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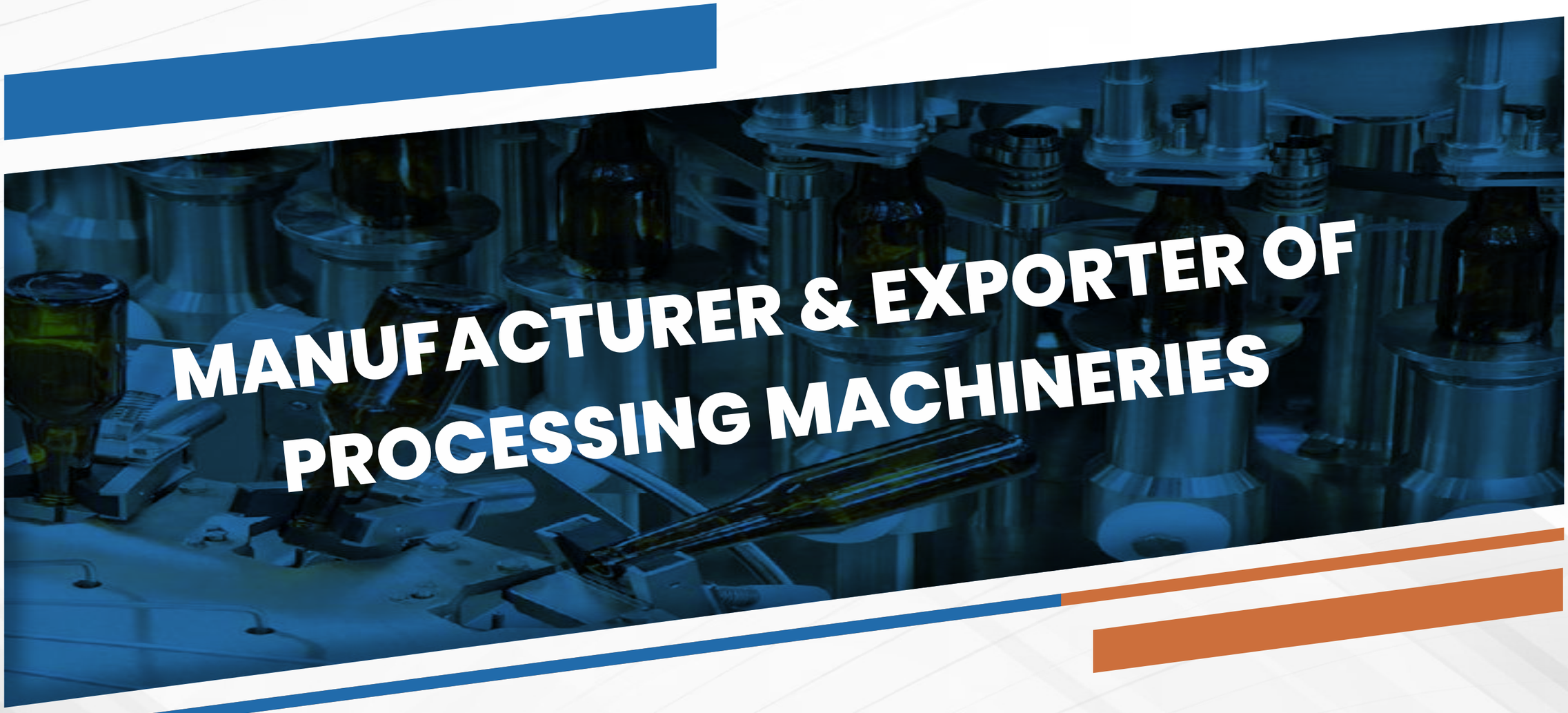

MANUFACTURER & EXPORTER OF PROCESSING MACHINERIES

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ENGINEERING

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NEW FILLING LINES

CHARACTERISTICS

- Speed: from 1.500 to 35.000 bottles per hour;
- Products to fill
  - Beverage industry: water, wine, soft drinks, spirits;
  - Food industry: milk and dairy products, edible oil;
  - Chemical products: household chemistry and body care products.
- Turn-key projects possible;
- Study of customer's demands and presenting an optimum solution;
- Consultancy services, logistics, and international transport;
- A wide choice of conveyor systems, dividers, elevators for bottles, packs and pallets;
- Tunnel pasteurizers, warmers, and coolers;
- Bottles dry with air knives before labelling;
- CIP plants with 1-2-3 tanks to be integrated with URANO and GIOVE monobloc series with manual, semi-automatic and automatic control.

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SPECIAL PROJECTS

MOBILE FILLING LINES INSTALLED ON TRUCKS

CHARACTERISTICS

- Mobile filling lines for bottling into glass and PET bottles.
- At customers' request the mobile filling lines can be additionally complete with technological equipment and packaging machines.
- Every mobile filling line can include other types of machines required by the buyer.
- The mobile bottling plants can be installed in standard road and sea containers or on trucks.
- The monoblocs integrated into the mobile bottling lines can be supplied as special versions to optimize their mobility.

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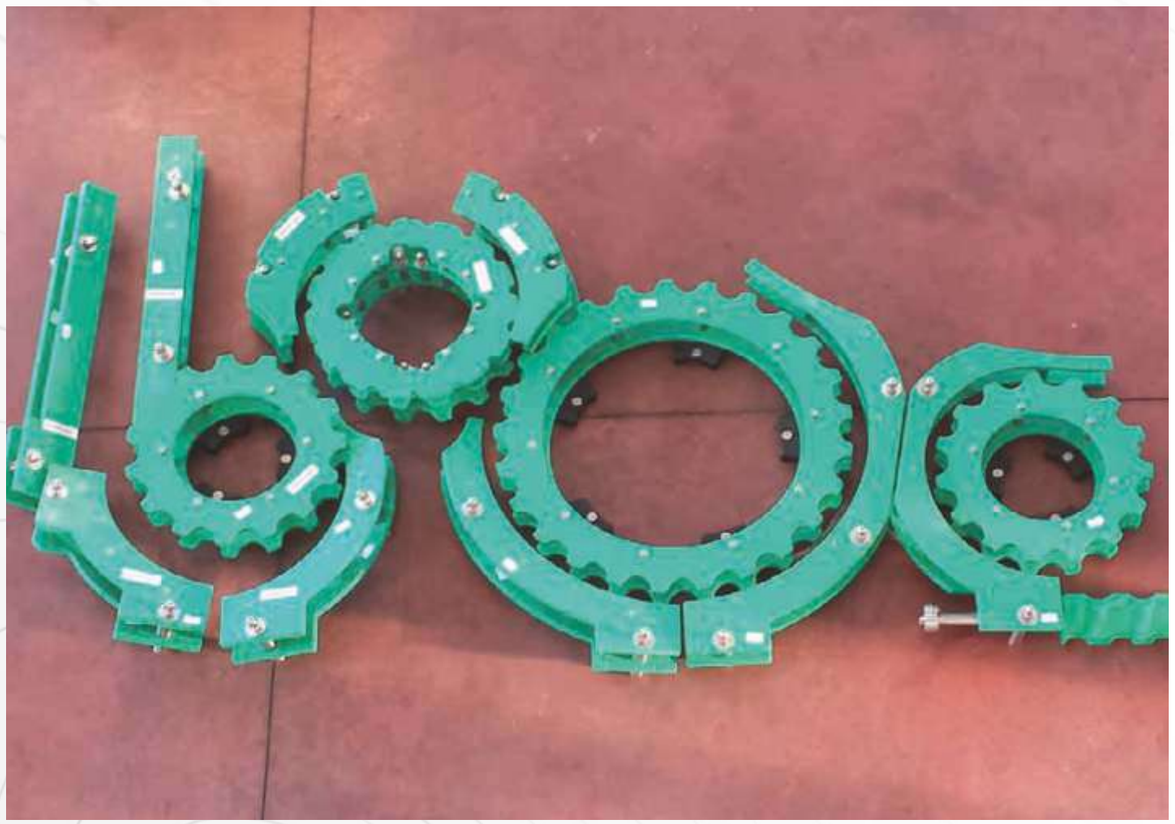
USED FILLING LINES, TECHNICAL INTERVENTIONS, AND AFTER SALES SERVICE

