version: throughput up to 1,200 b/h  $\,$ 

This monobloc is also avaible in the version consisting of revolving automatic corker for the distributon nd closure of naural and plastic champagne corks ond of the wire-hooding station.



TECHNICA	L DATA
MODEL	2005A-MTG/10
MAX. HOUR OUTPUT	2,800 b/h (1200 b/h junior version)
TYPE OF BOTTLE	Glass H from 9.44 to 14.56 inch +/- 5 D from 2.75 to 4.52 inch. +/- 2
MAIN FEED TENSION	220V (480V opz.) 3PH 6oHz*
AUXILIARY FEED TENSION	24V 60Hz*
POWER INSTALLED (KW)	1.50
WEIGTH (KG)	1,300
WIRE-HOODER	
TYPE OF WIRE-HOODING	4 wires with capsule 4 wires without capsule
AIR FEED PRESSURE (BAR)	6
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.15
WIRE HOOD SYSTEM CAPACITY	250 pcs
CORKER	
CORK TYPE (MUSHROOM-STYLE/FLAT)	H max 2.04 inch D max 1.22 inch
*(on-demand customization)	DATA NOT BINDING



## CAPPING MONOBLOCK - PVC CAPSULES 2008A-MDC/10 PVC CAP CAPPING MONOBLOC UNIT





The Capping Automatic Monoblock mod. 2008A-MDC/10 is suitable for distribution and closure of PVC shrink caps by means of a shrink head with an hourly throughput of 3,000 bottles.

The machine was designed to meet the needs of small and medium producers and is suitable for the bottling in glass containers with a  $\emptyset$  of 55 to 115 mm and a maximum height of 190 to 375 mm. In fact, the machine enables processing different bottle sizes thanks to the column whose height can be adjusted through a handle placed on the side.

The machine is operated partly mechanically and partly pneumatically:

The capsules are loaded using a horizontal magazine, supplied as a standard equipment of the basic machine and, containing about 500 capsules. On demand, the machine can be fitted with a magazine with bottom loading and a capacity of 1,000 caps.

The standard machine is equipped of DOUBLE photocell at the inlet to detect the presence of cork/bottle. The machine can be equipped with devices detecting the presence of the capsules at the discharge and/or controlling the bottle accumulation at the discharge (at cost).

The variation of the speed of the machine can be obtained by turning a knob located on the side. On demand it is possible to fit an INVERTER on the motor, which, using a potentiometer placed on the electrical keyboard panel, allows more precise and sensitive speed variation (from minimum production to maximum production rate).

### CONSTRUCTIVE FEATURES

The 2008A-MDC/10 model is completely manufactured with stainless steel, food-grade plastic materials, and steel alloys. All components of the machine are accessible to facilitate cleaning and maintenance, so guaranteeing long term duration.

The machine is equipped with Safety guards and Certificate of conformity compliant to the EC regulations.

#### OPTIONS AND ACCESSORIES

Magazine loadable from the bottom

Complete screw support + screw for standard (cylindrical) bottles Photocell detecting the presence of the capsules at the discharge Photocell controlling the bottle accumulation at the discharge Speed inverter on motor (for machine speed variation through a potentiometer on the switchboard)

TECHNICAL DATA			
MODEL	2008A-MDC/10		
MAX. HOUR OUTPUT	3000 b/h		
TYPE OF BOTTLE	Glass H from 9.44 to 14.56 inch. +/- 5 D from 2.75 mm to 4.52 inch +/-2		
CAP SIZE	D max 1.57 inch L max 2.75 inch +/-5		
AIR FEED PRESSURE (BAR)	6		
AIR CONSUMPTION AT 6 BARS	0.15		
MAIN FEED TENSION	380V 50Hz*		
AUXILIARY FEED TENSION	24V 50Hz*		
POWER INSTALLED (KW)	1.5		
FEEDING UNIT 250 WIREHOOD CAPACITY	Standard		
ROTATING LOADING DEVICE 1,500 PCS. CAPSULE	Optional		
BOTTOM LOADING DEVICE 2,500 PCS. CAPSULE	Oprtional		
*(on-demand customization)	DATA NOT BINDING		





## COMPACT SEMIAUTOMATIC LINE FOR

CHAMPAGNE - DISGORGING/DOSAGE (ADDITION OF LIQUEUR)/LEVELLING + CORKING (CHAMPAGNE) + WIRE-HOODING MACHINE + 1-SEAT MIXER FOR "LIQUEUR" MIXING - 2013S-MRTGR/10

The compact semiautomatic line assembles in a single machine the functions of Semi-automatic monoblock – disgorging, dosage (addition of liqueur) and levelling, corking, wire-hooding and mixer for the mixing "liqueur" (for small to medium productions of champagne, sparkling wines with the dassical champagne method). Apt to the bottling in glass containers from 0,375 Lt to 1,5 Lt.

