

## Brewing









## **CFT BREWING**



CFT Group has created CFT Brewing, a new division for the design, engineering and manufacturing of customized and tailored solutions for the beer industry. Thanks

to ROLEC Prozess- und Brautechnik GmbH, a German company with a strong background

in craft beer processing plants and to SBC Bottling & Canning, a CFT brand specialized in filling, bottling and canning solutions, CFT Group has become a reliable and expert partner for complete and customized turn-key brewing plants.

In 2018 CFT Group acquired Comac, an Italian Company based in Bergamo, Italy, thanks to which the Group can include in its offer premium compact filling machines for cans and glass as well as turnkey keg systems.

CFT Brewing is able to supply turn-key brewing systems starting from the raw material intake up to the finished beer for brew sizes from 10 HL up to 500 HL, as well as the appropriate filling and packaging solutions for beer in bottles,

cans and kegs.

Filling and

Brewing systems

from 10 HL to 500 HL

packaging solutions

3,000 to 90,000 cph

3,000 bph to 60,000 bph

Furthermore CFT Group offers special support and a wide range of services for breweries and brewery projects including:

- Research and laboratory breweries.
- > Engineering and design.
- > Technical and technological consulting.
- > Installation and commissioning.

Your benefits using CFT Brewing and ROLEC technology:

- > Specific technology for specialty beers.
- > Flexible production of all individual products.
- Efficient production for the competitive edge in the market.
- > Reliable project execution and brewing competence.
- > Professional partner with references worldwide.



Brewing engineering, manufacturing and process automation:

made in Germany.

Filling and packaging engineering, manufacturing and process automation made in Italy.







## MALT HANDLING AND MILLING

#### Malt intake

> Pneumatic and mechanic transport systems.

#### Malt storage

Silos, big bags, bags.

#### Specialty malt hoppers

#### Malt cleaning systems

> Flat screens, drum sieves, destoners.

#### Moisturizing screws

#### Milling plants

- 2 roller maltmill.
- > 4 roller maltmill.
- > 6 roller maltmill.

#### Malt conveying systems

- > Round chain conveyors.
- > Trough chain conveyors, belt and bucket elevators.

#### Aspiration plants





## **MASHING SYSTEMS**

## Pre-Mashing System

Reliable mashing-in process without clogging.

Saving of raw material due to a higher extract yield.

Improved product quality by immediate and homogeneous mash distribution.

Incoming grist flow is mechanically split to generate a large contact surface.

Mixing water inlet from central pipe via spray area.

Secondary water inlet via side wall channel.

Efficient and homogeneous mixing.

## Off-center Mash Agitation

Higher yield and mash conversion by improved mixing effect. Smooth product treatment with adjustable and low agitator speeds. Faster mashing times by better distribution.

## Template Heating Jackets

Faster mashing process by improved heat transfer.

Reduced cleaning by lower steam pressure in larger heating area.

Fast and efficient heat transfer by templates.

Low steam pressure for gentle product treatment and reduced cleaning demand.

### Benefits

#### **Cost Saving**

- Less malt consumption by increased extract yield of premashing system.
- Efficient conversion process
   by off-center agitator position.
- Reduced cleaning demand due to less fouling in template heating jacket.

#### Improved Wort Quality

- Smooth product treatment due to low steam pressure and low contact temperature.
- Reduced shear forces thanks to controllable agitator speed.
- Reduced oxygen pick-up during mashing process.

#### Time saving

- Faster mashing-in process.
- Faster mixing and conversion process.
- Reduced heating times.



## LAUTER TUN TECHNOLOGY

## Special Lauter Tun Design

> Adequate lauter tun diameter to handle special gravities and malt types.

> Ring pipe structure with symmetrical run-off pipes for homogeneous wort collection.

Sufficient number of run-off ports for efficient and fast lautering.

> Sufficient number of knives for high extract yields and homogeneous wort collection.

Lauter tun piping for optional in decoction mashing.

## Specific Lauter Tun Controls

High efficiency due to dynamic flow control and differential pressure measurement.

Low turbidity by self-optimizing and variable flow throughout the entire process.

 Improved wort quality by quality parameters as guiding factors for flow regulation during entire process.

Automatic flow adjustment for different incoming grist compositions.

#### Benefits

#### Production Flexibility

- Flexible system design to handle a wide range of beer types.
- Possible Integration of lauter tun into decoction mashing recipe.

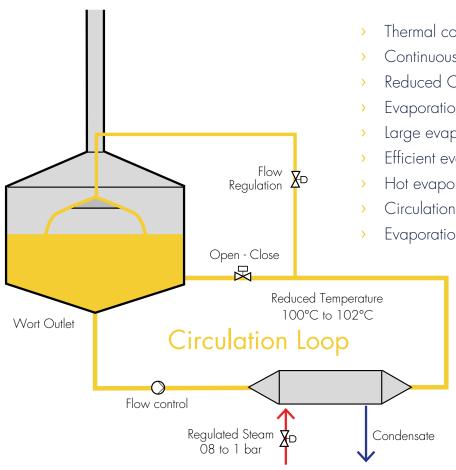
#### **Wort Quality**

- Low turbidity values by variable flow regulation during lautering and sparging phase.
- Low oxygen pick-up due to smooth wort supply from below.

#### Efficiency

- Multiple regulation cycles for high lautering yield.
- High productivity due to fast brewing cycles.

## ORT BOILING SYSTEM: ROLEC X-BOIL



- Thermal conversion (e.g. DMS-P to DMS).
- Continuous movement.
- Reduced CIP demand due to less fouling.
- Evaporation Loop.
- Large evaporation surface.
- Efficient evaporation of off-flavors (e.g. DMS).
- Hot evaporation without steam injection.
- Circulation pump.
- Evaporation surface without steam consumption.
  - Minimum electrical consumption due to speed control.
  - Protein control by adjustable energy input.
  - Homogeneous wort treatment and distribution.

#### **Benefits**

#### **Cost Saving**

- Saving of gas/oil due to less steam demand by reduced evaporation rate.
- Saving of water and detergent by reduced evaporation rate and less CIP cycles.