CHARACTERISTICS

- We provide engineering services, technical assistance, modernization, and retrofitting of available bottling lines.
- Our technicians can perform the dismantling, relocation, reinstallation, and start-up of the filling lines available at the customers' premises.
- Work-out, manufacturing, and installation of new format parts at the available lines of the customers.
- Consultancy in re-designing the existing line configurations and preparing new layouts aimed at increasing production efficiency and decreasing production costs.
- Bringing existing lines in conformity with the acting safety regulations.
- Supply and installation of spare parts for the existing bottling lines



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URANO CANS

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SERIE URANO CANS

ISOBARIC MECHANIC LEVEL FILLER FOR CANS

- Productivity from 4.000 to 72.000 cans/h.
- Monoblock is suitable for sparkling and still products, it is also fit for hot filling with product recycling.
- Number of valves from 16 up to 108.
- Workable cans range from 150 ml to 1,000 ml.
- An isobaric-certified tank of ring-type construction with mirror polished and cone-shaped bottom for a perfect cleaning.
- Electrical height adjustment of the iso-baric tank and the cam supporting ring without the use of any manual device.
- Coupling with the main models of seamer from 4 to 18 heads is possible

FILLING VALVES

- Filling system with an isobaric mechanic valve, suitable to work with counter-pressure up to 6 bar (standard model) or higher pressure (on request)
- Valves in stainless steel AISI 304/316, the parts in contact with the product are polished or electro-polished.
- Fluxing or degassing buttons with external springs to make cleaning and replacement easier.
- Internal seals in foodstuffs material, certified according to the CE regulations.
- The number extremely reduced of seals grants maximum sterility and cleanliness.
- Centering moving bell, controlled by a mechanic cam for perfect centering and seal of the can edge
- Possibility of treating cans with different lids by replacing only the centering bell. Mechanic control of opening and closing with friction placed outside the tank to avoid the possibility of pollution.
- Possibility of installing level and volumetric electro-pneumatic valves with flow rate meter.

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LIFTING JACK

- Jacks in stainless steel and free from lubrication.
- Jacks are of pneumatic type with cam return.
- The parts moving vertically exploit bushing and self-lubricating polymers at very low friction.
- The jack-controlling wheel is in plastic material in order to avoid the wear of the cam, which is mounted on stainless bearings.
- Strong, reliable, precise jack, suitable for very fragile containers and for containers with extremely precise tolerances.
- The jack is complete with a can-body grip in order to avoid container deformation.
- The assembly of the jack in the machines is realized by a completed assembled jack for simple and quick maintenance.

SIZE CHANGE

- The selected worm is manufactured in high-density plastic material. It is controlled by an angle gear in stainless steel with permanent lubrication.
- The entry star and the conveyor are constructed in plastic material for lines of low and medium speed, while for high-speed lines, they are manufactured in stainless steel, and mirror-polished for the parts in contact with the container.
- Worm, star, and conveyor are equipped with quick unhook clutches.
- The body guide, applied to the lifting jack, is in mirror-polished stainless steel and it can be easily replaced.
- Automatic system of tank and cam ring lifting controlled by a control board (no manual systems of hooking/blocking are required)
- With the height adjustment, it is possible to use different sizes of containers and to vary the product level inside the can.
- The height is controlled by two inductive positioning sensors managed by the PLC.

FILLING PROCESS

The can is positioned through an entry star on the lifting cylinder plate. The lifting cylinder rises to its maximum stroke. The valve-centering device allows its external body to descend. The ring seal is inserted into the centering device which then presses on the can neck, sealing it. Through a throttle, the CO2 circuit is opened, while the liquid passage remains closed. A cam opens the button which through a separated circuit allows the CO2 fluxing; in this way, there is the outflow of the air inside the can to avoid the product (during the filling process) coming into contact with air containing oxygen.

Once the fluxing phase is finished, the pressure inside the can is balanced with the tank pressure. At this point, an adjusting spring permits the gradual opening of the liquid, which through a baffle flows, widens against the inner sides of the can to avoid foaming.