The first station performs the disgorging, the dosage and the leveling and consists on the following items: A device for the manual disgorging and 4 valves; one for the disgorging, i.e the elimination of a part of wine, if necessary to reach a pre-established level in the bottle, a valve for the dosage, i.e. addition of liqueur, with liqueur tank equipped with a device regulating the quantity of liqueur to be introduced in the bottle, nitrogen inlet and pressure gauge for the control of the pressure, and two valves for the levelling of the wine. The four valves allow performing all operations of dosage and levelling in automatic mode: the operator has just to position the bottle on the support plate suitable for all workable formats.

For the automatic supply of the wine tank located at side of the liqueur tank and used to maintain the wine at a constant pressure, a system consisting of a support for the bottle and a valve, located outside the lower part of the chassis is applied. The operator puts the bottle on the support and fills it to feed the tank. After completing this part of the production cycle the operator discharges the bottle that goes to the corking station and then to the wire-hooding station and restarts the working cycle by loading a new bottle.

The corker, made of steel and equipped with a safety device, closes with natural champagne corks and is suitable for small or medium productions. The closing system of the corking unit consists of four hardened steel jaws ground with centesimal tolerances and can be easily demounted for cleaning and sterilization. It can treat corks with 30 mm max. Ø and 52 mm height. After the bottle is put on the holding cup, the machine is operated through a two-hand control and stops at the end of every cycle. The distribution of the corks is automatic. The corks are loaded manually through a steel tube. The wire-hooding machine is suitable for the application of the wire-hoods and their closure. It is possible to apply the following types of wire-hoods: 4-leg wire-hood with cap and 4-leg wire-hood without cap.

Its operation system is mechanical and pneumatic; the wire-hoods are loaded on the traditional O.M.B.F. stick which is then taken out (capacity of the stick: 250 wire-hoods).

The wire-hoods are distributed in automatic. The bottle is positioned on a suitable support and the cycle is started through a 2-hand control. When the cycle is completed the machine stops and no part remains in movement. The line is completed by the mixer working in automatic mode to mix the "liqueur" introduced in the bottle at the first station.

The electrical control of the machine is performed through PLC software. The front safety panel prevents any accident due to breakages

The machine includes a conveyor belt for the transport of the bottles with supports for easier management of the operator/s' work and the bottle inlet to for the mixer working in automatic mode. An accumulation table is fitted at the end of the machine at the discharge of the mixer for the bottles accumulation is equipped with motorized driving head for the control of the conveyor belt.

The machine consists of a structure completely manufactured of stainless steel AISI 304 formed by a wheeled chassis for the support on the floor and a frame fixed to the chassis and bearing all devices for the production cycle.

TECHNICAL DATA			
MODEL	2013S-MTG/10		
AVERAGE OUTPUT	300 b/h		
TYPE OF BOTTLE	Glass H from 5.90 to 14.96 inch +/- 5 D from 2.75 to 4.52 inch +/- 2		
MAIN FEED TENSION	380V 50Hz*		
AIR FEED PRESSURE (BAR)	6		
AIR CONSUMPTION AT 6 BARS (GAL/SEC)	0.40		
TOTAL POWER INSTALLED (KW)	2.6		
DIMENSIONS OF THE MACHINE (MM)	49.2 x1 29.92		
TOTAL MASS OF THE MACHINE (KG)	1763.7		
*(on-demand customization)	DATA NOT BINDING		



### DISGORGING/DOSAGE LIQUER/LEVELLING

TYPE OF PRODUCT		
CORKING		
TYPE OF CORK	H max 2.04 - D max 1.22 inch	
CORK FEED TUBE	Capacity 10/15 pcs: Standard	
MANUAL REVOLVER MAGAZINE	Cap. 160 pcs: Option	
MECHANICAL HOPPER	Cap. 1000 pcs: Option	
WIRE-HOODING		
TYPE OF WIRE-HOOD	4 leg wire-hood with/without cap	
WIRE-HOOD ROD	Cap. 250 pcs: Standard	
MANUAL REVOLVER MAGAZINE	Cap. 900/1200 pcs: Option	
SEAT MIXER		
HORIZONTAL DRUM TIPPER	n° 1 bottles load tunnel	
	DATA NOT BINDING	



## AUTOMATIC RINSING MACHINE FOR THE INSIDE CLEANING OF THE BOTTLES





### CONSTRUCTIVE FEATURES

The Automatic rinsing machine model is completely manufactured with stainless steel, food-grade plastic materials, and steel alloys. All components of the machine are accessible to facilitate cleaning and maintenance, so guaranteeing long term duration. The machine is equipped with Safety guards and Certificate of conformity compliant to the EC regulations.