#### Proven Technology

Various references world-wide-

#### **Production Flexibility**

- Usage of modern and/or conservative boiling method with the same system.
- Gradual and smooth adjustment of wort boiling process is possible.
- Fully flexible production volumes due to external heater concept.

#### Improved Wort Quality

- Controllable DMS and offflavor content by dedicated evaporation loop.
- Controllable protein content thermal and load by independent heating and circulation.
- Gentle heating by low steam and atmospheric pressure boiling pressure.



## HOP DOSING SYSTEM: ROLEC HOPNIK

## Reliability



> Reliable flow without clogging of filtration sieve.

> Proven technology with various references.

## Flexibility

- Usage during wort boiling and/or whirlpool possible.
  - Hop dosing into wort kettle and/or Hopnik is possible.
  - Flexible usage of all hop types and other ingredients.

## Efficiency

- Reduced hop demand due to high hop extraction yield.
- Reduced brewhouse downtime due to fully automatic process.
- Possible combination with any existing brewhouse.



PROCESS CONTROL SYSTEM

## System BeraBrew

- > System platform supplier ROLEC / A-On.
- > Proven usage in brewery projects worldwide.
- > Easy and uncomplicated system handling.

## System Brewmaxx

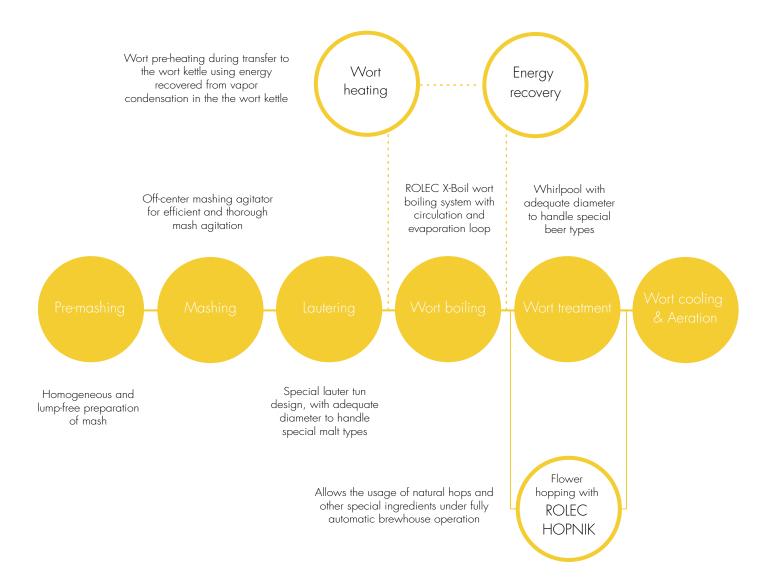
- > System platform supplier ProLeit.
- > Brewmaxx compact edition.
- > Brewmaxx express edition.
- > Brewmaxx full edition.

## System Braumat

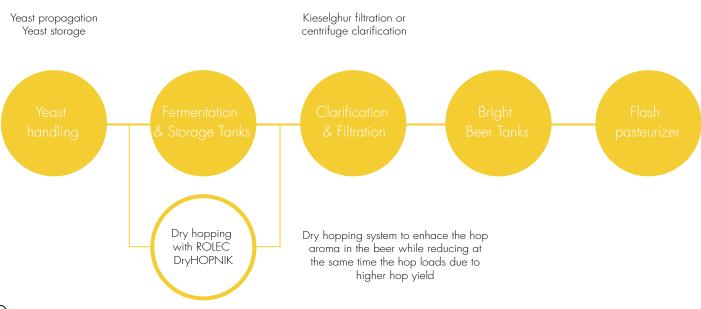
- > System platform supplier SIEMENS.
- > Version BRAUMAT Classic.
- > Version BRAUMAT compact PC S7.