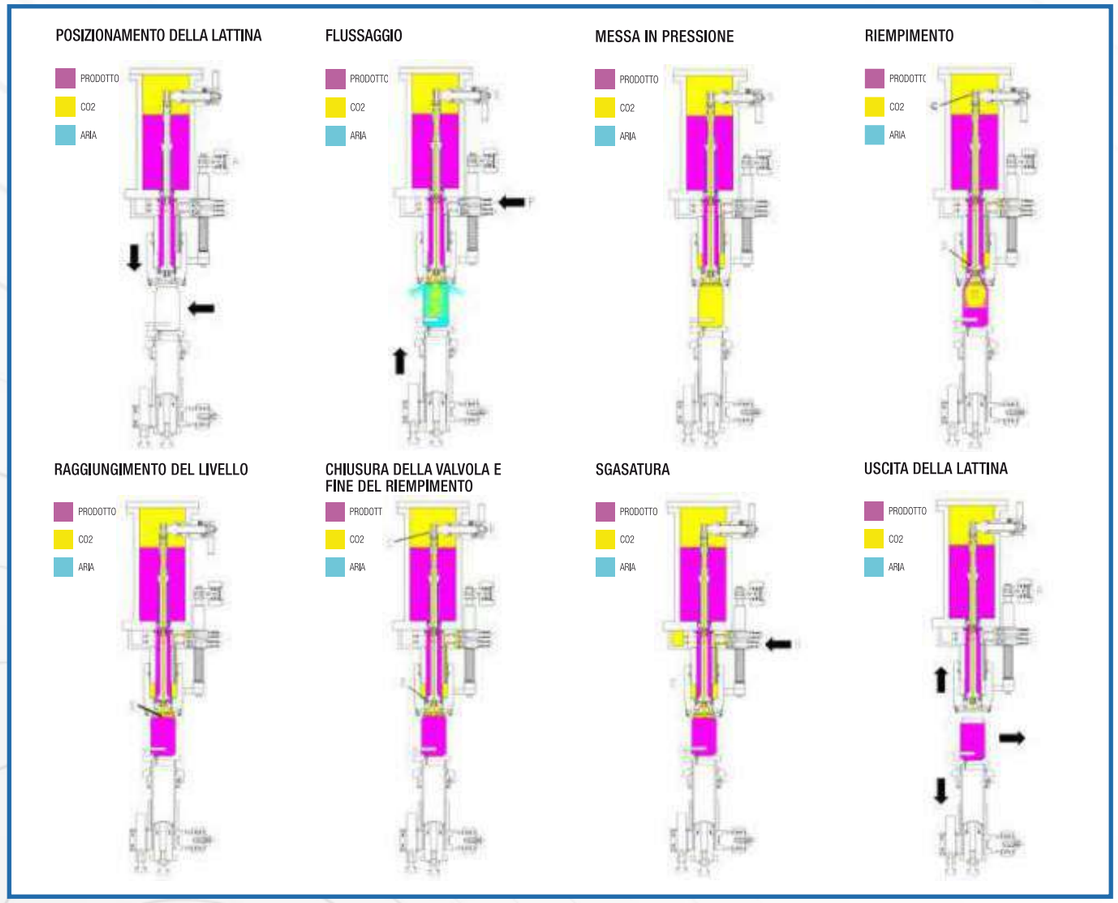
When the liquid finally covers the pipe leveling hole, the filling stops immediately because the level is reached.

The throttle is positioned in a way to close the liquid passage.

A second button opens a circuit that allows the decompression inside the can and also prevents it from imploding during the filling valve detachment phase. The circuit of the decompression is a piped circuit so that every leak of gas or foam on the machine is avoided..

During the phase of detachment of the valve, the centering device rises and the lifting cylinder, through a cam, descends till it reaches the working floor.

A conveyor and chain system with pegs transfers the already filled can towards the seamer.



CLEANLINESS

INTERNAL

- Machine suitable for cleanliness at the closed circuit.
- Dummy cans mounted on the filling turntable.
- Insertion of dummy cans in a manual way without the usage of any device.
- Possibility of equipping the machine with an automatic insertion.
- The dummy can, inserted in the centering device permits the complete washing of the valve and of the finished can contact zone with the mouth.
- The dummy cans are connected to a manifold for the counter-current washing and the total drainage of the tank at the end of the washing phase.
- An external skid, on which are mounted all the process valves, permits to cleanse of all the circuits through a CIP system, in a completely automatic way.
- Possibility of coupling the filler to an automatic already existing CIP system.
- All parts coming into touch with the product are subject to forced washing in current and counter-current even with very aggressive chemical products or at very high temperatures without running the risk of compromising the functionality of these parts.

EXTERNAL

- The basic version of the machine is equipped with a series of nozzles for the washing of critical zones.
- The basic plant foresees the use of hot and cold water.
- The machine can be equipped with a complete foaming system, by customer request.

BASE

- All machines are equipped with a basement entirely in "high clearing" stainless steel. The peculiar shape with strong multiple angles gives this type of base auto-draining characteristics, permitting a quick removal of traces of products and avoiding the stagnancy of liquids.

CONTROLLED CONTAMINATION CHAMBER

- All machines are equipped with a basement entirely in "high clearing" stainless steel. The peculiar shape with strong multiple angles gives this type of base auto-draining characteristics, permitting a quick removal of traces of products and avoiding the stagnancy of liquids.

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SEAMER

- The filler can be coupled to the main models of seamer from 4 to 18 heads.
- The choice of the seamer is done according to the needs of the customer.
- The mechanic coupling is done with a universal joint transmission for perfect and sure synchronization between filler and seamer.
- The electrical board can be integrated inside the machine board to have a simpler management by the machine.
- The seamer can be equipped with the necessary options according to the needs of the customer and the product to work/fill.
- On request, it is possible to have electronic coupling/synchronism.

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GIOVE

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SERIE GIOVE

MACHINERY FOR STILL PRODUCTS FILLING INTO GLASS AND PET BOTTLES

- Speed: from 1.500 to 35.000 bottles per hour.
- The machine is characterized by a high level of production flexibility and is designated for filling a wide range of still (non-carbonated) and low-carbonated products as well as suitable for hot filling technology with product recirculation.
- The machine is offered in three versions: mechanical for filling by level, electro-pneumatic type also for filling by level, and the most advanced version of electro-pneumatic volumetric and net weight filling.
- The machine has been designed for working with glass bottles.
- A modified version for filling into PET bottles with NECK HANDLING technology foreseeing holding and transferring the PET bottles being held by the neck ring.
- The machinery of this series is suitable for working with any format and dimensions of bottles, from mignon sizes to big-capacity containers.
- Various filling types: gravity filling, low vacuum and inert gas saturation.
- Simple and efficient CIP cleaning using the dummy bottle sets for integrating the filling monobloc with the automatic cleaning-in-place plant actuating all the washing cycles in a closed contour without any interference from the line operator.
- Simple and reliable mechanical components of European origin guarantee the reliability and durable life cycle of the machine's operation.
- Easy maintenance of the machine thanks to the profound research and development work resulting in specific design peculiarities of the machine, and comfortable access to all the aggregates and parts of the machine for maintenance and repair operations.

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FILLING VALVES

MECHANICAL VALVE FOR GRAVITY FILLING BY LEVEL

- Gravimetrical mechanical filling valve for gravity, low vacuum, and inert gas filling operations
- The filling valve is completely made of AISI 304 or AISI 316L stainless steel, with external springs and a minimum number of sealings, guaranteeing the maximum sterility and aseptic conditions of filling operations.
- The leveling is obtained by calibrated inserts on the outer side of the valve; the centralized level adjustment system is offered optionally.
- The inner geometry of the filling valve has been designed to eliminate the shock impact on the product and to ensure the complete drainage of all the washing solutions and liquids during all the CIP cleaning phases.
- Various models and modifications of the mechanical filling valves are available, depending on the specific characteristics of the products to be filled.

