BC SERIES

Automatic returnable bottle washer

The BC Series bottle washer is a double end, mechanical drive and high flexibility solution for cleaning your demands of both returnable and non-returnable glass containers. In order to spatially separate contaminated and clean bottles, the BC Series was designed based on double end concept, where bottle infeed and discharge are taken places at two sides for best possible hygiene. With an impressive output of 800 bottles per minute, BC Series bottle washer is capable of offering the best cleaning solution.

Over 400 bottle carriers and 20000 bottle pockets are impressively driven by a single motor. Modular maceration bath with standardized parts design allows daily maintenance work to be completed with minimal downtime. Containers are cleaned via multiple stages of sophisticated cleaning procedures including pre-rinse, spray, caustic maceration and rebel removals. The cleaning technology of BC Series bottle washer is modular structured, where individual maceration tank, loop guide and pre-treatment system are combined to form a complete cleaning solution.

- Capacity ranging from 12000BPH to 48000BPH
- Constructed from SUS304 and carbon steel
- Suitable returnable glass bottles
- Number of bath: 2 to 6 (depends on bottle condition)
- Number of label remover: 2 to 4 units
- Drive system: Synchronized mechanical drive

DOUBLE END CONCEPT

2nd RECYCLED WATER RINSING
Using recycled water from the 1st recycled water bath to rinsing bath for external and internal container rinsing. Used recycled water is overflowed to the previous bath for reuse.

4th HOT SODA BATH
Hot soda is used for external and internal bottle cleaning. Heating of rinsing medium is heating by steam via shell tubular heat changers.

3rd HOT SODA BATH (LABEL REMOVAL)
Hot soda is used for external and internal bottle cleaning. Heating of rinsing medium is heating by steam via shell tubular heat changers. Integrated with label removal unit.

1st HOT SODA BATH (LABEL REMOVAL)
Hot soda is used for external and internal bottle cleaning. Heating of rinsing medium is heating by steam via shell tubular heat changers. Integrated with label removal unit.

1ST RECYLCED WATER RINSING
Using recycled water from the final rinsing bath for external and internal container rinsing. Used recycled water is overflowed to the previous bath for reuse.

HOT WATER BATH
Using recycled water from the 2nd recycled water bath for external and internal container rinsing. The rinsing medium is heated by conduction thermal energy from the neighboring bath. Rinsed water will be pumped to pre-rinsing bath

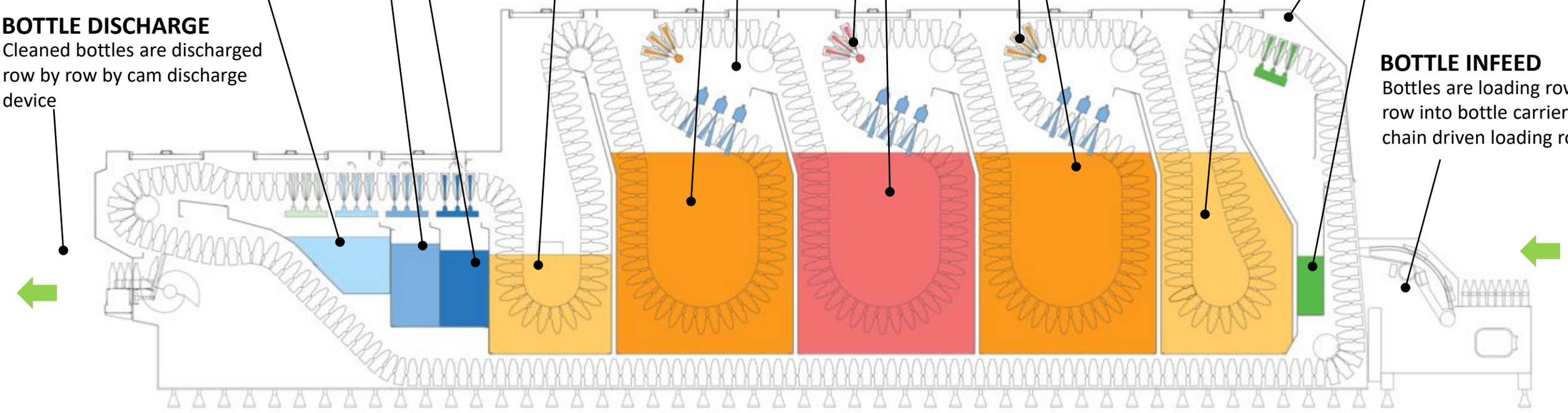
2nd HOT SODA BATH (LABEL REMOVAL)
Hot soda is used for external and internal bottle cleaning. Heating of rinsing medium is heating by steam via shell tubular heat changers. Integrated with label removal unit.

PRE-RINSING
Using recycled hot water from hot water bath for pre-rinsing of containers. Removing substances such as cigarette butt, dust and glass fragments.

FINAL RINSING
Fresh water is used for final rinsing for bottles. Used water will be recycled and transferred to the previous bath for reuse.

BOTTLE DISCHARGE
Cleaned bottles are discharged row by row by cam discharge device

BOTTLE INFEED
Bottles are loading row by row into bottle carriers by chain driven loading rods.



SINGLE END CONCEPT

HOT SODA RINSING
Recycled hot soda is used to rinsing both external and external surface of bottles. Further removing any residual contaminated substances.