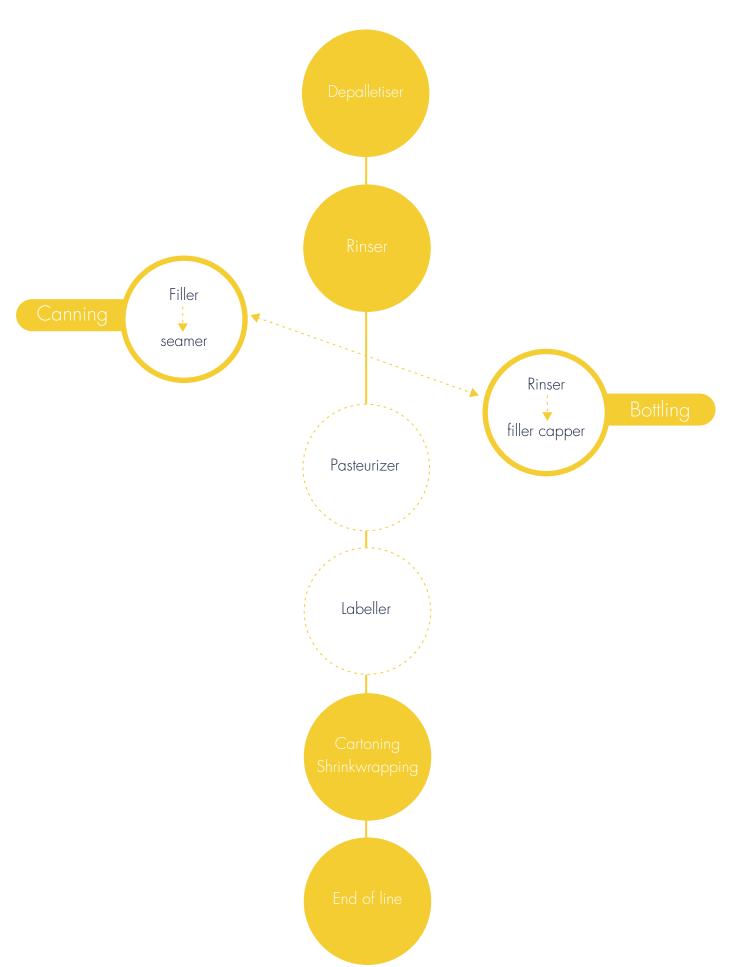
## Brewhouse Process Flow

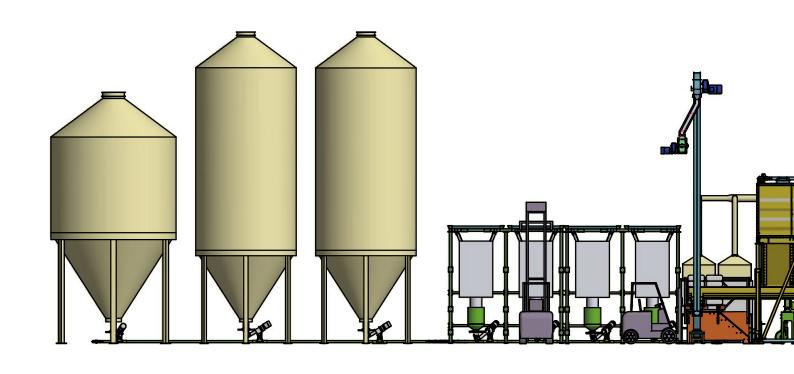


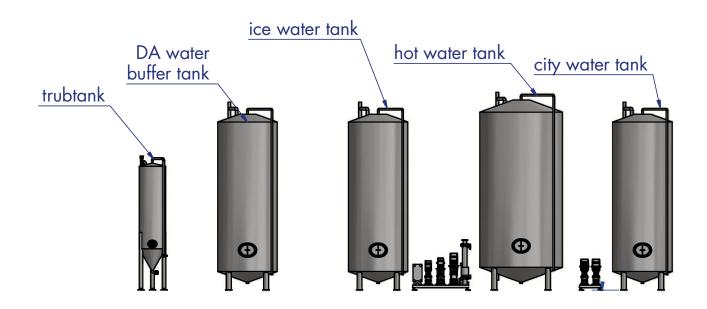
### Cellar Process Flow

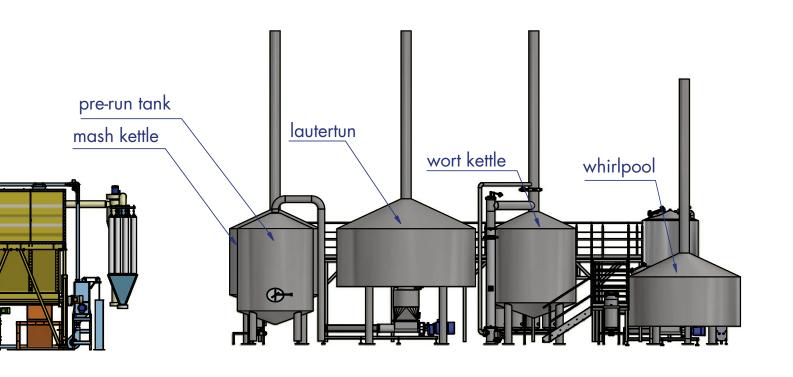


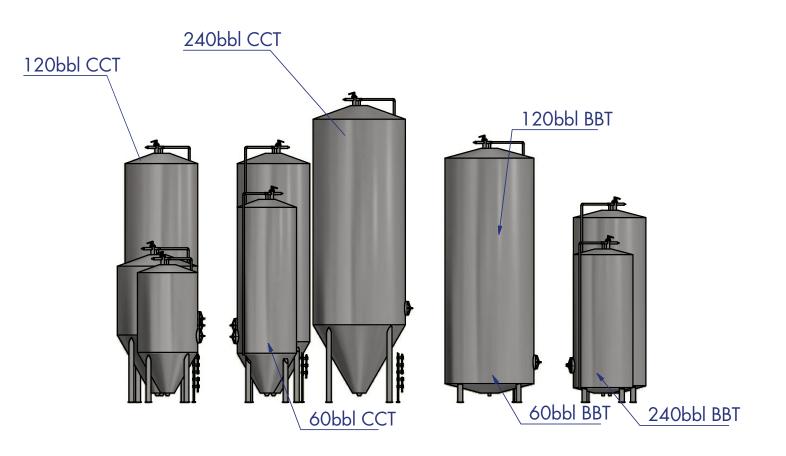
## Filling Process Flow

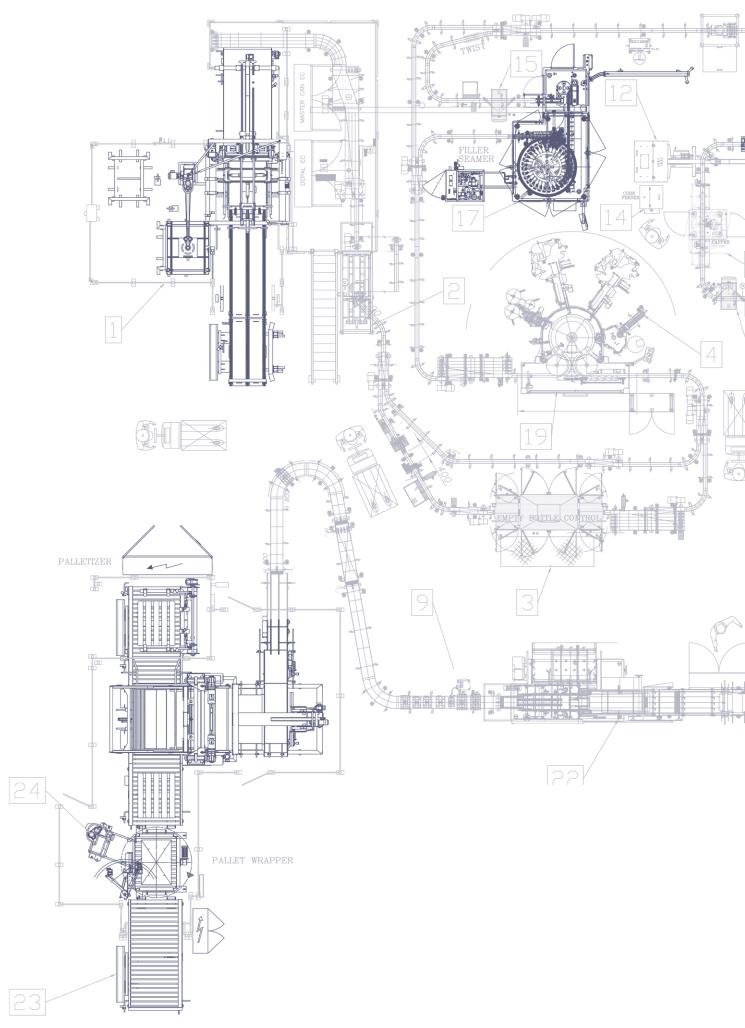


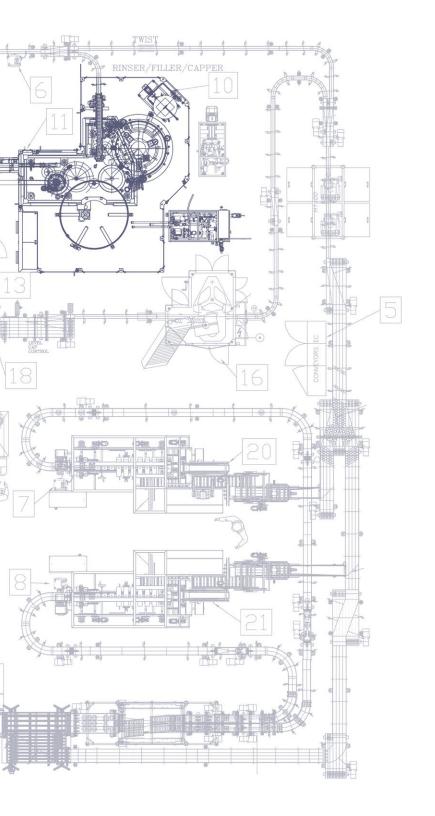












- 1 Depalletiser CFT201
- 2 Lowerator
- 3 Empty botti e i ns pector
- 4 Ink jet coder
- 5 Conveyors EC
- 6 Ink jet coder
- 7 Ink jet coder
- 8 Ink jet coder
- 9 Ink jet coder
- 10 Bottles Rinser
- 11 Bottles Filler
- 12 Magnetic Cap Elevator
- 13 Head capping machine
- 14 Cork feeder
- 15 Level Cap inspector
- 16 Wirehooder
- 17 Can Filler + Seamer
- 18 Level Cap inspector
- 19 Labeller
- 20 Case packer
- 21 Case packer
- 22 Wraparound
- 23 Palletizer CFT 601
- 24 Stretchwrapper

## COMPACT RANGE: PROCESSING



## **FIRSTBREW**

#### Overview

FIRSTBREVV originates from CFT Group's continued desire to produce a sophisticated range of products, similar to that which CFT Group provides for large industrial plants, only on a scaled down version

for small/medium sized breweries. This allows us to provide machine and equipment at competitive market prices but a higher level of technology.

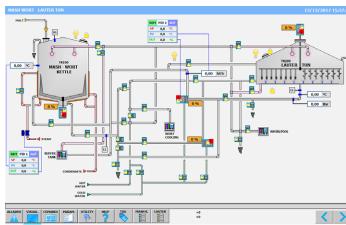


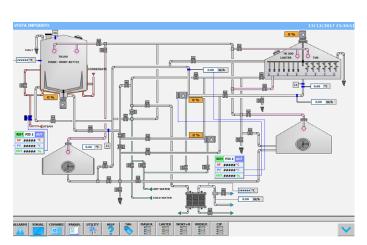
- **COMPACT**: reduced footprint (20 M<sup>2</sup>), while maintaining very high production standard.
- MODULAR: ergonomic solution thanks to vertical structure implementation.
- > AUTOMATIC: high degree of automation.
- **VERSATILE**: different configurations available.
- > **HIGHLY PERFORMING**: from 5.000 HL up to 30.000 HL per year.