ELECTROPNEUMATIC VALVE FOR GRAVITY FILLING BY LEVEL

- In conformity with the specific features of the products to be filled and peculiar characteristics of the bottles, the electro-pneumatic filing valve provides for accurate control of all the filling phases: single and double pre-evacuation of air from the bottle, flushing with inert gas, automatic filing level adjustment, etc.
- The electronic filling valve control system assures the individual adjustment of the processes and phases of bottle filling, independent of the machines' working speed.
- The recipes (combinations of product specifications and bottle formats) are memorized in the PLC of the machine and recalled through the operator's panel.
- The filling valve is completely made of AISI 304 or AISI 316L stainless steel to guarantee maximum sterility and aseptic filling conditions.
- The special design of the filling valves ensures the filling of bottles with very small necks and opening diameters of 9-10 mm.
- The centralized filling level regulation system assures the simultaneous filling level control of all the valves without any necessity for manual intervention,
- The amount of sealings is reduced to a minimum.
- The inner geometry of the filling valve has been designed to eliminate the shock impact on the product and to ensure the complete drainage of all the washing solutions and liquids during all the CIP cleaning phases.
- The unique design of the filling valve provides the possibility of filling all the types of products into a wide range of bottle formats.

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ELECTROPNEUMATIC VALVE FOR GRAVITY FILLING BY LEVEL

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ELECTROPNEUMATIC VALVE FOR VOLUMETRIC AND NET WEIGHT FILLING

- The electro-pneumatic valve for volumetric or net weigh filling foresees no contact between the filling valve and bottleneck. This system is suitable for working with both extra small and very big PET bottle formats.

- The electronic control system allows the adjustment of filling speed in the initial, intermediate, and final phases of bottle filling to prevent product foaming and spilling. The recipes (combinations of product specifications and bottle formats) are memorized in the PLC of the machine and recalled through the operator's panel.
- The filling valve is completely made of AISI 304 or AISI 316L stainless steel to guarantee maximum sterility and aseptic filling conditions.
- The amount of sealings is reduced to a minimum.

Filling process control:

- - volumetric version of the filling valve (filling by volume): KROHNE electromagnetic or mass flow meters, depending on the characteristics of the product to be filled.
  - Weight version of filling valve (net weight filling): with weight cells.

Absence of bottles lifting cylinders.

-

BOTTLES LIFTING CYLINDERS

- The GIOVE series filling machines are equipped with closed contour bottles lifting cylinders, pneumatic lifting by compressed air, and lowering by mechanical cam.
- The lifting cylinders for bottle platforms are made of stainless steel. The moving parts are furnished with inlays, bushings and self-lubricating components not demanding any technical maintenance.
- Depending on the types of bottles to be filled, three varieties of bottle lifting cylinders are being offered:
  - Upper lifting cylinders for PET bottles with Neck Handling technology foreseeing the gripping and transfer of PET bottles by their neck rings;
  - Lower lifting cylinders for bottle platforms elevating and lowering, suitable for handling glass bottles and PET containers without using the Neck Handling bottles gripping and transfer system;
  - Lower lifting cylinders with a controlled moving pace for handling special design glass bottles, for example, with extra small mignon bottles or very big containers.
- The dismantling and further installation of each of the above-mentioned types of lifting systems are very quick because the lifting cylinder is demounted and installed anew being assembled, which ensures the economy of time, practicality, and safety.

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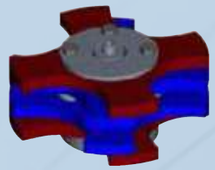
FORMAT CHANGE

GLASS BOTTLE

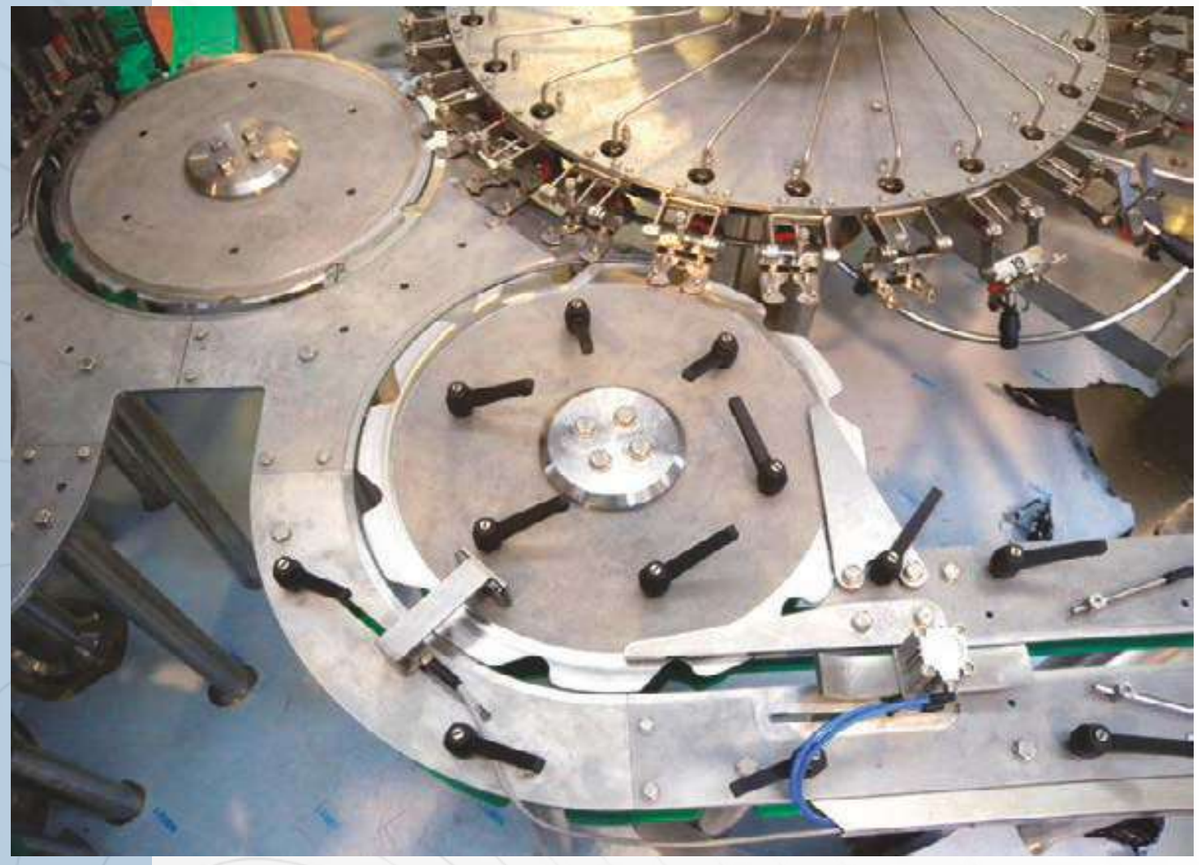
- The bottles are moved using worm screws and transfer stars with individually elaborated geometry for either cylindrical or shaped bottles.
- All the worm-screws, stars, and guiding arches are equipped with quick dismantling and mounting mechanisms without any tools.
- Optionally, the following versions of format change parts are available:
  - Adjustable multiformat infeed worm-screws
  - Universal multiformat stars with manual adjustment for each of the formats
  - Special stars with grippers



PET BOTTLE

- The Neck Handling system is designated for feeding and transferring the PET bottles being gripped by the neck ring and includes the transfer stars and guiding arches made of stainless steel; there is no need to change parts if the bottles differ from each other by height and bottle body diameter provided that the
- neck of all the bottles is the same.