Suitable for the inside cleansing of glass containers. MAXIMUM OUTPUT:  $1.000-1.500 \, \mathrm{pcs/h}$ 

TECHNICA	L DATA
MODEL	AUTO RINSING MACHINE
HOUR OUTPUT	From 1000 tO 1500 b/h
HORIZONTAL OVERTURNING DRUM	1 TUNNEL WHERE THE CONTAINERS ARE LOADED FOR CLEANING THROUGH NOZZLES
MASS OF THE MACHINE	1102.3 LBR +/-
DIMENSIONS	CM 82.6 X 39.3 X 78.7 H
	DATA NOT BINDING















production program is process equipment for food industry with particular emphasis on beverage sector. However our own specialized engineering personnel, modern manufacturing plant and professional staff give us capability

of providing certain projects to pharmaceutical and chemical industries as well.

By our engineering expertise and experiences we strive to offer our customers quality, affordable and at the same time high efficient process solution. Least but not last we always bear in

mind the energetic efficiency of integrated systems. All this can be achieved only if we are always in contact with modern technologies, up to date practices and search for continuous

improvement all in terms of engineering and implementation, as well as in terms of organization within our enterprise system.

Main competitive advantage of company PETEK is high capability of adaptation to customer needs and requests. There can be offered either standardized or unique solutions. Separate

components of our constructions are standardized, while finished products are always accommodated according to the investor actual technological demands and consisting

circumstances.

We will find best process solution for your technical request.

Our main product groups are:

- Product preparation
- Heat treatment technologies
- Cleaning and sanitation equipment
- Conveying technologies

Turn key projects

We offer our customers design and executions of complete processing plants and in co-operation with our partners also complete bottling – packaging lines. We provide design,

engineering, supply and installations of complete technological systems.











# THERMAL TREATMENT TUNNEL THERMAL TECHNOLOGY STANDS FOR SUITABLE THERMAL PROCESS



Suitable thermal process of already filled product can be crucial from several aspects such as product's quality, its lasting shelf life and outside appearance. All this we can provide with our most standard and referential product group – tunnel technology.

### This modern, up to date technology can be used for three different kinds of thermal processes after filling:

- Pasteurization after cold fill of product.
- Cooling after hot fill of product.
- Warming after cold fill (when already flash pasteurization was applied before filling).

### We offer to our clients four construction models accommodated to different capacities and purposes:

- ML series small line
- L series single line
- DL series double line
- DD series double deck

#### Main features of our systems

- Modular structure that enables easy loading, transport and assembly.
- Complete stainless steel construction with no carbon steel parts.
- Innovative design solutions.
- Rational energy consumption.
- Considerable "world famous components" that assure long life period of machine and easy maintenance.
- Modern and accessible software for simple use of device, adding of new products or parameters modification of the pre-set programs.
- Complete adaptability to concrete technological requests.

### TUNNEL PASTEURIZER - STANDS FOR PRODUCTS LONG SHELF LIFE

Sophisticated technology for gradual heating of already filled product from inlet temperature up till pasteurizing temperature, holding on pasteurizing temperature for necessary time and gradual cooling to outlet temperature.

The platform of pasteurization process is a precise temperature regulation that enables exact thermal process which is essential for quality of your product and its required shelf life. These values are achieved through properly reached number of pasteurizing units (PU's). Special feature of our pasteurizers is active control of pasteurizing units also in case of production stop-down. With our own developed system and software we can secure safety and constant thermal process without any frights of possible "under" or "over" pasteurization.

### Main features of our systems

- Active monitoring and control of PU which enables that the set value of pasteurizing units is always within agreed tolerances (also in case of stoppages on filling line).
- Efficient heat exchange provided between heating and cooling zones enables very rational process in terms of heat energy required for normal pasteurization process.
- Heating is preformed indirectly by means of heat exchangers.









## THERMAL TREATMENT THERMAL TREATMENT FOR VARIOUS PURPOSES



### HEATING TUNNEL - IS APPLIED AFTER COLD FILL TO ACHIEVE ROOM TEMPERATURE AND PREVENT CONDENSATION

When temperature differences between product and production room are significant, heating of product inside container is necessary to avoid subsequent condensation of container

surface. Condensation is a problem that can occur already in production room or later in a warehouse. Wet containers can cause following issues:

- problems of label application,
- · problems of destroyed packages,
- problems of printing.

After the cold fill, heating of the product is preformed from the inlet to the required outlet temperature. Objective of the process is to heat product from filling temperature to

temperature above dew point. Heating source is water, proper heating is provided by heat exchanger with an automatic temperature control.

### COOLING TUNNEL - IS APPLIED AFTER HOT FILL TO COOL PRODUCT TEMPERATURE DOWN

Cooling process is applied at hot fill production process after products are filled and need to be cooled down relatively quickly to ambient temperature of production room or

warehouse. Quick cooling is recommended when we have to prevent products retention on high temperature for too long in order to avoid certain damage of products' colour, taste

and other organoleptic properties.