- > PLUG AND PLAY: complete turnkey system.



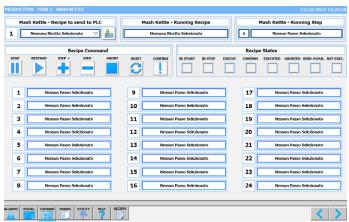
## MAIN TECHNICAL FEATURES







RHI VISUAL COMANDI PARAM. UTILITY HELP



- Suitable for limited space and easy to install thanks to the monoblock design.
- > N.2 centrifugal pumps (1 primary pump, 1 dedicated to Lauter Tun).
- Working time optimization thanks to the separate Whirlpool and product buffer tank.
- > Modularity and expandability with optional section.
- > Reduced time for assembly and installing.
- > Performing: 1 brew in 8 hours, 2 brews in 11 hours,3 brews in 14 hours, 6 brews in 24 hours (with standard beers).
- > High level of automation supported by dedicated software.



## COMPOSITION

The brewhouse is composed of four vessels, designed in a two by two format: a mash/kettle tun with product buffer on the bottom and a lauter tun with whirlpool on the bottom.

FIRSTBREW is equipped with:

## Mash/Kettle tun

- > Cylindrical shell, upper and lower conical bottom in AISI 304.
- High efficiency slow stirrer for effective and uniform product heating and for gentle wort handling.
- > Independent heating jackets for a better distribution of steam on shell and on conical bottom .
- > Effective circuit for steam control and condensate discharge.
- Internal washing system.



#### Buffer Tank

- Cylindrical shell, upper and lower bottom in AISI 304.
- Working time optimization.
- > Internal washing system.

## Whirlpool

- Cylindrical shell, upper and lower bottom in AISI 304.
- Effective removal of hot trub thanks to the machine specific design, having a large diameter to help trub settling.
- Tangential wort inlet to create the forces necessary to get trub precipitation.