  A special type of transfer stars fitted with gripping pincers for PET bottleneck handling is available as an option; these stars with grippers are usually offered for high-speed lines.



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RINSER

- The rinsing carousel is completely made of AISI 304 or 316L, the Washable version (i.e. suitable for spraying under pressure) guarantees an ideally clean interior bottle surface.
- One- and two-channel rinser models are available; a two-channel modification ensures the possibility of double treatment of the inner side of the bottle either with washing solution and water or with further blowing by compressed air. The spraying nozzles are of two types: fixed or mobile (penetrating the bottle).
- The basic machine is equipped with a "No bottle no rinsing" system
- An electro-pneumatic version of the rinser is offered as an option: the memorizing and memorizing of the recipes for bottle rinsing are set and re-called directly on the control panel of the machine.
- Among the available options, we offer a rinsing liquid recirculation tank with its pump and filters, automatic detergents dosing aggregate, and bottle external surface washing system.

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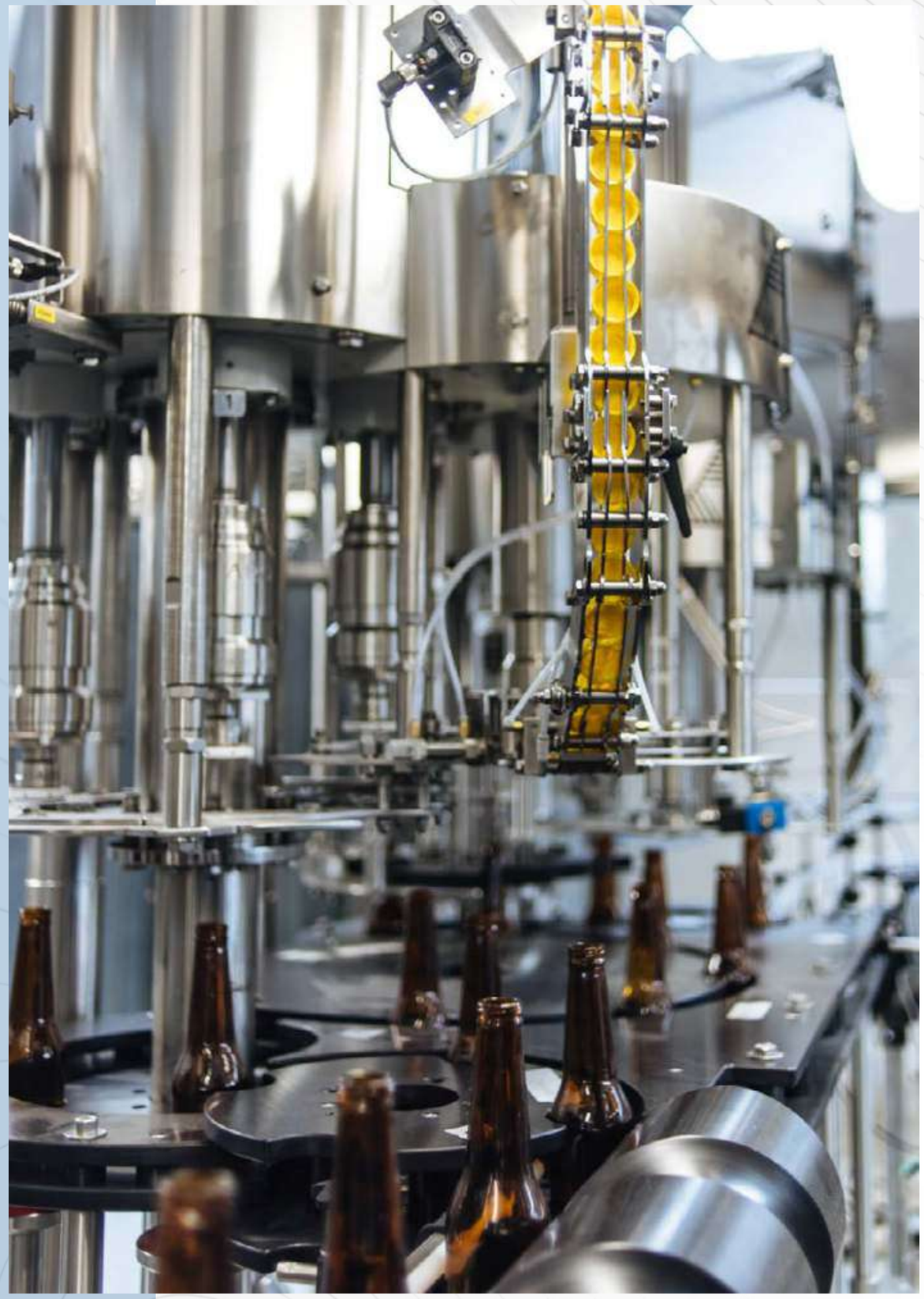
CAPPING SYSTEM

- The Nelden monoblocs can be equipped with capping turrets for various types of closures, including natural or synthetic corks, aluminum or plastic screw caps, crown corks, sport caps, and so on.
- One or more capping turrets can be installed on the Nelden monoblocs, either mono- or multiple-head versions. A wide range of options is available upon the customer's request.



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MACHINE SANITIZING

INTERNAL

- The scope of supply includes dummy bottles set for CIP washing and sanitizing of the internal part of the machine.
- Depending on the customer's wish, the dum-my bottles can be either manual or (semi)-automatic.
- The machine is equipped with a separate channel for return, recirculation, and drainage of the washing liquid.
- The sanitation of technically advanced high-speed machines is usually performed by automatic CIP plants where all the washing and sanitation phases are controlled electronically by the dedicated software integrated into the monobloc's PLC, to eliminate the risk of mistakes and reduce the sanitary treatment duration.
- All the components and channels of the machine in contact with the product to be filled are subject to forced cleaning in counterflow.
- The high quality of the constituent materials allows the washing and sanitizing of the machine with very aggressive chemical agents at high temperatures and steam treatment without any risk of damaging the filling valves or affecting their functionality and performance.

EXTERNAL SURFACE SANITIZING

- At the request of the customer the Nelden machines can be equipped with the foam washing system for the outer surface washing of the machine, upper and lower parts of the carousels, and beneath the working table structure.
- The external surface washing process is completely adjustable according to the production conditions and working peculiarities.

