

BOTTLE WASHER FOR LOW, MIDDLE AND HIGH OUTPUT

OUTPUT RANGE: 3.000 - 50.000 BPH

Bottle washer ATHENA, DELTA and LAGUNA with continuous motion of bottle carriers

RETURNABLE AND CONTINUOUS DESIGN

- **returnable** (single-ended)
 - inlet and outlet on one side
 - ATHENA and DELTA types
- **continuous** (double-ended)
 - inlet and outlet on opposite sides
 - LAGUNA types

PARAMETERS

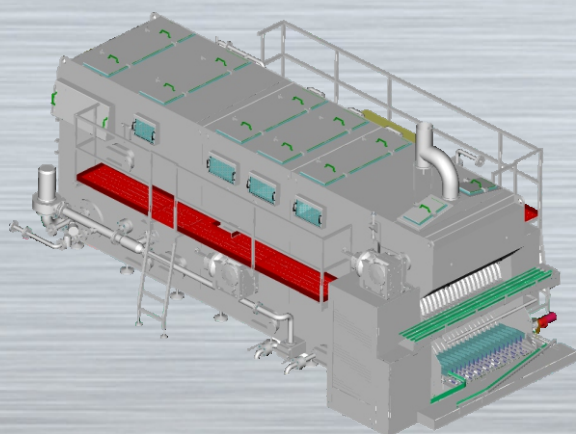
- **water requirement**
 - 0.5l = 160-250 ml/bottle
- **stream conditions**
 - 0.5l = 31-33 kJ/bottle

BOTTLE WASHING RANGE

- **Bottle dimension**
 - 0,5l version - 55 - 72 mm diameter, 160 - 290 mm height
 - 1,0l version - 55 - 90 mm diameter, 160 - 335 mm height



Bottle washer ATHENA 24/22.3
RHODIUS Mineralquelle und Getränke GmbH & Co.KG, Germany



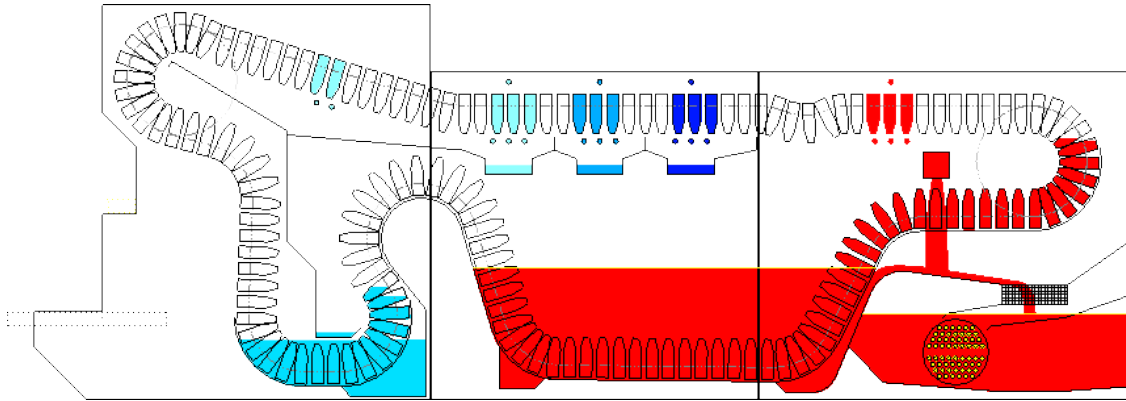
- rinsing pumps pressure: **1.5 bar**
- contact of bottles with washing solution: **8-12 min.**
- rocking above-level lye rinsing of labels (DELTA, LAGUNA)
- active mechanism for removal of labels in the area of above-level rinsing (DELTA, LAGUNA)
- continuous movement of bottle carriers - carriers move with constant speed, bottles are inserted and discharged during concurrent movement of bottle carriers
- control system SIEMENS S7

OUTPUT RANGE

GROUP	TYPE	BOTTLE CAPACITY/hr. (bottle volume)
Low output	ATHENA	5 000 - 10 000 (0.5l)
		3 000 - 6 000 (1l)
Medium output	ATHENA	12 000 - 28 000 (0.5l)
		8 000 - 20 000 (1l)
High output	DELTA, LAGUNA	24 000 - 50 000 (0.5l)
		17 000 - 35 000 (1l)



BOTTLE WASHERS FOR LOW OUTPUTS (return washers)