#### Lauter Tun

- Cylindrical shell, upper conical bottom and lower flat bottom in AISI 304.
- > False bottom and filtering grid.
- Efficient 2-arm rotating rake with central control system for a correct distribution and cut of the grains during filtration.
- A flap connected with the rotating rake can be manually raised and lowered to push out the spent grains at the end of the filtration phase.
- Internal washing device for sparging and to wash the lauter tun with water and washing liquid.



COMPACT RANGE: FILLERS FOR CANS

## **CYGNUS**

#### Technical Data

Speed up to 1.200 cph. Counter-pressure hybrid glass bottle and aluminium can rinsing / filling / capping / seaming machine

CYGNUS HYBRID GLASS BOTTLE AND
ALUMINIUM CAN RINSING / FILLING /
CAPPING / SEAMING MONOBLOCK is a new hybrid machine manufactured by Co.Mac S.r.l., based on counter-pressure filling technology, suitable for filling carbonated and still beverages in glass bottles and aluminium cans. The use of electro-pneumatic filling valves makes this machine a perfect solution for the low capacity



lines (up to 1.200 bph/cph) where in a very small place both cans and bottles can be treated.

#### Benefits

- Possibility to treat both cans and bottles in very limited space.
- > Optimal settings for all filling parameters (flushing, evacuating pressurization, filling, snifting...)
- Dedicated recipes for different types of containers and product-adjustable and that can be selected by HMI.
- All filling parameters always remain unchanged; they do not depend on the capacity of the machine, as for classical mechanical fillers.



## **PEGASUS**

### Technical Data

Speed up to 3.600 cph. Counter-pressure can filling /seaming machine.

PEGASUS CAN FILLING / SEAMING MONOBLOCK is a part of canning machines manufactured by Co.Mac S.r.l., based on counter-pressure filling technology, suitable for filling carbonated and still beverages in aluminium cans. The machine is designed to rinse cans with CO2 or other inert gas, fill them with product and finally seam the lids. The use of electro-pneumatic filling valves and seamer manufactured by sector leading companies makes of this machine a perfect solution for the low/medium capacity lines (from 3,000 up to 6,000 cph).

#### BENEFITS

- > Optimal settings for all filling parameters (flushing, evacuating, pressurization, filling, snifting...)
- > Dedicated recipes for different types of product adjustable and that can be selected by HMI.
- All filling parameters always stay the same; they do not depend on the capacity of the machine, as for classical mechanical fillers.



## **PERSEUS**

### Technical Data

Speed up to 6.000 cph. Counter-pressure can filling / seaming machine.

PERSEUS CAN FILLING / SEAMING MONOBLOCK is a part of canning machines manufactured by Co.Mac S.r.l., based on counter-pressure filling technology, suitable for filling carbonated and still beverages in aluminium cans. The machine is designed to rinse cans with CO2 or other inert gas, fill them with product and finally seam the lids. The use of electro-pneumatic filling valves and seamer manufactured by sector leading companies makes this machine a perfect solution for the low/medium capacity lines (from 3.000 up to 6.000 CPH).

#### BENEFITS

- > Optimal settings for all filling parameters (flushing, evacuating, pressurization, filling, snifting...)
- > Dedicated recipes for different types of product adjustable and that can be selected by HMI.
- All filling parameters always stay the same; they do not depend on the capacity of the machine, as for classical mechanical fillers.





#### Main Technical Features

- > Speed: up to 6.000 cph.
- > Heavy duty construction.
- > Easy product and format change-over
- Compact footprint.
- > Centralized lubrication system.
- > External valve washing system: external washing spray nozzles (Optional).
- > Innovative screwless system.
- Touch panel: more power and memory than other standards operator panels: includes function to manage production reports, graphs, historical data, condition monitoring.
- > Very low oxygen pick up.
- Integrated pneumatic interface (hydraulic and lubrication) both for filler & seamer.





## AUTOMATIC COMPACT FILLER & SEAMER MONOBLOCK

### Benefits

- HIGHLY COMPACT: downsized footprint while maintaining very high production standard: suitable for limited space and easy to install.
- > **EASY MAINTENANCE**: thanks to its Plug and Play system it requires short installation and start-up operation.
  - HIGHLY PERFORMING: up to 6.000 cph / 100 cpm
  - GUARANTEED QUALITY: lowest DO pick-ups in the market today.







## **PHOENIX**

### Technical Data

Speed up to 10.000 cph. Counter-pressure can filling / seaming machine.

#### PHOENIX\_EPV CAN FILLING / SEAMING MONOBLOCK

is a part of canning machines manufactured by Co.Mac S.r.l., based on counterpressure filling technology, suitable for filling carbonated and still beverages in aluminium cans. The machine is designed to rinse cans with CO2 or other inert gas, fill them with product and finally seam the lids. The use of electro-pneumatic filling valves and seamer manufactured by sector leading companies makes this machine a perfect solution for the low/medium capacity lines (from 7.000 up to 10.000 CPH).

#### BENEFITS

- > Optimal settings for all filling parameters (flushing, evacuating, pressurization, filling, snifting...).
- > Dedicated recipes for different types of product, adjustable and that can be selected by HMI.
- All filling parameters remain unchanged; they do not depend on the capacity of the machine, as it is the case with classical mechanical fillers.





## MASTER C BLOCK

#### Main Technical Features

- > Speed up to 15.000 cph.
- > Heavy duty construction.
- > Easy product and format change-over.

> Flowmeter technology with high filling point accuracy without the use of level tubes and with centralized height fill adjustment.

High CIP efficiency: extensive use of modern high tech materials.

- Option for automatic dummy-can system: the machine could be integrated into an automatic closed circuit system for sanitization.
- Compact footprint with shortest transfer between filler and seamer, guaranteeing low oxygen pick up.
- Filler: easy maintenance due to pre-assembled central manifolds, with direct access from the top.
- Seamer easy maintenace: complete changeover lid and body in less than 2 hours.
- Centralized lubrication system...
- External valve washing system: external washing spray nozzles (Optional).
- > Touch panel: more power and memory than other standards operator panels: includes function to manage production reports, graphs, historical data, condition monitoring.
- > Single sloping base for filler & seamer.
- > Integrated pneumatic interface (hydraulic and lubrication) both for filler & seamer.