HYGIENIC "HIGH CLEANING" DESIGN WORKING TABLE

- The increased efficiency of the outer surface washing system can be attributed to the steep roof-shaped working table in hygienic design. The special geometry of the working table structure resembling a roof with steep spans ensures outright and quick drainage of liquids, spilled products, and debris and prevents puddling of stagnant water and washing detergents.

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MACHINE SANITIZING

LAMINAR FLOW SYSTEM OF STERILE AIR AND CREATING CONTROLLED ATMOSPHERE WITHIN THE FILLING MONOBLOC STRUCTURE

- A special ultra-clean version of Nelden monobloc can be offered at the customer's request to ensure the highest hygienic standards of the inner environment within the closed structure using a directed laminar flow of sterile air that has passed through the high-efficiency particulate air (HEPA) filters (or so-called absolute filters).
- The vectored laminar flow of HEPA-filtered sterile air within the closed monobloc structure creates a slightly increased air pressure to safeguard the environment of the machine's structure from microbiological contamination.

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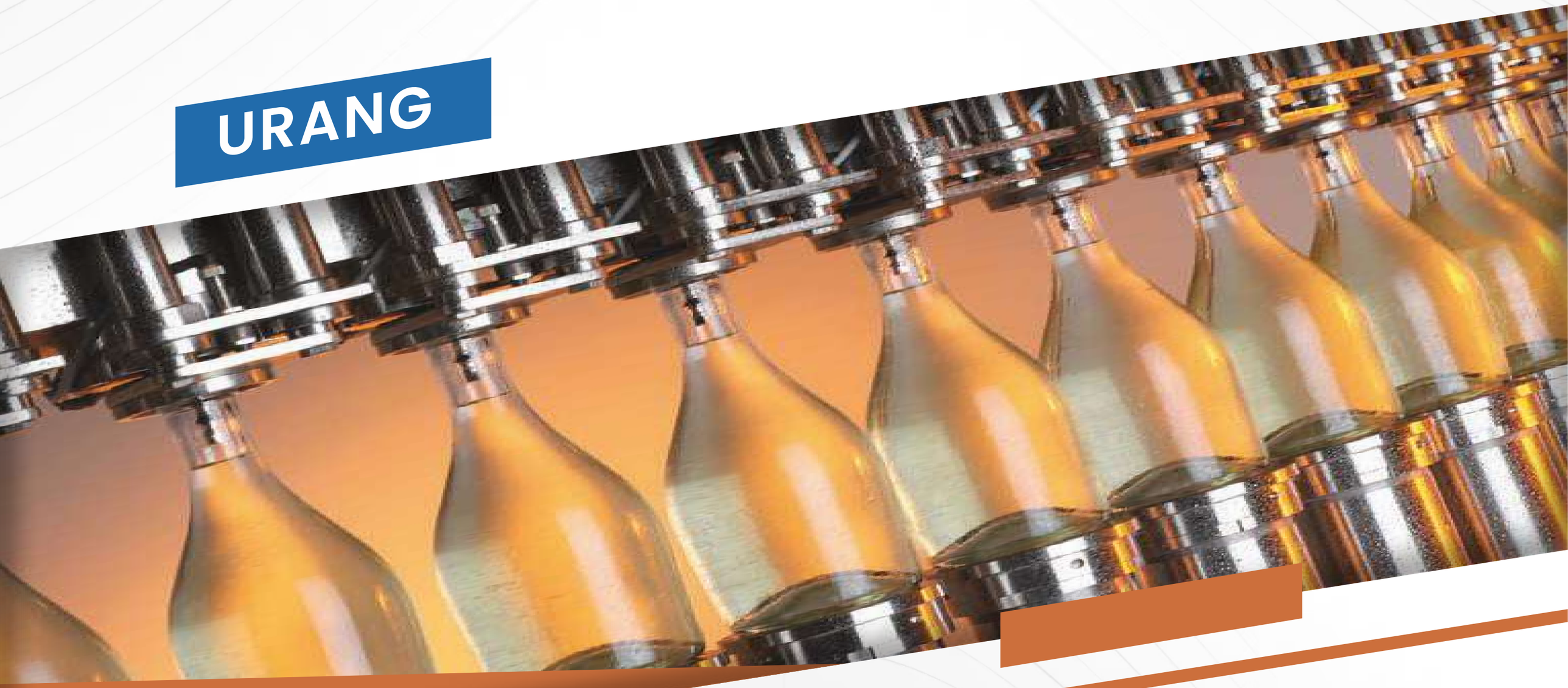
URANG



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SERIE URANO

MACHINERY FOR CARBONATED PRODUCTS FILLING INTO GLASS AND PET BOTTLES

CHARACTERISTICS

- Speed: from 1.500 to 35.000 bottles per hour
- The machine has been designed to fill a wide range of carbonated and non-carbonated (still) products into glass and PET bottles of various formats.
- A separate channel for carbon dioxide for bottle decompression
- Simple and efficient CIP cleaning using the dummy bottle sets for integrating the filling monobloc with the automatic cleaning-in-place plant.
- The filler is in a Washable version (the outer surface of the machine is suitable for washing by pressurized water) assuring the ideal hygienic filling conditions.
- Simple and reliable mechanical components of European origin (EU) guaranteeing the reliability and durable life cycle of the machine's operation.
- Electronic height adjustment of all the carousels of the machine depending on the bottle format, complete with electric drive.
- The ring bowl has been mirror-polished inside and outside to ensure the optimum hygienic filling conditions, tested according to the PED norms for equipment operating under high pressure, and supplied with the corresponding PED test certificate. Both mechanical and electro-pneumatic versions of the filler are supplied with a ring-type product bowl with a conical bottom part while the volumetric electro-pneumatic modification of the machine is complete with a separate stand-alone buffer tank that is installed next to the machine.

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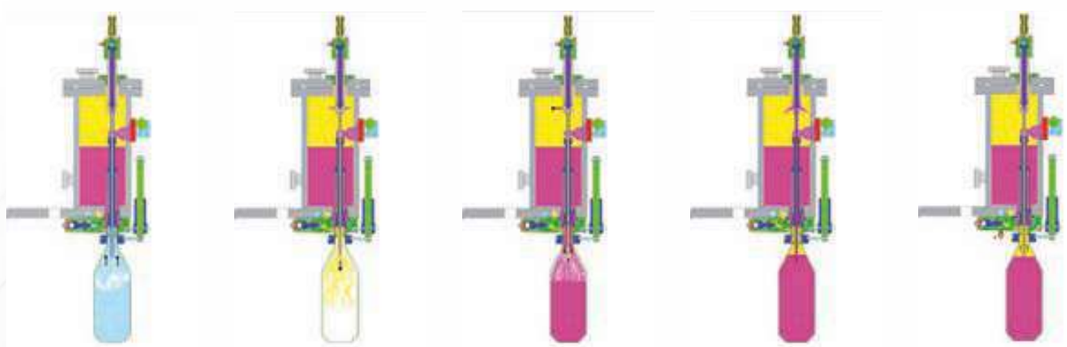
FILLING VALVES