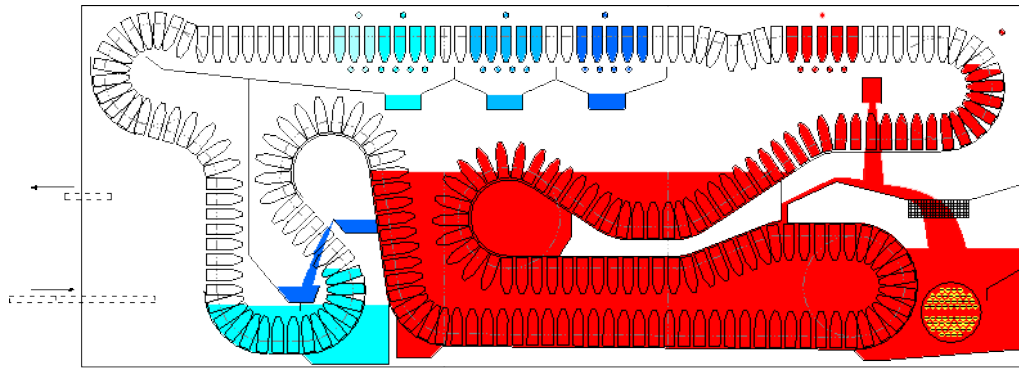
WASHING PROCESS

- | | |
|--|-----------|
| • pre-soaking of bottles | 40 - 50°C |
| • soaking in the lye washing bath | 80 - 84°C |
| • lye rinsing | 80 - 90°C |
| • emptying of lye residues from bottle bottoms | |
| • inside and outside rinsing with hot water | 55 - 65°C |
| • inside and outside rinsing with warm water | 40 - 50°C |
| • inside and outside rinsing with cold water | 25 - 35°C |
| • inside and outside rinsing with drinking water | 10 - 15°C |



ATHENA 12/05.3
Stingray Brewery Ltd., Grand Cayman

BOTTLE WASHERS FOR MEDIUM OUTPUTS (return washers)



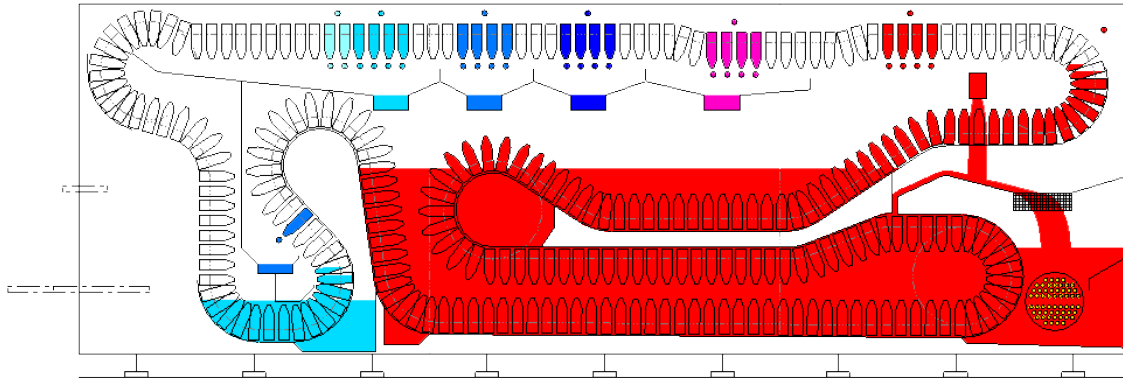
WASHING PROCESS

- | | |
|--|-----------|
| • pre-soaking of bottles | 35 - 45°C |
| • pre-injection/bottle tempering | 45 - 55°C |
| • soaking in the lye washing bath | 80 - 84°C |
| • lye rinsing | 80 - 90°C |
| • emptying of lye residues from bottle bottoms | |
| • inside and outside rinsing with hot water | 55 - 65°C |
| • inside and outside rinsing with warm water | 40 - 50°C |
| • inside and outside rinsing with cold water | 25 - 35°C |
| • inside and outside rinsing with drinking water | 10 - 15°C |



ATHENA 18/18.3
PEPSICO, plant Toma Teplice nad Metují, Czech Republic

BOTTLE WASHERS FOR MEDIUM OUTPUTS (return washers)