## **BENEFITS**



- HIGHLY COMPACT: downsized footprint while maintaining very high production standard: suitable for limited space and easy to install.
- > **FULLY ELECTRONIC MACHINE**: very high degree of automation thanks to its plug and play system.
- HYGIENICALLY DESIGNED: efficient sanitation due to automatic system.
- > HIGHLY PERFORMING: up to 15.000 cph / 250 cpm
- > GUARANTEED QUALITY: lowest DO pick-ups in the market today
- > HIGHLY PRECISE: great filling accuracy.



## STANDARD RANGE: FILLERS FOR CANS



SBC "Master" Family is based on proven counter-pressure filling technology, suitable for the filling of still and carbonated beverages in both steel or aluminium cans.

### **MASTER C TECH**

## Fully Integrated Filler and Seamer Monoblock

#### Technical Data

Machines configurations:

**Filler**: from 28 to 108 valves; coupled with 3000 series which represent the "state of art" in the seaming field.

**Speed**: from 16,000 cph to 90,000 cph

**Product volume range**: from 150 ml up to 1,000 ml Available in several configurations and for different speeds.

#### Characteristics

- > Fast product and format change-over for a very cost effective machine.
- The machine is supplied with fully automatic dummy can system.
- Flowmeter filling tecnology with high fill point accuracy.
- Compact footprint: easy accessibility for maintenance and change-over.
- Shortest transferring chain between filler and seamer in the market.
- nulti-touch screen. More power and memory than other standard operator panels: possibility to manage production reports, graphs, historical data, condition monitoring. Possibility to upload: manuals, files, videos and photos. Intuitive operations: scroll, zoom.
- > Filler easy maintenance. Filler pre-assembled central manifolds, easily extractable from the top.
- > No electrical boxes inside the machine.
- > Baseless design.

- Seamer easy maintenance. Complete change-over lid and body in less than two hours.
- > Fast replacement of seaming rolls arms.
- New unstacker design for quick and easy adjustment.
- Seamer lubrication. Centralized, closed circuit oil lubrication system.
- Hygienic and sanitary design. Filler and seamer with hygienic base design; integrated washing system covers seamer main areas.
- External valve washing system. External washing spraying nozzles.
- > Brushless drive units. Servomotor operated infeed screw: it is possible to exclude one can in case of a problem with a single filling valve or seaming head.
- Automatic I.M.T: During production, the In-Motion-Timer software checks the phase of the chain conveyor between the filler and the seamer. If out-of-phase the software automatically adjusts its position without having to do it manually or electrically.



## 2000 "L" SERIES

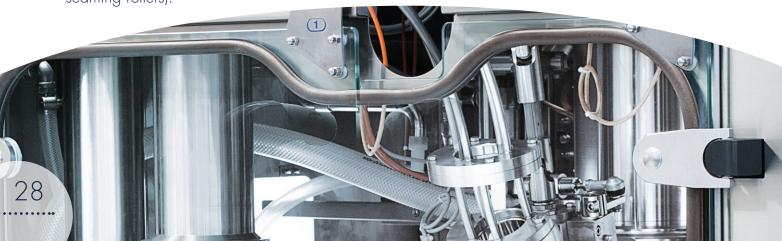
#### Automatic Grease Lubricated Seamer

The 2000 series is able to satisfy low speed capacity and medium high capacity according to the can diameter. These machines are suitable for full and empty cans of regular cylindrical shape in tin, aluminium, cardboard and plastic. Constructed with features of hygiene and versatility that make it suitable for all production needs. Speed range: up to 600 cpm.

#### Characteristics

- > Heavy duty construction.
- Low maintenance costs.
- Quick change-over.
- > High seaming precision with all kind of cans.
- > Easy operation.
- Maintenance over time of the seaming parameters.
- Non stop 24h seaming operation.
- > Stainless steel structure in the seaming area.
- > Input conveyor entirely made of stainless steel.
- Dual cam (desmodromic system) of extractor control.
- Easy adjustment of seam rollers with centralized adjustment points directly on the roll levers.
- > Electronic no-can/no-lid device.
- Motorized plates to lift cans.
- Automatic centralized lubrication (including seaming rollers).
- Possibility of exclusion/reinsertion of second operation rolles.
- Exit of seamed cans at a 90° angle to input.
- Outer casing entirely in stainless steel, with double wall filled with soundproofing material.
- > St. steel control panel.





## 3000 "N" Series

## Fully Electronic Oil Lubricated Seamer

The new 3000 series can seamer represents the state of art in the seaming field. The machines of the new series can be customized for the beverage, food and can-making industry, thanks to their technological features and high performances. Speed range up to 1700 cans/minute.



#### Main Features

- Machine entirely manufactured in st. steel (not only the seaming area!).
  - > Fully electronic oil lubrication system with antileakage device.
  - Closed circuit recovery system for seaming rolls.
  - New hygienic design for an effective sanitation.
- Quick changeover system for a quick format change.

## Standard Equipment

- > 100% st.steel construction.
- Draining base designed to guarantee a high level of sanitation.
- > Draining tank.
- > St. steel infeed conveyor.
- Micrometric vertical and horizontal seaming rolls adjustment.
- Motorized seaming turret height-adjustment.
- Mechanical or electronic synchronization of the filler.

- > Electronic and centralized machine lubrication by oil recirculation and collection system.
- Electronic anti-leakage rollers lubrication by oil in closed circuit.
- Exclusion/re-insertion of the 2nd op during the seam adjustment.
- Micrometric fine centralised adjustment of all second operation rolls.
- Electronic device for controlling the can passage through the seamer.
- Large opening doors for easy access.
- > Steel safety guard protection.

### Benefits

- High quality seaming using all cans types, tinplate, alu and downgaged materials.
- Increased resistance (endurance) to sanitation and washing.
- New hygienic and anti-rust concept.
- Low maintenance costs.
- Non-stop 24 hours operation.
- > Quick change-over.







