3000 series

bottle filling machines
riners-fillers-cappers
3000 Series - a flexible choice

The modular system of the 3000 Series allows it to cater to the most diversified needs within bottle-filling, sterilization and closing. The series thereby proves itself as a competitive choice, no matter if it is a low- or high-capacity requirement, or if the requirement is for an ultra clean or standard hygiene level.

Automated cleaning systems for CIP and the surfaces of the product-zone are activated by the flick of a button, without any manual involvement of the operator.

Intelligent change-parts are offered as protection against operator errors during changeover. Even on the largest machines, changeover is performed in less than 20 minutes.

The series allows you to build a complete line, catering to your production needs from where the processing ends until your bottles are filled, sealed, boxed and palletized.

APPLICATIONS

**FOOD**
- Peanut Butter
- Edible Oil
- Mayonnaise
- Salad Dressing
- Ketchup

**DAIRY**
- Fresh Milk
- Drinking Yoghurt
- Cream
- Sterimilk
- ESL

**BEVERAGE**
- Mineral Water
- Fruit Juice
- Energy Drinks
- Wine
- CSD

**INDUSTRIAL**
- Motor Oil
- Detergents
- Lubricants

**COSMETIC**
- Shampoo
- Liquid Soap
- Cleansers
- Lotions
Nett-Weigh Rotary Filler Capper Range

**FEATURES AND FUNCTIONS**

- Pressurised supply system and a continually variable flowrate filling valve achieve high production capacity with low foam generation.

- Utilizing starwheels for transfer of the bottle between the sections, allowed to run more than one bottle size on the machine, effectively eliminating long changeover times due to the simplicity of the design.

- The continuous variable flow control valve promotes non-contact non-drip filling, creating a hygienic filling environment and minimizing characteristics foaming.

- Highly effective closed loop automated CIP system cleaning the machine under pressure making sure that all product contact components are thoroughly cleaned.

- With the newly designed filling valve the nett weigh filler enable clients to achieve a very precise filling weight with 1g accuracy making it more cost effective by minimizing product give away.

**CUSTOMER BENEFITS**

- Filling Accuracy
- Non-contact filling (clean)
- Setup time for different volumes
- Non-contact setup for different volumes
- Quality control - continuous weight checking/reject system
- Ultra Clean
Rotary Bottle Fillers

**CUSTOMER BENEFITS**

- Quick release changeparts for short production changeovers.
- Smooth handling of containers (bottom or neck handling).
- Low maintenance and down time.
- High levels of SIP and CIP to ensure optimal levels of hygiene.
- No Container / No Fill feature to minimize product waste.
- Production friendly operation from base mounted control panel.
- A safe working environment ensured by full safety guarding which conforms to international safety standards.
- Various capping options.

**OPTIONS**

- Container and Cap Rinsers
- Fully Automated CIP Systems with CIP-able Filling Nozzles
- Clean Room with HEPA filters
- Container Divert / Reject System
- Backup Sensor to Manage Line Control
- Nitrogen Dosing System.

**OPERATING SPEEDS**

Speed of 1,500 BPH to 48,000 BPH are achievable. Final speeds are determined by product viscosity, filling temperatures and foaming characteristics, as well as container design and neck opening.

**MACHINE EXAMPLES**
Linear Bottle Fillers

FEATURES AND FUNCTIONS

- The filler can handle a large range of bottle sizes and most flowable products. The machine is designed for use by a single operator.
- Easily adjustable settings allow for a simple, fast changeover between different bottle types.
- The filling procedure is extremely simple. Containers enter the machine on the conveyor, the filling valves are then lowered into the necks of the container where a precise amount of product is pumped into the container. The containers are then released, and the next cycle begins.
- The filling volume is easily set for each individual valve.
- The filling valve height can be easily adjusted.
- A full CIP system is available.
- The filling speed is adjustable from the front panel.
- The machine is manufactured from stainless steel for exceptional hygiene and durability.
- All parameters are accessible from the touch screen interface.

OPERATING SPEEDS

Speed of 450 BPH to 3,900 BPH are achievable. Final speeds are determined by product viscosity, filling temperatures and foaming characteristics, as well as container design and neck opening.

MACHINE EXAMPLES
Bottle and Cap Unscramblers

BOTTLE UNSCRAMBLERS

- The unscrambler is designed in stainless steel and can handle a large range of bottle sizes and types.
- The machines are fully automatic and designed with a large bottle hopper and elevator. An adjustment mechanism allows for fast changeovers between different bottle types by simply performing minor adjustments without the need to replace any parts on the machine.
- The operating procedure is extremely simple. The bottles are transferred from the large bottle hopper onto a rotating disc where the bottles are oriented for base- or neck leading transfer into the unscrambler.
- Misaligned bottles are simply diverted back to the rotating disc through the infeed bumper and the aligned bottles are transferred back through the infeed belt.
- On the infeed belt, a hooking mechanism orientates the neck leading bottles to base leading orientation. The base leading bottles simply push through under the hooking mechanism.
- A series of side transfer belts lift the bottles into an upright position, ready for discharge from the machine. This discharge conveyor can feed bottles for base- or neck handling, i.e. to airveyor.
- The discharge conveyor speed is synchronized with the unscrambler speed and the unscrambler speed is controlled entirely by the downstream demand for bottles. The bottles are handled very gently with no damage to the bottle surface.

CAP UNSCRAMBLERS

- Can achieve output of up to 700 caps per minute
- Low maintenance
- Easy, gentle handling of caps to reduce damage
- Less action in filling area making filler more accessible
- Combination of traditional cap unscrambler and cap feeding elevator
- Improved cap storage area
- Easy to combine with cap sterilization unit
- Can handle all size flat screw caps ranging from 28mm up to 70mm

MACHINE EXAMPLES
End of Line Solution to be integrated with 3000 Series machines

TREPKO Group offers a wide range of equipment supporting the process of packaging and ensure automation of the line.

3000 Series with 710 and 730 Machines for packaging into cartons and for the shrink wrapping

740 Series Palletising System