Function: Precise product cooling down to the required temperature prompt after the container entrance into the tunnel. Heat exchange is provided by water coming from an outside

cooling source (cooling tower, cooling aggregate etc.).

Features

- Cooling with internal closed cycle of water.
- Cooling with external water source.
- Gradual preheating of water at the beginning of cooling process.
- Easy access for maintenance and cleaning.

### COOLING TUNNEL WITH PASTEURISING ZONE - TO ASSURE PROPER TREATMENT AFTER HOT FILL

Because food and beverage industry does not tolerate anything less than perfect intactness we have to assure for some more delicate products after hot fill to stay under pasteurising

temperature a little longer.

This solution is usually applicable where transport distance from the filler to the cooling tunnel is door-to-door or very short so that the product does not stay on the required

pasteurising temperature long enough.

When entering into the tunnel product is held at the inlet temperature for the required time, after that it is gently cooled to a certain outlet temperature. Heating medium is water,

heated in the first (pasteurization) holding zone by means of a heat exchanger with an automatic temperature control.

## packaging & pallettizing



Ape Impianti is backed by the experience and technical know-how that comes from four decades in the business of end-of-the-line plants for the beverage industry.

At the beginning of the Sixties, in a stage of economic boom, there was a deep change in the way of consuming and distributing wine: the bottle substituted the demijohn and arrived on the table of the Italian people. The need of mechanising production became a priority. Therefore, urged by new demands, Fabio Grappoli left the family-run winery to found Officine APE, and he started designing and developing new machinery for the first bottling plants in the winemaking sector.

In the Seventies, Ape artisan-type organisation allowed for a direct involvement in all the bottling issues, which meant a deep collaboration with the customers.

At the beginning of the Eighties, the son Franco Grappoli, the present Managing Director, started working at the company, which thus turned into a more industrialised reality. In these years, the whole range of packaging machinery started being produced.

To follow the transformation of the bottling process, from chain of machines connected to each other into real automated lines, numerous plants with primary sector companies were developed, thus acquiring the specific know-how which today allows to offer a full service to the beverage industry.

In the Nineties, a profitable production collaboration began with Tecnomec which, in 1995, led to the establishment of APE IMPIANTI, born with the specific target of creating an industrial concern capable of facing the market globalisation challenges.







### **BABYDEPAL**



Depalletizer which transfers the bottle layer by lifting it thanks to inflatable pick-up rubbers.

The machine enables a single operator to feed the line, through a few simple operations. It allows the transfer of a whole layer from the pallet onto the depalletizing table in less than a minute, thus eliminating physical stress and giving the operator time to carry out other control tasks.

Due to its small overall size, Babydepal can be also placed into structures with little space available.

The gripping head is fastened to a double-column stainless steel structure, which performs a horizontal translation on railed guides fastened to the floor. It deposits the bottle layer onto the depalletizing table.

Thanks to Babydepal great versatility, changeover is quick and occurs through special spacers. The depalletizer can be equipped so as to work with different kinds of bottles: cylindrical, conical and rectangular shaped bottles, even with non-standard sizes pallets.

Hundreds of Babydepal are performing in wineries all over the world.





## **DEPAL 2010**

Automatic multi-format push-type depalletizer to transfer a whole layer of bottles, it allows to process bottles of different size, requiring no format adjustment.

The machine is designed with a sturdy double-column frame. Depalletizer basic version is supplied with the pallet placed on the ground and interlayer removing device.

DEPAL 2000 main structure can be equipped with various additional units: full pallet feed modules, interlayer store and empty pallet store for different automation degrees according to customer needs and output required.

A row unloading device is available as option to depalletize non-cylindrical bottles. DEPAL 2000 processes also bottles in plastic cases.

This is a reliable machine which has been tested for several years in many wineries all over the world.

Output: from 5000 to 12000 bph





## CARTON ERECTOR FORM 1200

FORM 1200 HM / NS

Fully automatic case erecting machine which shapes American type cartons and seals bottom flaps by Nordson hot melt gluer (HM version) or by adhesive tape (NS version).

FORM 1200 HM/NS is a sturdy and simple to use machine.

Quick format changeover is secured thanks to simple and practical adjustments on graduated scales by hand-wheel.

Complete with sealing unit of bottom flaps by adhesive PVC tape in NS version.

The HM version includes Nordson hot melt gluer and case pressing devices (available also for cartons with pre-glued partitions).

In less than 2 m2 the machine produces up to 900 cartons/h with max dimensions 460mm. Its cases store unit has standard capacity of 80 cartons and of 180 cartons when supplied with the additional unit.