## **SAGITTA**

### Technical Data

Speed up to 5.000 bph. Counter-pressure glass bottle rinsing / filling / capping machine

#### SAGITTA GLASS BOTTLE RINSING / FILLING / CAPPING MONOBLOCK

is a part of bottling machines manufactured by Co.Mac S.r.l., based on counter-pressure filling technology, suitable for filling carbonated and still beverages in glass bottles. The machine is designed to rinse the bottles with water or other disinfectant solutions, fill them with product and finally close them. The use of electro-pneumatic filling valves makes this machine a perfect solution for the low/medium capacity lines (2.500 up to 6.000 BPH.)

#### BENEFITS

- > Optimal settings for all filling parameters (flushing, evacuating, pressurization, filling, snifting...)
- > Dedicated recipes for different types of product, adjustable and that can be selected by HMI.
- All filling parameters remain unchanged; they do not depend on the capacity of the machine, as for classical mechanical fillers.



## STANDARD RANGE: FILLERS FOR GLASS





## **MASTER G TECH**

#### Characteristics

- > Electropneumatic filling valve.
- New positioning of the filling valve on tank external side: easier to washing.
- > Full automatic tank height adjustment managed by HMI.
- > Full automatic vent tube set up managed by HMI.
- Most hygienic filling valve: level adjustments without any washing needs.
- AseptubeR system (Patent pending system) which avoids any contact with the external environment during the adjustment phases.
- > Electronic control of the filling phases.
- > Excellent product quality maintening.
- > Fully automatic dummy bottles insertion.
- > High-pressure washing of valves, centering ring and bottle lifters.
- > Higyenic design: self-draining base, adjustable water nozzles.
- > Speed from 6.000 up to 60.000 bph.



#### Technical Data

Filler: from 12 up to 120 valves

Speed: 6.000 - 60.000

Possible configuration:

Monoblock: Filler / Capper

Triblock: Rinser / Filler / Capper



## **KEG SYSTEMS**

## MODULAR BEAM TYPE

#### Technical Data

Speed from 30 to 240 kph. Keg washers/fillers suitable for automatic keg lines.

#### Key Features

- A complete keg line can consist of a number of machines, depending on the total output required.

  The technology and components used for this type of machines are the same used in high-speed keg lines. A PLC provided with HMI allows the user to set and check all the machine operation parameters.
- There are several models available, according to the machine output and cleaning cycles required.
  In particular:
  - > The model **PORTOFINO** consists of one washing head, one steam contact position and one filling head, and has got an output of approx. 30 to 36 kph
  - > The model CAPRI consists of two washing heads, one steam contact position and one filling head, and has got an output of approx. 50 to 55 kph.
  - The model SIENA consists of three washing heads, one caustic soaking position and one filling head, and has got an output of approx. 60 to 70 kph.
  - The model TRIESTE consists of three washing heads, one caustic soaking position, one steam contact position and one filling head, and has got an output of approx. 60 to 70 kph.
  - The model VERONA consists of four washing heads, one caustic soaking position and one filling head, and has got an output of approx. 60 to 75 kph.
  - > The model **BOLOGNA** consists of four washing heads, one caustic soaking position, one steam contact position and one filling head, and has got an output of approx. 60 to 80 kph.



- > The model TORINO consists of five washing heads, one caustic soaking position and one filling
- head, and has got an output of approx. 60 to 80 kph.
- > The model MILANO consists of five washing heads, one caustic soaking position, one steam contact
- position and one filling head, and has got an output of approx. 60 to 80 kph.

### Technical Data

- > High hygiene degree.
- > High hygiene degree.
- > Equipped with components of well-known brands, easy to find on local markets.
- > Easy and cost-effective maintenance.
- > Quick change-over provisions.
- > After-sales technical assistance available 24 hours, 6 days a week.





## SMART KEGGING MACHINES

THIS LINE OF SEMI-AUTOMATIC KEG WASHERS/FILLERS has been designed and manufactured to offer a professional machine to small/medium companies as well as to big players. Smart keg washers/fillers have the same filling head, washing head, process components and instrumentation of bigger Comac plants. Basic model

includes, factory-fitted, all that is necessary for a top-of-the-range machine.

- K1 consists of a single washing/filling head and comes complete with one or two detergent tanks. It washes and fills from 15 to 18 kegs per hour, depending on the keg size and washing cycle.
- K2 consists of two heads one washing head and one filling head – and comes with one, two or three detergent tanks. Its output is 30 to 36 kegs per hour, depending on the keg size and washing cycle. Robust and user-friendly, they are easy to install and connect, and guarantee hygienic washing and filling operations.



#### Technical Data

Speed from 15 kph to 36 kph. Semiautomatic keg washers/fillers for craft breweries.

- Stainless steel switchboard
- Product piping and utilities according to DIN 11850 (internal roughness max 0.8)
- Tank heating (steam injector)
- Sight glass on product
- Hardware for remote assistance

#### Benefits

- VERY SHORT LEAD TIME (4 weeks for standard configurations of both K1 and K2).
- > **VERY SHORT LEAD TIME** (4 weeks for standard configurations of both K1 and K2).
- > EXTREMELY EASY TO INSTALL, connect and use.
- > REQUIRE VERY LIMITED SPACE.
- **EQUIPPED WITH COMPONENTS OF WELL-KNOWN BRANDS**, easy to find on local markets.
- HIGH HYGIENE DEGREE.
- > EASY AND COST-EFFECTIVE MAINTENANCE.
- > QUICK CHANGE-OVER PROVISIONS.
- > **AFTER-SALES TECHNICAL ASSISTANCE** available 24 hours, 6 days a week.

## HIGH-SPEED RANGE: BERGAMO

#### Technical Data

Speed from 250 kph. Semi-automatic keg washers/fillers for craft breweries.

## Key Features

- > Pre-cleaning and cleaning stations.
- > Framework in AISI 304 stainless steel, sandblasted with microscopic glass beads and treated with thermo-protective varnish. The framework is provided with height-adjustable support feet.
- > Automatic system that positions the kegs onto the heads, controlled by brushless motors.
- > Keg lifting tables that lift the kegs from the heads, controlled by pneumatic cylinders.
- > Special pressers controlled by pneumatic cylinders, that block the kegs onto the heads.







