



### Requirements and Solutions

Knowledge of the many interdependencies and expertise in the selection and technical implementation of a widest range of customer-specific bottle washing requirements distinguish the specialists of the bottle washing technology division and their ranges of Innoclean products.

Thanks to its modular design, the double-end KHS Innoclean DM bottle washer can be configured to meet a variety of bottle washing requirements. Other energy and water-saving features are available in addition to the functions and characteristics for energy-saving and resource-conserving operation already offered in the standard version.

### Key Features

- Project-related separation of infeed and discharge
- Self-supporting, welded housing
- Multiple-bath design
- Modular design for selecting processes according to specific requirements
- Low energy consumption thanks to optimum water and heat management

### Standard Equipment

- Multiple-stage bottle pre-heating and pre-washing
- Plastic bottle cells for gentle container handling
- Energy-saving bottle pocket carriers for minimized carryover of heat and liquids
- Filtration of circulating media in all treatment zones
- Cross-flow spraying for maximum spraying time and uniform bottle treatment
- Split-channel vapor extractor externally mounted over the entire width of the machine to avoid recontamination
- Heated housing surfaces above the bottle discharge prevent condensation in this critical area of the machine
- Triple-i-Drive system equipped with numerous functions for drive tasks





#### Advantages

- The hygienically designed spraying system means considerably fewer points for potential clinging soiling as well as greatly reduced maintenance and cleaning effort
- Automation capabilities are available in nearly all machine areas for virtually unattended machine operation
- Many options are available for coupling the machine to external heat consumers such as beer pre-heaters and crate washers



#### Service

- Customized machine design
- Fast supply of spare parts
- Worldwide service

#### Options

- Increased pressure pre-washing and automatic belt discharge
- Fully automatic sieve belt discharges in the water zones
- Energy-saving concept with heat recovery between various functional areas
- Electrical power-saving concept for pumps

#### Technical Data

##### Machine capacity

15,000 bottles/hr to 150,000 bottles/hr

##### Available processing widths

2.9 m to 6.3 m

##### Processable container types

Refillable glass and PET bottles

##### Processable container sizes

Diameters ranging from 53 mm to 109 mm and heights from 135 mm to 340 mm