The machine frame and all its parts in contact with the cartons are made of AISI 304 stainless steel.

Special version machines are available to erect the "elite" carton for lying bottles packaging. Output up to: 900 cartons/hour - 5.400 bottles/hour



## CARTON ERECTOR FORM 1300 HM / NS

Automatic machine for the opening of American type case. FORM 1300 HM, with space-saving compact design, opens the case and seals the bottom flaps by hot melt glue.

Manufactured with a solid frame in stainless steel AISI 304 and with innovative mechanical solutions, FORM 1300 HM provides perfect square cases and applies the glue with 4 nozzles to ensure a secure seal.

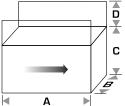
Brushless drive motors power cases through erecting and sealing with a smooth and accurate motion to ensure high speed performance and to manage glue sprays.

### MACHINE CHARACTERISTICS:

- •Brushless drive motors power cases transfer.
- Adjustment may be completed without change parts, by using hand turnwheels with numerical marker and graduated scale.
- •Case magazine holds up to 80 pieces. Provided with missing case alarm it may be refilled at any time during operation. Extended magazine up to 160 cases.
- Touch-screen display.
- Nordson Hot Melt applicator and programmable heating of glue before starting of bottling line working.
- •The glue jets are set by operator panel and carried out by the machine, selecting the case format on the touch-screen.
- Optional special version to work élite case which allows to stock bottle lying.

output	1250 cph
installed power	6 kW
6 atm air consumption	450 NI/min
electric absorption	15 A
weight	800 kg





#### case dimensions

A min 190 - max 440 mm B min 130 - max 330 mm C min 185 - max 400 mm



## FULLY-AUTOMATIC PACKING MACHINE -A

### **INCA 1200M**





Fully-automatic packing machine which packs bottles into American type cartons with or without pre-glued inside partitions and into plastic crates.

INCA 1200 M employs the same inverter-controlled radial movement which has been tested for many years by series 2000 packing machine. This technical solution allows medium-high outputs ensuring a smooth and balanced bottle movement and permits speed to be varied during the different phases of the operating cycle.

Packing equipments secure high performance while processing cartons of various formats with or without inside partitions and ensure perfect integrity of the labels.

Quick and easy format changeover takes only few minutes. Multiformat pick-up heads, separators and centring units allow the packing of bottles with diameter from 62 to 116 mm without any equipment replacement. Picking head is equipped with safety devices to prevent blockage.

Output: 5000 bphw





### FULLY-AUTOMATIC PACKING MACHINE

### **INCA 2010**



Fully automatic pick and place machine, with chassis, bottles and cases accumulation tables in stainless steel AISI 304. Simple and sturdy structure suitable for cases and plastic crates. Fixed or multiformat pick-up heads and equipments allow a perfect result with case with or without inside partitions, paying attention to the labels. Quick format changeover, which requires only few minutes. Inverter-controlled radial mechanical movement secures a smooth and balanced movement while bottles are inserted inside cases and allows speed to be varied during the different phases of the operating cycle.

Provided with CE mark in specification of the Directive of the European Council (2006/42/CE) next modifications.

### MACHINE CHARACTERSITICS:

- •Main motor SEW Eurodrive.
- •Inverter-controlled radial movement with speed variation adjustable on operator panel.
- •Touch-screen operator panel.
- •Bottle presence inspection device on table.
- •Use of step-step motors allows the automatic adjustment of the picking head grips, of the photocells detecting case presence, of the case drive and of the guide rails on bottle table. The parameters of the "format program" are set up and modified autonomously on operator panel.
- •Multiformat equipments which process bottles with diameters from 62 mm to 108 mm.
- Multiformat packing head up to 24 grips (2 cases of 12 btl 4 cases of 6 btl).
- •Suitable equipments for customised case patterns.
- Automatic bottle height adjustment set up on operator panel.
- Special version: decaser.

OUTPUT = up to 450 cycles per hour 900 cases of 12 bottles (max length 420mm) 1800 cases of 6 bottles rotated (max length 230mm)





## PARTITION INSERTING MACHINE INSER 1200

The INSER 1200 is a fully-automatic machine which opens and inserts pre-assembled partitions into US/American type cartons, before or after the bottles are placed in the cases. INSER 1200 is equipped with a partition storage unit that is easy to load with capacity up to 500 partitions. Quick format changeovers are easy for the replacement of the partition picking unit and adjusts using self-centering side-rails. INSER 1200 has a special vibrating belt which allows for the partitions to descend into the carton without pressure allowing perfect integrity of the labels. Output: 1,000 cartons/hour – 6,000 bottles/hour







# CASE SEALING CH 800 NS / HM

The CH 800 is a fully automatic case sealing machine to seal top flaps of American type carton. It moves cartons by means of side belts. The basic version 'NS' seals the cartons top and bottom flaps with adhesive tape. The 'HM' version seals the carton top flaps with hot melt glue. The CH 800 sealing machine is complete with a twin slope conveyor belts which separates and spaces the incoming cartons. The machine is equipped with Stainless steel safety guards.