### Key Features

- > Treatment heads in AISI 304 stainless steel, provided with EPDM seals in order to ensure maximum hygiene.
- > C. pneumatic valves in AISI 316L for flow control during the washing cycles.
- > The keg system consists of three modules: a pre-washing module, a washing module and a keg filler. Each module is made of AISI 304 stainless steel and equipped with six treatment heads.
- > The modular design allows to combine two or more systems, to increase the efficiency of the keg line.
- > The pre-washing and washing heads are in stainless steel AISI 304L or AISI 316L (in case of use of acid solution), with internal roughness <0.6 μ, equipped with EPDM seals, PTFE valve obturators and magnetic sensors, to control the opening of the fitting.
- > The filling heads are made of stainless steel AISI 316L, with internal roughness <0.6 μ, equipped with EPDM seals, PTFE valve obturators and magnetic sensors, to control the opening of the fitting.
- > The filling of the kegs is controlled by a flowmeter.
- > The kegs are introduced into the machine via a robotic system, which transfers them directly into the various treatment heads, equipped with devices for the control of the working cycles.
- > The electrical panel installed in the machine is made of stainless steel (IP54) and provided with PLC; the pushbutton control panel too is made of stainless steel (IP54) and provided with operator panel for the control and the setting of the machine operating parameters.
- > The modules are supplied complete with automatic sanitization systems that do not require the manual installation of false kegs.

#### Benefits

- > Extremely high efficiency rates and high hygiene degree.
- > Optimization of the cycle times due to a fast loading system and a working cycle which do not require the keg to be moved from one head to another inside the machine.
- > Reduced fitting gasket and spring wearing, as pre-washing, washing and filling processes are distributed on three heads: PRE-WASHING is carried out on the first head, washing on the second and filling on the third, with significant reduction of keg maintenance cost.

- > The limited number of fitting opening strokes grants a reduced wear and tear of the guide sleeves and head components and, therefore, it leads to reduced downtimes, maintenance times and costs.
- > Improved flexibility of the line, thanks to the independence of each pre-washing, washing and filling head from the others. A damaged or faulty head can be excluded from operation while production continues on the others.
- > Equipped with components of well-known brands, easy to find on local markets.

**TUNNEL PASTEURIZERS** 

CFT Group supplies premium tunnel pasteurizers equipped with an automatic system which allows to avoid the over-pasteurization of the product in case of stop of the internal conveyor.





## **CIP SYSTEMS**

The Group, thanks to Comac's know-how and experience is able to supply premium CIP systems specific for kegs.



## KEG EQUIPMENT AND ACCESSORIZATION

CFT group, thanks to Comac portfolio is now able to offer different solutions for kegs systems, starting with Keg inspection devices, keg weighers, turners and cappers and decappers as well as washing systems specifically engineered and manufactured for kegs.

## **END OF LINE**

### **DEPALLETISERS**

- > Low level depalletiser.
- > High level depalletiser.
- > Different aligning systems.





## **PALLETISERS**

- > Low level carton palletiser.
- > High level carton palletiser.
- > Single or multiple infeed.





## SECONDARY PACKAGING

CFT Group is able to provide a complete 360° offer in End of Line solutions, from palletizers and depalletizers up to shrinkwrappers, from wraparounds to pick and place systems, passing through Combi's range.

#### **SHRINKWRAPPERS**

- > Formation of grouping through servo-powered fingers.
- > Regulation of rows by feeler gauges.
- > A servomotor for every primary movement.
- > Automatic, servo-powered format changeover.
- > Format changeover without later adjustments.
- Adjustments of movements without needing to stop or empty the machine in case of defects in the packing material.
- > Anti-accident protections with great accessibility.
- > Available version in stainless steel wherever possible.
- > Machine management based on virtual motor.
- > Input of new formats through a form system.





#### **WRAPAROUNDS**

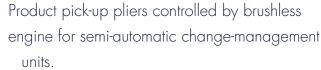
- Formation of grouping through servo-powered fingers.
- > Regulation of rows by feeler gauges.
- A servomotor for every primary movement.
- Automatic, servo-powered format changeover.
- > Format changeover without later adjustments.
- Adjustments of movements and positions while in production without needing to stop or empty the machine.
- Anti-accident protections with great accessibility.
- Available version in stainless steel wherever possible.
- Machine management based on virtual motor.

## ROBOTIC LAYER FORMING SYSTEMS

- > Picking up and palletizing of multiple rows.
- Closing pliers with brushless engine for automatic change format management.
- > Extreme ripetibility.
- Cartons palletizing via gripper head with suction cups.
- According to each layer pattern, simultaneous picking up of several cartons.
- Combined or individual setting down of interlocked formations.



#### PICK & PLACE



- Product transfer pockets in high-strength titanium mounted on pre-stretched chains operated by two- phase brushless motors with tape dispensers.
- Motorized transport boxes with two servo motors for the managing of multiple formats.
- > Dual box function, a shell is loaded simultaneously at the evacuation of the full box through the timing of the two flights.





# CFT GROUP

## BREWING COMPLETE LINE

Thanks to the latest strategic acquisitions in the Brewing Industry, CFT Group has become a key-player in supplying turnkey plants and premium machines, both for the Processing and Packaging sector, always offering turnkey solutions able to meet all customers' different requirements.

With Rolec, CFT Group has enlarged its range of processing machines, in order to meet both micro and large breweries' needs. Furthermore, CFT Group can satisfy different filling requirements for any format, from the can to the glass, up to the Keg, by integrating its innovative high-speed filling solutions with the special compact range provided by Comac's brand.









COMPACT FILLER FOR CANS

COMPACT FILLER FOR GLASS

STANDARD FILLER FOR CANS

STANDARD FILLER FOR GLASS









**KEG SYSTEM** 

CIP

**SEAMER** 

**END OF LINE** 













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