- The isobaric mechanical filling valve is designated for filling carbonated products with counterpressure. The pressure in the standard version machine is up to 6 bar, or higher in special versions, according to the client's request.
- The filling valve is completely made of AISI 304 or AISI 316L stainless steel, with external springs and a minimum number of sealings, guaranteeing the maximum sterility and aseptic conditions of filling operations.
- Vent tubes for product level adjustment with easy-to-dismantle and reinstall mechanism.
- The inner geometry of the filling valve has been designed to eliminate the shock impact on the product and to ensure the complete drainage of all the washing solutions and liquids during all the CIP cleaning phases.
- In case of bottle bursts during filling the automatic system immediately closes the filling valve and rinses the valve and bottle platform to remove the glass debris; at that, the number of adjacent valves and bottle platforms to be rinsed is a programmable function.
- All the configurations of rinsing carousels include the "mobile centering devices" to evade the collision of the bottle with the filling valve at high speeds.
- The adjustments after the bottle format change are completely automatic and any use of tools or operator's interference is not needed.



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FILLING VALVES

- Electro-pneumatic valve is the product of mechanical valve evolution, so it has inherited all the advantages of the predecessor.
- The filling valve is electronically controlled by pneumatic actuators that fully replace all mechanical processes; this makes it possible to eliminate the belt ring, the butterfly opening system and all the mechanical parts normally subjected to wear.

- The main advantage of the electro-pneumatic system is the possibility of free choice of the filling phases sequence and duration, independent of the carouse rotation speed. Besides, the operators can set up the recipes (combinations of product, bottle format, and volume) to be memorized by the machine and recall these recipes from the PLC at any time.
- The filling carousel is equipped with a centralized leveling system that ensures the simultaneous adjustment of the filling level in all the bottles without any manual interference from the operator.
- For filling into PET bottles, a volumetric filling valve either with mass or magnetic flowmeters by KROHNE.

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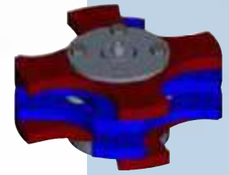
BOTTLES LIFTING CYLINDERS

- The URANO series filling machines are equipped with closed contour bottles lifting cylinders; pneumatic lifting by compressed air and lowering by mechanical cam.
- The lifting cylinders for bottle platforms are made of stainless steel. The moving parts are furnished with inlays, bushings, and self-lubricating components that do not require any technical maintenance.
- Depending on the types of bottles to be filled, three varieties of bottle lifting cylinders are being offered:
  - Upper lifting cylinders for PET bottles with Neck Handling technology foreseeing the gripping and transfer of PET bottles by their neck rings;
  - Lower lifting cylinders for bottles platforms elevating and lowering, suitable for handling glass bottles and PET containers without using the Neck Handling bottles gripping and transfer system;
  - Lower lifting cylinders with a controlled moving pace for handling special design glass bottles, for example, with extra small mignon bottles or very big containers.
- The dismantling and further installation of each of the above-mentioned types of lifting systems are very quick because the lifting cylinder is demounted and installed anew being assembled; that ensures the economy of time, practicality, and safety.

FORMAT CHANGE

GLASS BOTTLE

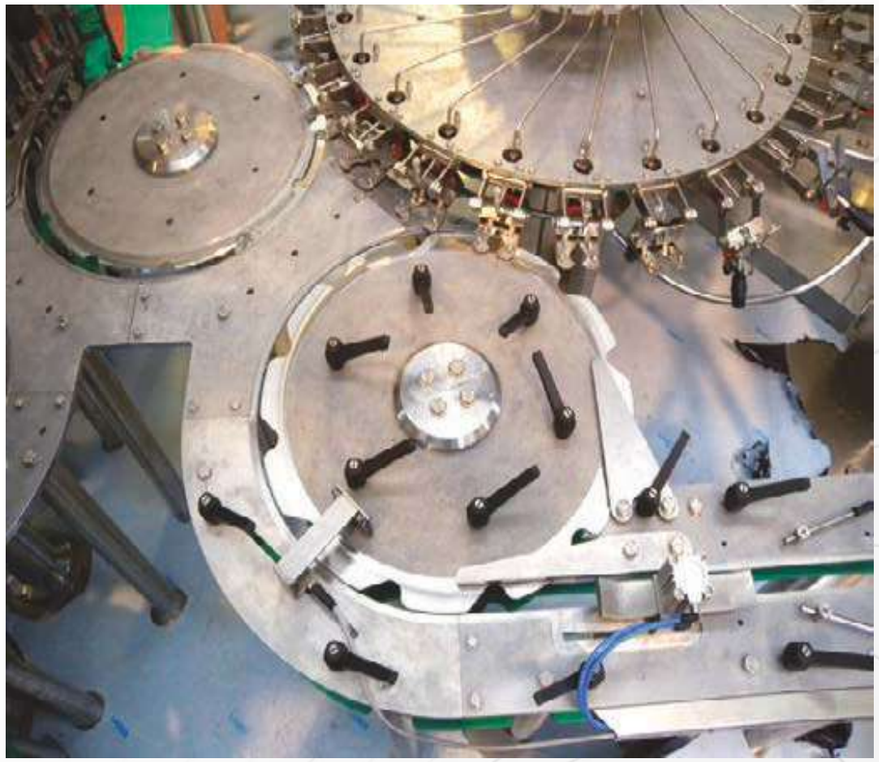
- The bottles are moved by means of worm screws and transfer stars with individually elaborated geometry for either cylindrical or shaped bottles.
- All the worm-screws, stars, and guiding arches are equipped with quick dismantling and mounting mechanisms without any tools.
- Optionally, the following versions of format change parts are available:
  - Adjustable multiformat infeed worm-screws;
  - Universal multiformat stars with manual adjustment for each of the formats;
  - Special stars with grippers.



FORMAT CHANGE

PET BOTTLE

- The Neck Handling system is designated for feeding and transferring the PET bottles being gripped by the neck ring and includes the transfer stars and guiding arches made of stainless steel; there is no need for change parts if the bottles differ from each other by height and bottle body diameter provided that the neck of all the bottles is the same.
- A special type of transfer stars fitted with gripping pincers for PET bottleneck handling is available as an option; these stars with grippers are usually offered for high-speed lines.



