

2. Trolley washing machine

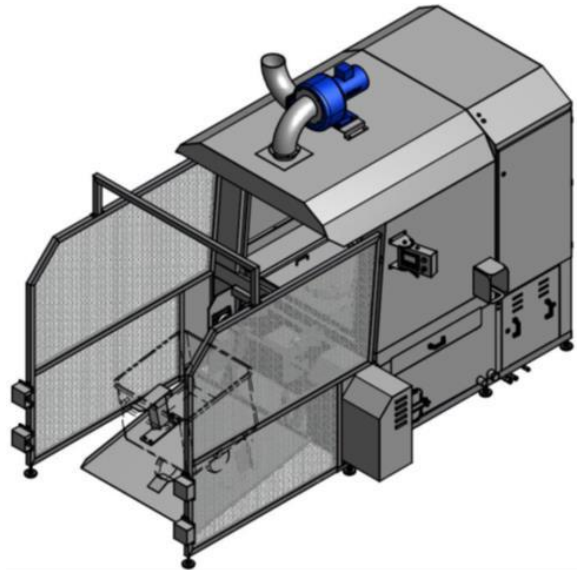


200 l

Charging trolley

DIN9797 200 l

Loading: Front Loader



KWA.200

. Capacity: 40 per hour

The trolley washing machine has a combined (optional) prewash, main wash and rinsing zone and washes 25-40 trolleys per hour - depending on the grade of contamination (slight, normal and heavy).

The trolleys are loaded and unloaded via an electromotive operated door (servo motor) which also seals the washing chamber.

Operation:

The washing cycles are adjustable (average duration approx. 100sec.) and incorporates 6 phases:

1. Loading the trolley and closing the door
2. Hot water cycle at 35-60°C
3. Drip-dry period
4. Rinsing cycle with antiseptic effect at 85-92°C
5. Drip-dry period
6. Opening the door and unloading the trolley

Miscellaneous

- Material: Stainless steel 1.4301
- Encase engine room
- Rotating nozzle system
- Desiccation protection (via level sensors)
- Adjustable washing time
- Energy-saving cascade system: the fresh rinse water is re-used to refresh the wash water
- Main wash tank with


Technical Data (Example of washing machine):

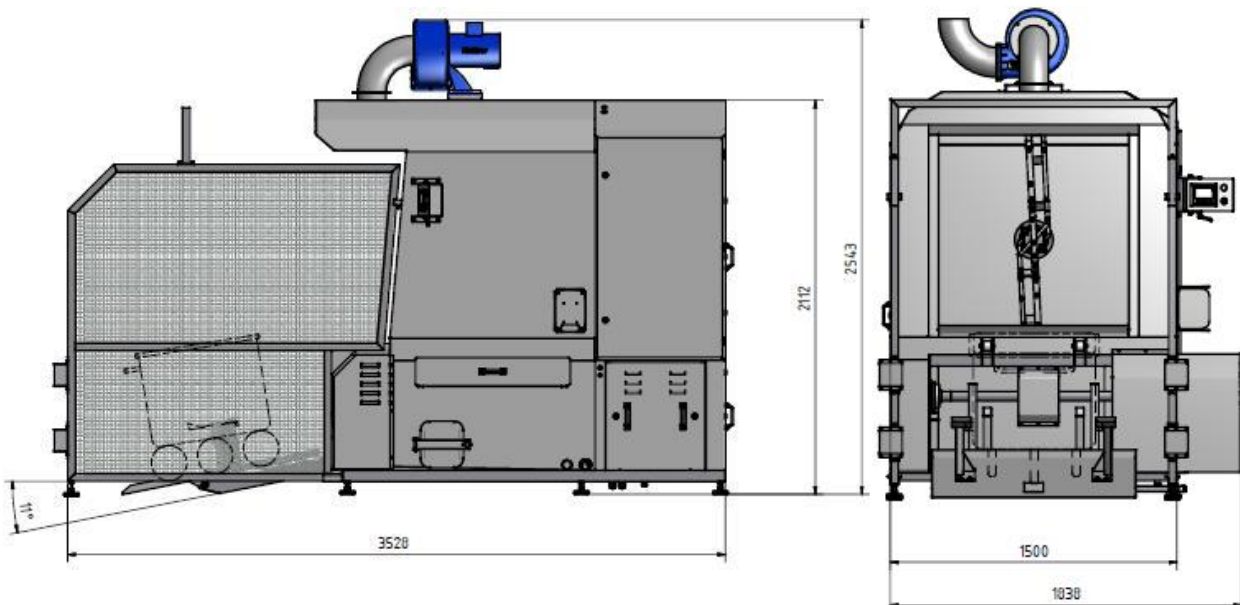
Electrical mains	: 3~400V/50Hz+N+PE
Protection class	: IP55
Pump	: EBARA EVM max. 16 bar
Pump capacity	: 15.0 kW
Water inlet tank	: 3/4" AG
Water inlet rinse water	: 1/2" AG
Drain	: Dump valve 200x200mm, additional drain 2" (DN50)