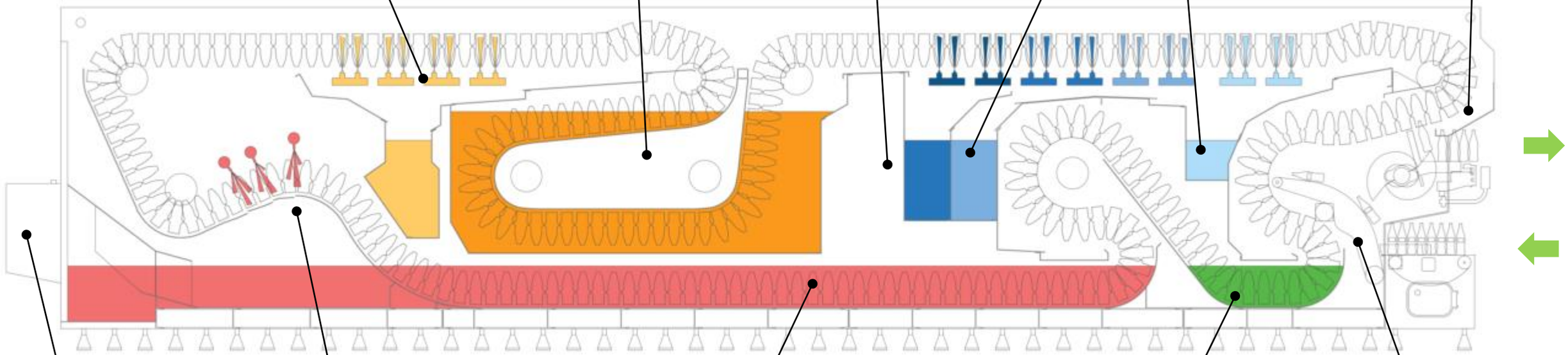
2nd HOT SODA BATH
2nd Hot water soda bath is used to completely remove any residual contaminated substances from bottle surface.

1st RECYCLED WATER RINSING
Using recycled water from fresh water tank to further rinsing the external and internal surface of bottles. Used water is overflowed to the neighboring bath for reuse.

2nd RECYCLED WATER RINSING
Using recycled water from 1st recycled water tank to further rinsing the external and internal surface of bottles

FINAL RINSING
Fresh water is used for the final rinsing of bottle surface. Used water is then recycled to pre-rinse contaminated bottles

BOTTLE DISCHARGE
Cleaned bottles are discharged row by row by cam discharge device



LABEL REMOVER
Removed labels and fragments are transferred via mesh stainless chain into collection trolley for further process.

HIGH PRESSURE JETTING(LABEL REMOVAL)
Rinsed bottles are jetted with high pressure jetting unit to remove labels from the bottle surface.

1st HOT SODA BATH
Contaminated bottles are macerated in this hot soda bath for a period of required time to separate labels and dust from bottle surface.

PRE-SOAKING BATH
Incoming bottles are pre-soaked to initially remove label and contaminated substances from bottle surfaces. Including glass fragments and cigarette butts.

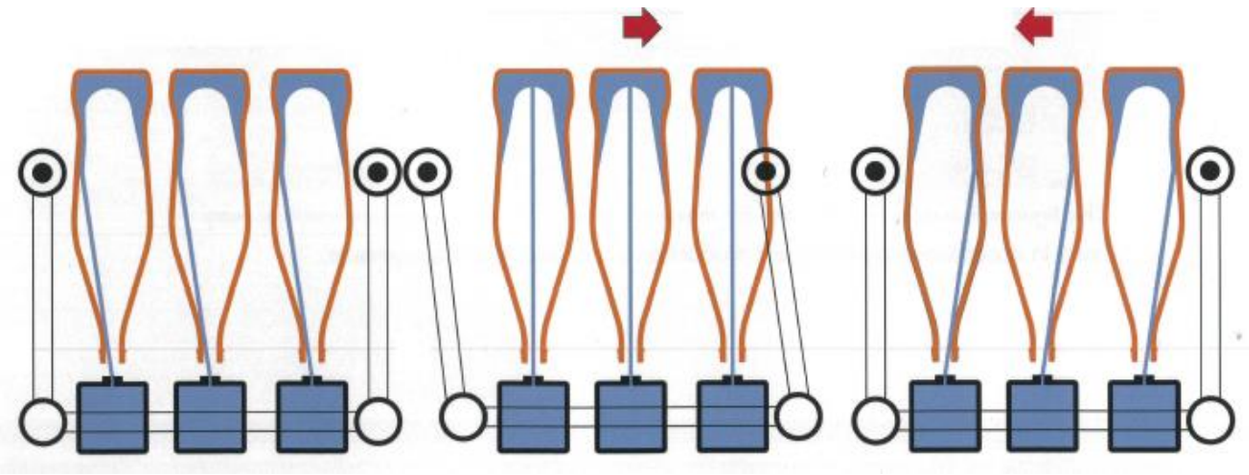
BOTTLE INFEED
Bottles are loading row by row into bottle carriers by chain driven loading rods. Bottle buffering device are installed to smooth bottle infeed process.

MACHINE FEATURES

SYNCHRONIZED PARALLEL SPRAYING DEVICE

Effective rinsing for best cleaning performance

Synchronized parallel spraying device is one of the innovated device developed by YUH FENG MACHINE to enhance the performance of bottle cleaning. In comparison with rotary rinsing device. Rinsing time can be increased up to 2.5 times. Any residual soda is rinsed and removed completely.



ROTARY SPRAYING DEVICE

Effective cleaning angle for best performance

Rotary type bottle rinsing device are often used in Europe. It has shorting contact time when compared to synchronized parallel rinsing system. However, we have increase the rinsing angel to increase contact time. Less energy consumption for better performance.