RINSER

- The rinsing carousel is completely made of AISI 304 or 316L; the Washable version (i.e., suitable for spraying under pressure) guarantees an ideally clean interior bottle surface.
- One- and two-channel rinsers models are available; a two-channel modification ensures the possibility of double treatment of the inner side of the bottle, either with washing solution and water or with further blowing by compressed air. The spraying nozzles are of two types: fixed or mobile (penetrating the bottle).
- The basic machine is equipped with a "No bottle-no rinsing" system
- An electropneumatic version of the rinser is offered as an option: the memorizing and memorizing of the recipes for bottle rinsing are set and recalled directly on the control panel of the machine.
- Among the available options we offer rinsing liquid recirculation tank with its pump and filters, automatic detergents dosing aggregate, and bottle external surface washing system.

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CAPPING SYSTEM

- The Nelden monoblocs can be equipped with capping tubes for various types of closures, including natural or synthetic corks, aluminum or plastic screw caps, crown-corks, sport caps, and so on.
- One or more capping turrets can be installed on the Nelden monoblocs, either mono- or multiple-head versions. A wide range of options is available upon the customer's request.

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MACHINE SANITIZING

INTERNAL

- The scope of supply includes dummy bottles set for CIP washing and sanitizing of the internal part of the machine.
- Depending on the customer's wish, the dum-my bottles can be either manual or (semi)-automatic.
- The machine is equipped with a separate channel for return, recirculation, and drainage of the washing liquid.
- The sanitation of technically advanced high-speed machines is usually performed by automatic CIP plants where all the washing and sanitation phases are controlled electronically by the dedicated software integrated into the monobloc's PLC, to eliminate the risk of mistakes and reduce the sanitary treatment duration.
- All the components and channels of the machine in contact with the product to be filled are subject to forced cleaning in counterflow.
- The high quality of the constituent materials allows the washing and sanitizing of the machine with very aggressive chemical agents at high temperatures and steam treatment without any risk of damaging the filling valves or affecting their functionality and performance.

EXTERNAL SURFACE SANITIZING

- At the request of the customer the Nelden machines can be equipped with the foam washing system for the outer surface washing of the machine, upper and lower parts of the carousels, and beneath the working table structure.
- The external surface washing process is completely adjustable according to the production conditions and working peculiarities.

HYGIENIC "HIGH CLEANING" DESIGN WORKING TABLE

- The increased efficiency of the outer surface washing system can be attributed to the steep roof-shaped working table in hygienic design. The special geometry of the working table structure resembling a roof with steep spans ensures outright and quick drainage of liquids, spilled products, and debris and prevents puddling of stagnant water and washing detergents.

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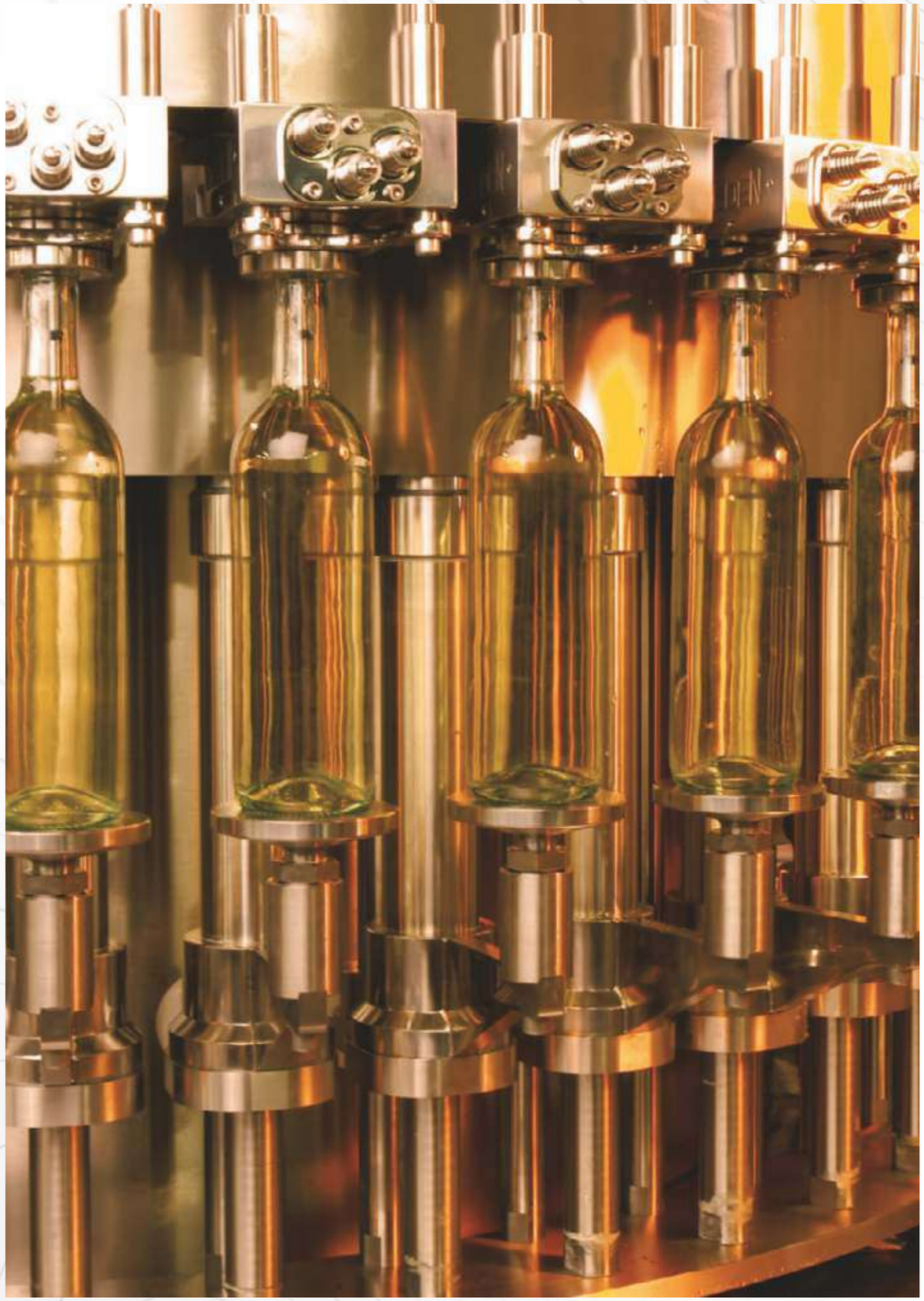
MACHINE SANITIZING

LAMINAR FLOW SYSTEM OF STERILE AIR AND CREATING CONTROLLED ATMOSPHERE WITHIN THE FILLING MONOBLOC STRUCTURE

- A special ultra-clean version of Nelden monobloc can be offered at the customer's request to ensure the highest hygienic standards of the inner environment within the closed structure using a directed laminar flow of sterile air that has passed through the high-efficiency particulate air (HEPA) filters (or so-called absolute filters).
  The vectored laminar flow of HEPA-filtered sterile air within the closed
- monobloc structure creates a slightly increased air pressure to safeguard the environment of the machine's structure from microbiological contamination.



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