Container Washer



- Tank volume : 670 litre
- Noise level : approx. 65db (A)
- Electrical tank heater : 2 x 9 kW
- Water consumption : 8 - 10 litres/wash cycle
- Cycle length : adjustable
- Capacity : 25-40 trolleys/h – depending on grade of contamination
- Nozzle beam : Stainless steel 1.4301
- Wash temperature : 35 - 60°C, adjustable
- Rinse temperature : 85 - 92°C

Article description	
Electrical heating	
Steam heating	
Possible Options	
Electrical heating	
Tank heating 27 kW	
Steam heating	
Steam valve air	
Electrical valve stem	
Steam-water mixing valve (Rinse water)	
Possible Options for all execution	
Electrical flow heater, 27 kW, for rinsing water 85°C	
Electrical flow heater, 54 kW, for rinsing water 85°C	
Conductivity controlled metering pump for detergent	
Metering pump 230 VAC, for rinsing aid, adjustable 010 - 3,0 l/hour	
Vapor extractor with integrated stainless steel piping	
Drum Filter	
Band filter	



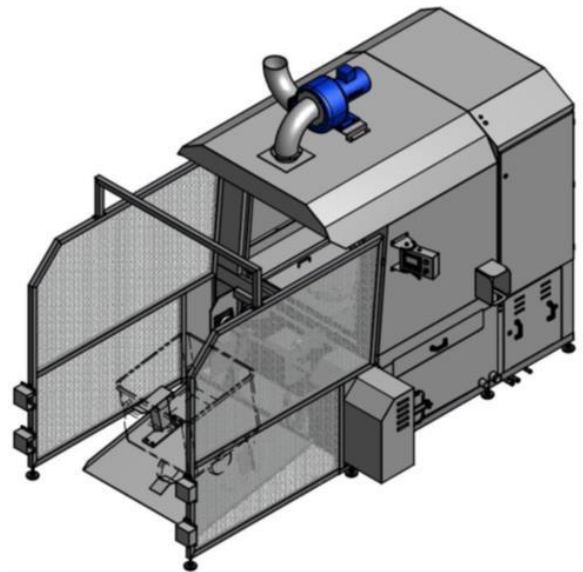


300 l

Charging trolley

DIN9797 300 l

Loading: Front Loader



KWA.300

Capacity: 40 per hour

The trolley washing machine has a combined (optional) prewash, main wash and rinsing zone and washes 25-40 trolleys per hour - depending on the grade of contamination (slight, normal and heavy).

The trolleys are loaded and unloaded via an electromotive operated door (servo motor) which also seals the washing chamber.

Operation:

The washing cycles are adjustable (average duration approx. 100sec.) and incorporates 6 phases:

1. Loading the trolley and closing the door
2. Hot water cycle at 35-60°C
3. Drip-dry period
4. Rinsing cycle with antiseptic effect at 85-92°C
5. Drip-dry period
6. Opening the door and unloading the trolley

Miscellaneous

- Material: Stainless steel 1.4301
- Encase engine room
- Rotating nozzle system
- Desiccation protection (via level sensors)
- Adjustable washing time
- Energy-saving cascade system: the fresh rinse water is re-used to refresh the wash water
- Main wash tank with


Technical Data (Example of washing machine):