WASHING PROCESS

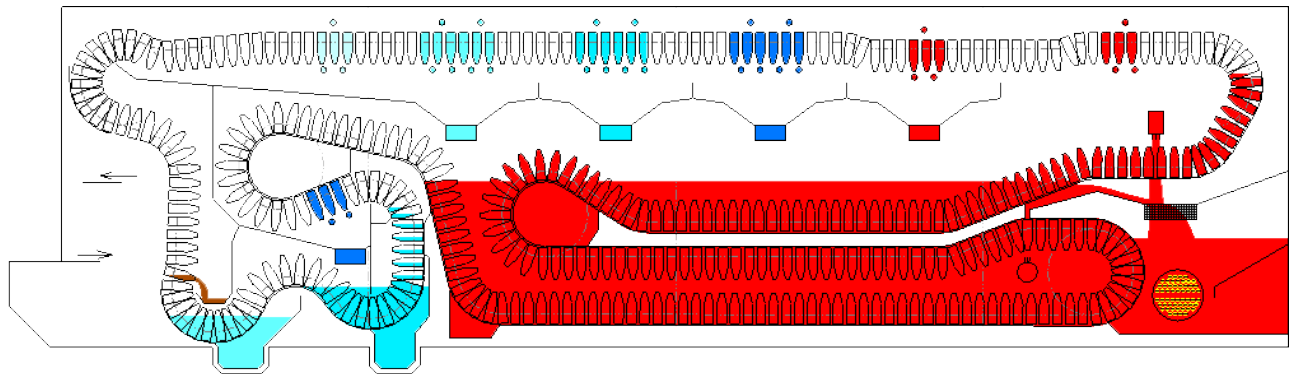
- | | |
|--|------------|
| • pre-soaking of bottles | 35 - 45 °C |
| • pre-injection/bottle tempering | 45 - 55 °C |
| • soaking in the lye washing bath | 80 - 84 °C |
| • lye rinsing | 80 - 90 °C |
| • additional lye inside rinsing | 65 - 75 °C |
| • emptying of lye residues from bottle bottoms | |
| • inside and outside rinsing with hot water | 55 - 65 °C |
| • inside and outside rinsing with warm water | 40 - 50 °C |
| • inside and outside rinsing with cold water | 25 - 35 °C |
| • inside and outside rinsing with drinking water | 10 - 15 °C |



ATHENA 18/18.3

JSC Georgian Beer Company - „Brewery Zedazeni”, Georgia

BOTTLE WASHERS FOR HIGH OUTPUTS (return washers)



WASHING PROCESS

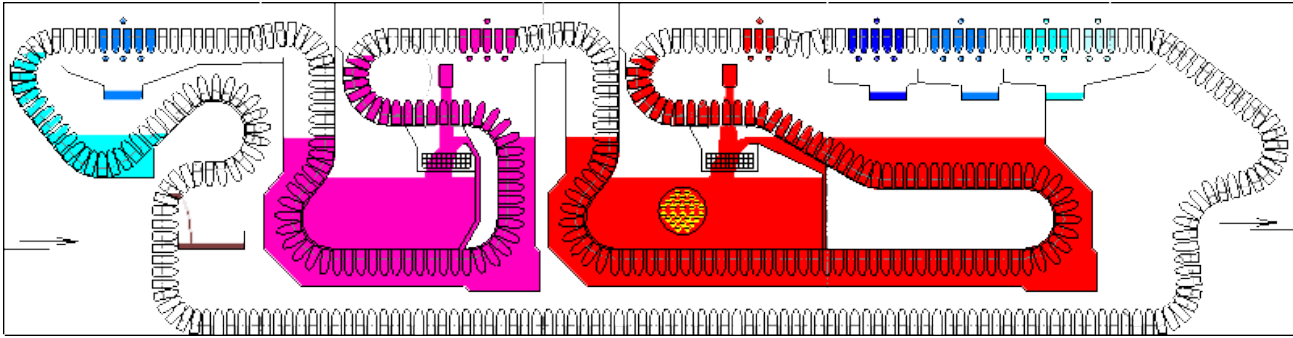
- | | |
|--|------------|
| • emptying of residuals from bottles | |
| • pre-soaking of bottles I. | 30 - 40 °C |
| • pre soaking of bottles II. | 40 - 50 °C |
| • pre-injection | 50 - 60 °C |
| • soaking in the lye washing bath | 80 - 84 °C |
| • lye rinsing | 80 - 90 °C |
| • additional lye inside rinsing | 65 - 75 °C |
| • inside and outside rinsing with hot water | 55 - 65 °C |
| • inside and outside rinsing with warm water | 40 - 50 °C |
| • inside and outside rinsing with cold water | 25 - 35 °C |
| • inside and outside rinsing with drinking water | 10 - 15 °C |



DELTA 30/36.4 VN

Brewery Litovel a.s., Litovel, Czech Republic

BOTTLE WASHERS FOR HIGH OUTPUTS (trough-feed washers)



WASHING PROCESS

- emptying of residuals from bottles
- pre-soaking of bottles 30 - 40°C
- pre-injection 50 - 60°C
- soaking in the lye washing bath I. 75 - 80°C
- inside rinsing and rinsing with lye I. 75 - 85°C
- soaking in the lye washing bath II. 80 - 84°C
- inside rinsing and rinsing with lye II. 80 - 90°C
- inside and outside rinsing with hot water 55 - 65°C
- inside and outside rinsing with warm water 40 - 50°C
- inside and outside rinsing with cold water 25 - 35°C
- inside and outside rinsing with drinking water 10 - 15°C

IMPORTANT CHARACTERISTICS OF BOTTLE WASHER

- material design: all-stainless steel, combined
- decentralized drives
 - automatic alignment of individual drives
 - automatic setting of bottle inserting and discharging mechanism for various types of bottles
 - defective basket detection - failure of insertion of bottles into rows with a damaged basket during normal operation, replacement of a defective basket during machine maintenance
- automatic control of drinking water consumption according to current machine
- control system SIEMENS S7
- wide range of accessories