Output up to: 800 cartons/hour - 5,000 bottles/hour









### CASE SEALING -CH 1000



CH 2010





This stainless steel automatic case sealer closes the top flaps of the case and seals them with hot glue. The machine moves the case in the sealing unit and stops the following one, then folds the minor flaps, applies glue and closes the long flaps. The sealing by compression device while the case is stopped, provides firm compression to ensure proper hot melt bonding of all cases. CH 2010 HM is equipped with an efficient case transfer system by means of bars, which maintains the case at right angles.

output	2000 cph
installed power	5 kW
6 atm air consumption	95 NI/min
electric absorption	16 A
weight	600 kg

### MACHINE CHARACTERSITICS:

- Bar-type case transfer powered by motor controlled by encoder.
- Motorized main motions controlled by encoder.
- •Top flaps sealing by compression device while the case is stopped.
- PLC Siemens complete with touch-screen operator panel.
- Motorized adjustment of sealing unit height.
- Quick lifting system of the closing head
- •Nordson Hot Melt applicator with gun at 4 nozzles and glue heating timer programmable before starting of bottling line working.
- •Quick format changeover thanks to self-centering side rails adjustable by using hand turnwheels. Available also in version with automatic motorized adjustment by operator panel.
- Additional module for bottom and top adhesive tape sealing.
- •Optional special version to work élite.

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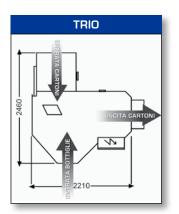


## packaging machines

## **AUTOMATIC PACKAGING MONOBLOCK**

### TRIO

The monobloc three consists of operation units integrated among them: case erector, packer and top The trio can work cases containing 6, 12 and 15 of the most commonly used bottles. The packing unit can be provided with multiformat equipments to be able to work different bottle diameters without replacement of the pickingup equipment and with centering funnels for cases with our without premade partitions. Production up to 3000 bph - 250 cases/h of 12 bottles - 500 cases/h of 6 bottles.

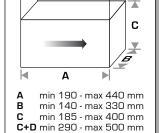




Case magazine with a capacity up to 75 pieces







### THE MACHINE IS COMPOSED BY:

- Bottles alignement device.
- Case magazine with capacity up to 75 pieces depending on their thickness.
- Case erecting group.
- Bottle inserting group with case centring funnel.
- Group for bottom flap sealing by adhesive tape case transfer by side belts.
- Device for top flaps sealing by adhesive tape.
- PLC SIEMENS.
- Touch-screen display.
- Safety guards in aluminium and métacrylate.
- Different configurations and two versions are available:
- Standard: it provides case opening, packing and bottom/top sealing by adhesive tape. This is an optimal configuration for the employ of cartons without partitions or with preglued partitions, as the entire packaging cycle is carried out by the machine.
- Basic: it provides case opening, packing and bottom sealing. The cartons opened on the top are discharged to allow for the next partitions introduction.

output	installed power	6 atm. air consumption	weight	electric absorption
3000 bph	2 kW	400 NI/I'	1200 kg	5 A



Multiformat pick-up head



partitions



Centering funnels for cases with preglued Taping unit for upper and lower flaps sealing



## AUTOMATIC PACKAGING MONOBLOCK packaging machines



### **UNIBLOCK 6000**



The UNIBLOCK 6000 is a new packing Monoblock that has the output of 5,000- 10,000 BPH. The unit automatically erects the carton, seals the bottom flaps with hot glue and inserts the bottles into the case. The Uniblock consists of two operational units integrating the case erecting, bottom sealing unit and packing unit. The case erecting unit picks up cartons from the magazine using special suction cups, opening the carton and seals the bottom with hot melt glue with a pressing and counter pressure device. The magazine has a 75 piece capacity and an extra-large capacity magazine is available upon request. The packing unit sets the bottles coming from the line onto the storage table, the picking head inserts them smoothly and evenly into the case by a single radial movement of the head,

controlled by an inverter. Packing equipment ensures high performance while processing cartons of various formats with or without inside partitions and offers perfect integrity of the labels. Multi-format pick-up heads, separators and centering devices allow the packing of bottles with diameter from 62 mm to 108 mm without any equipment format replacement.





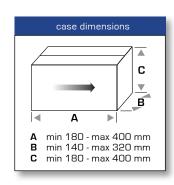
### PACKAGING MONOBLOCK packaging machines **ISOLA**



All packaging phases CASE ERECTION BOTTLES PACKING PARTITIONS INSERTING CASE SEALING

are gathered in the packaging isle, composed by 2 integrated modules. The machine can be equipped with cases weighting, labelling and/or printing application to guarantee a complete system in a small space.