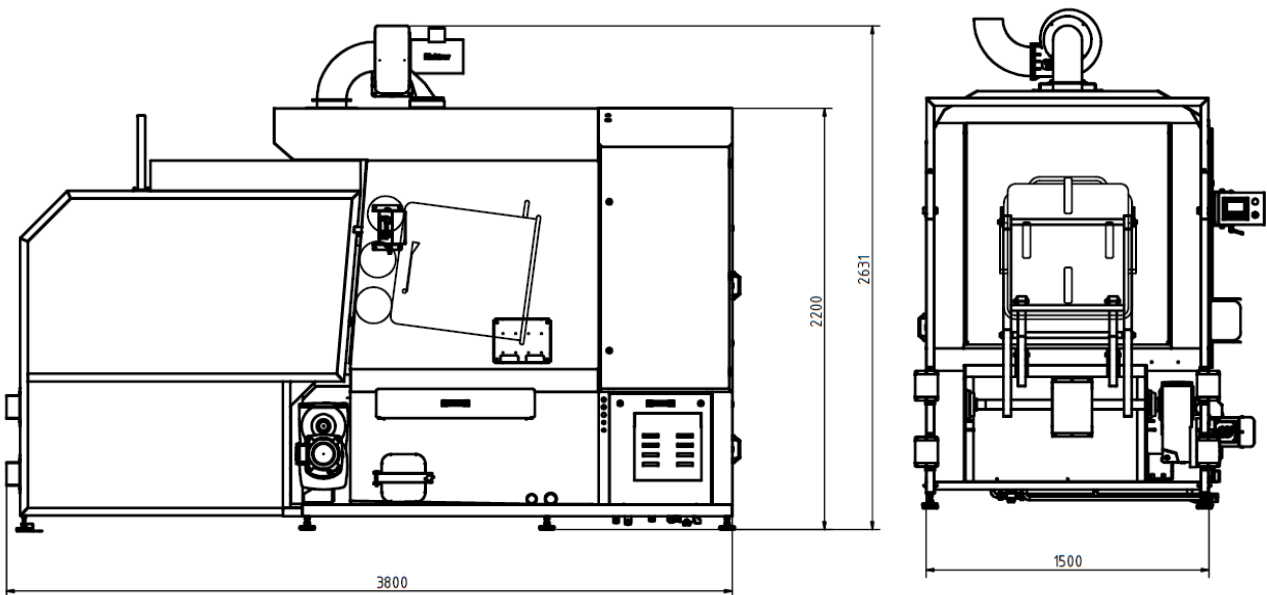
Electrical mains	: 3~400V/50Hz+N+PE
Protection class	: IP55
Pump	: EBARA EVM max. 16 bar
Pump capacity	: 15.0 kW
Water inlet tank	: 3/4" AG
Water inlet rinse water	: 1/2" AG
Drain	: Dump valve 200x200mm, additional drain 2" (DN50)
Tank volume	: 670 litre

Container Washer



Noise level	: approx. 65db (A)
Electrical tank heater	: 2 x 9 kW
Water consumption	: 8 - 10 litres/wash cycle
Cycle length	: adjustable
Capacity	: 25-40 trolleys/h – depending on grade of contamination
Nozzle beam	: Stainless steel 1.4301
Wash temperature	: 35 - 60°C, adjustable
Rinse temperature	: 85 - 92°C

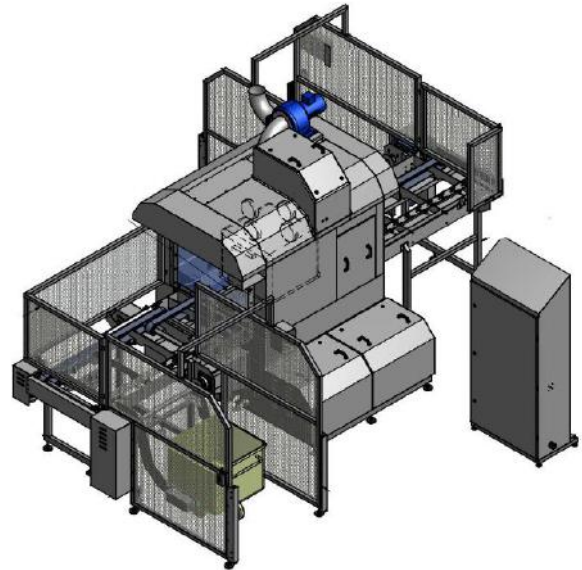
Article description 	
Electrical heating	
Steam heating	
Possible Options	
Electrical heating	
Tank heating 48 kW	
Steam heating	
Steam valve air	
Electrical valve stem	
Steam-water mixing valve (Rinse water)	
Possible Options for all execution	
Electrical flow heater, 27 kW, for rinsing water 85°C	
Electrical flow heater, 54 kW, for rinsing water 85°C	
Conductivity controlled metering pump for detergent	
Metering pump 230 VAC, for rinsing aid, adjustable 010 - 3,0 l/hour	
Vapor extractor with integrated stainless steel piping	
Drum Filter	
Band filter	





