

## *SM Series Monobloc*



The SM Series Monobloc is a high flexible, reliable solution for producing your demands of non-carbonated beverage in PET containers with gravity filling technology. Processes regarding rinsing, filling and capping are all achieved within single monobloc for optimal food hygiene and micro-biological safety. Containers are transferred within the monobloc via modular starwheels in neck handling mode, hence contacts between containers and components are reduced to minimal to avoid cross contaminations. Suspended transmission system with centralized lubrication panel to facilitate maintenance work and to reduce downtime. Integration with colored human machine interface to assist machine operators to gain total control of the machine.

In terms of air filtration, SM Series Monobloc can be integrated with Class 100 /ISO class 5 high efficient particulate airs (HEAP) system to slightly pressurize the filling room, hence any ambient air is kept outside to avoid contamination. SM Series Monobloc is connected to bi-directional CIP/SIP system for dead corner free sterilization with steam, acid and alkaline solutions after daily production routine. Suitable for medium to high production requirement.

### **Your benefit:**

- Neck handling mode for maximum food hygiene
- Suspended transmission system to facilitate maintenance
- Bi-directional CIP / SIP system for dead angle free sterilization
- Integrated with both mechanical and electrical safety devices for hazard free machine operation
- Integrated with human machine interface to facilitate machine operation
- Centralized lubrication panel to reduce lubrication downtime

### **Method of operation:**

Empty containers enter the machine via air conveyors and transferred individually to the rinser via star wheel in neck-handling mode. In that process, containers are divided into identical pitch before entering the rinsing module. In the rinsing module, Individual container is gripped by patented bottle gripper and rotated 180 degrees for internal and external rinsing with different mediums.

Rinsed containers are then transferred to filling module for filling. In the filling process, air in the containers is discharged while products are filled into the container without any contacts between these two mediums. Filled containers are then transferred to capping module for capping via torque adjustable cappers. Once capping is completed, containers are discharged via discharging star wheel to end of line for further packaging.

**Facts and figures:**

- Production capacity: 4200 to 60000 Bottles/hour
- Applicable product: Mineral water, juice and tea etc.
- Applicable container: PET
- Applicable container type: Round, square and rectangular
- Applicable volume: 330ml to 2000ml
- Construction material: SUS304, SUS316 stainless steel and painted carbon steel

**Additional equipments:**

CC Series cap feeding and rinsing system  
HEAP system