Production till 5000 bph in cases of 6 and 12.









Partitions magazine: 100/150 pieces capacity feedable at non-stop cycle.







### **ISOLA 2 HM**

Composed of 1 module

- Case erecting unit and bottom closing
- Packing unit



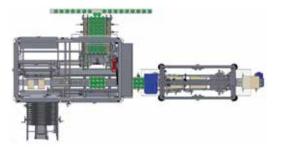
### **ISOLA 3 HM**

Composed of 2 modules. First module

- Case erecting unit and bottom closing
- Packing unit

Second module

• Top closing unit by hot glue or adhesive tape



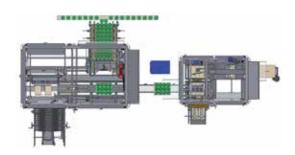
### **ISOLA 4 HM**

Composed of 2 modules. First module

- Case erecting unit and bottom closing
- Packing unit

Second module

- Partitions inserting unit
- Top closing unit by hot glue or adhesive tape



	output	installed power	6 atm. air consumption	weight	electric absorption
ISOLA 2 HM	5000 bph	6 kW	600 NI/I'	2500 kg	13 A
ISOLA 3 HM	5000 bph	7 kW	600 NI/I'	2500 +400 kg	15 A
ISOLA 4 HM	5000 bph	9 kW	750 NI/ľ	2500 +400 kg	19 A

Partitions inserting /closing module: it picks up the partitions from the magazine puts them into the case, and closes the upper flaps by hot melt alive



Sealing pressing device: closing by glue with cases stopped with pressing.



Closing module: automatic top flaps closing by hot melt glue or by adhesive tape.



Cases labelling station.







### BEER TRIBLOCK

### CARRIER STANDARD 200 - ISOLA 2 HM BEER - ISOLA 3/4 HM BEER



### **CARRIER STANDARD 200**

New and innovative packaging solution, it blends in a single machine all carrier erecting and packing. CARRIER STANDARD 200 overcomes manual operations and goes one better current solutions, which require more machines and space. Within its compact frame, affordable and high performing, CARRIER STANDARD 200 is the perfect packaging solution for every craft brewery.

#### Carrier erecting unit

Provides carriers erecting and their transfer to in-line carrier packer.

. APE "teardrop" synchronized and servo- controlled movement design allows carriers feed to the opening station.

### Bottles packing unit

Provides bottles line up and its placement into carriers.

Bottles conveyor ensures continuous product feed to the picking platform.

Carriers, coming from erecting unit, are transferred to packing platform.

Dedicated packing head picks up and places bottles inside the carrier.

A specific carrier centering device provides with follow through packing operations to assure gentle product handling and labels integrity.



Carrier erecting unit



In-line carrier packing unit



### ISOLA 2 HM BEER



A new project, developed on more than thirty - years packaging machinery experience.

It blends all case erecting and packing in a single machine.

Within its compact frame, reliable and high performing, ISOLA 2 HM BEER integrates

the perfect packaging solution for every craft brewery.

#### Case erecting unit

Provides square, well-sealed cases to in-line packer. The pressing device compresses bottom flaps, before packing, to keep up with

the most safe seal before packing operations.

#### Bottles/Carriers packing unit

Provides product line up and placemet. Dedicated packing head picks up and places product inside the case. A special centering device provides follow through packing operations to assure gentle product handling and labels integrity.





Case erecting unit

In-line case packing unit

## ISOLA 3/4 HM BEER

ISOLA 3/4 HM BEER completes the perfect packaging solution for every craft brewery. The machine provides, thanks to an APE unique solution, partition inserting and hot melt top sealing by means of the same machine or, as an alternative, only hot melt top sealing.

#### Partition inserting and top sealing unit

A new solution that blends partition inserting and hot melt top sealing operation in a single machine. The partition head automatically opens multi-celled lightweight chipboard and places it into the case.

Pressing operation is executed while case stops to keep up with the most secure seal.

### Top sealing unit

Provides hot melt top sealing.

Pressing operation is executed while case stops to keep up with the most safe seal.



Partition inserting unit



Hot melt top sealing unit





## PALLETIZER



PAL 1300

The layer-type automatic palletizer PAL 1300 stacks and arranges boxes onto a pallet ready for the warehouse and the retailing chain. The required space is 2,5 m x 2,5 m. Easy to use, PAL 1300 is flexible in the creation and execution of the different pallet patterns which can be generated by control panel.

The palletizer comes in a range of configurations to handle different types of automation equipments and of packaging.

Output up to 6000 bph depending on the format.





### CASE WEIGHT CHECKING SYSTEM

The weight inspection system enables to find out unfinished cartons. This system ejects from the line all cartons with one or more bottles missing or not completely full. By means of an alphanumerical keyboard it is possible to choose minimum and maximum refusal values, with 50 gr as margin of error. The correct weight can be entered manually or by machine self-learning.

Complete with cartons counter device, cartons ejector, integrated control and roller conveyor for ejected cartons, the weighing system has carrying power up to 30 kilos.

Output: 1500 cartons/h

♠ 135





CONVEYORS	
DOG-NC120x120-Q1	Closed 1MT Conveyor complete 120x120
DOG-NA120x180-Q1	Open 1MT Conveyor complete 120x180
DOG-ERM2000-Q1	Motorized roller conveyor length 2 meters
DOG-NTS-2000-Q1	Motorized case conveyor length 2 meters with table top chain
CURVES	
DOG-CC02-Q1	Standard 90 degree curve
DOG-CC05-Q1	90 degree curve with 250 radius
DOG-CC06-Q1	90 Degree curve for R200 mm with disc
DOG-CC01-Q1	Standard 45 degree curve
DOG-CC07-Q1	180 Degree curve for R200 mm with disc
TACTION HEADS	
DOG-TT1-800-Q1	Round table collection motorized with variable mechanical speed 1HP.
DOG-TGD1-Q1	Side transfer 1 mt 1HP motor
IDLE HEADS	
DOG-TDR01-Q1	Idle head
DOG-TDR04-Q1	Idle head with rotary table 800 mm diameter
ACCUMULATION TABLE	ES
DOG-PA520-Q1	5 chains accumulation table length 2000 mm. complete with speed variator and acetalic chains 82,6 mm. wide
DOG-PC4-10P-Q1	Motorized loading table for cylindrical bottles complete - 4 chains 1,0 meter - PVC platform
DOG-PC5-15-Q1	Motorized loading table for cylindrical bottles complete - 5 chains 1,5 meters
DOG-PC5-15P-Q1	Motorized loading table for cylindrical bottles complete- 5 chains 1,5 meters, PVC platform
DOG-PC6-15-Q1	Motorized loading table for cylindrical bottles complete - 6 chains 1,5 meters
DOG-PC6-15P-Q1	Motorized loading table for cylindrical bottles complete - 6 chains 1,5 meters, PVC platform
DOG-PC6-20-Q1	Motorized loading table for cylindrical bottles complete - 6 chains 2,0 meters
DOG-PC6-20P-Q1	Motorized loading table for cylindrical bottles complete - 6 chains 2,0 meters, PVC platform
PACK-OFF TABLES	
DOG-TINC1500DX-Q1	Pack-off table for manual packaging - 1,5 meters right direction
DOG-TINC1500SX-Q1	Pack-off table for manual packaging - 1,5 meters left direction
DOG-TINC2000DX-Q1	Pack-off table for manual packaging - 2,0 meters right direction
DOG-TINC2000SX-Q1	Pack-off table for manual packaging - 2,0 meters left direction
BIDIRECTIONAL TABLE	ES
DOG-TAVBID420DX-Q1	Bidirectional Packoff Table Right 4 chain 2 meters
DOG-TAVBID420SX-Q1	Bidirectional Packoff Table Left 4 chain 2 meters
DOG-TAV-CAM20-Q1	Pack-off table for manual packaging for trucks
CHAINS	
DOG-826DP-Q1	Plastic straight chain
DOG-826CP-Q1	Plastic flex chain
DOG-838CP-Q1	Plasticflex chain thick 8.7mm
DOG-838DP-Q1	PLastic straight chain thick 8.7 mm
DOG-826CPR200-Q1	Plastic flex chain R 200
DOG-826DA-Q1	Stainless steels straight chain
DOG-826CA430-Q1	Stainless steels flex chain
SIDE CONNECTION DR	IVING HEADS
DOG-TGD1-A-Q1	Truck side connection 1HP Sp.VAR A
DOG-TGD1-B-Q1	Truck side connection 1HP Sp.VAR B
DOG-TGD1-C-Q1	Truck side connection 1HP Sp.VAR C
	ac. state commender and opposite







 $\ensuremath{\mathsf{TT1-800}}\xspace$  | Round table collection motorized with variable mechanical speed 1HP. .



 $\textbf{TDR01} \mid \text{Idle head, 1HP Motorized tow-head with variable mechanical speed. } variator$ 



**TGD1** | Side transfer 1MT 1HP motor



 $\label{eq:pc6-20P} \textbf{PC6-20P} \mid \textbf{6} \text{ chains loading table , length 2000 complete with speed variator acetalic chains 82,6 mm. wide and pvc plate}$ 



ERM2000 | Motorized roller conveyor



NC120X120 | Closed 1MT Conveyor complete 120x120



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