Charging trolley

DIN9797 200 l



Loading: Pass-Through-Machine

KWAD.200

Capacity: 25 - 50 per hour

Meat trolley washing machine this model is a tunnel type washing system for 200 liter charging trolleys with a closed cabin and washing with infeed and discharge loader for the trolleys.

Washing sequence

The container is easily inserted and fixed directly in infeed loader.

By pressing the pushbutton, the container is clamped, raised and rotated 180 ° on the infeed conveyor and then transported into the wash tunnel

The closing of the doors automatically starts the following wash cycle.

1. Hot water cycle (50-60 ° C)
2. Drip-dry period
3. Rinse with disinfectant activity at 82° C (Provided by customer)
4. Drip-dry period

After the wash cycle is completed, the doors at the exit side open and the container is transported on the discharge conveyor to the discharge loader. The container is clamped, rotated 180° back and placed down on the ground.

Technical Data (Example of washing machine):


Cycle time	: 60 - 120 sec, adjustable
Nozzle beam	: Stainless steel
Water consumption	: 8 l/cycle
Capacity	: 20 – 25 pcs/h
Wash pump	: HD Stainless steel Centrifugal pump
Pressure	: 17 bar

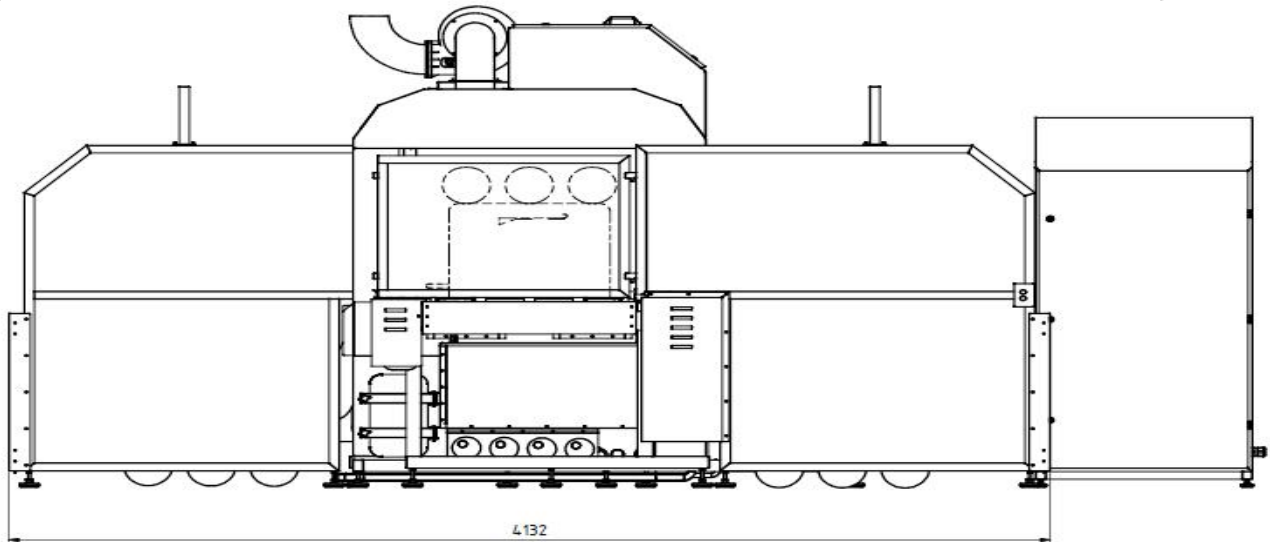
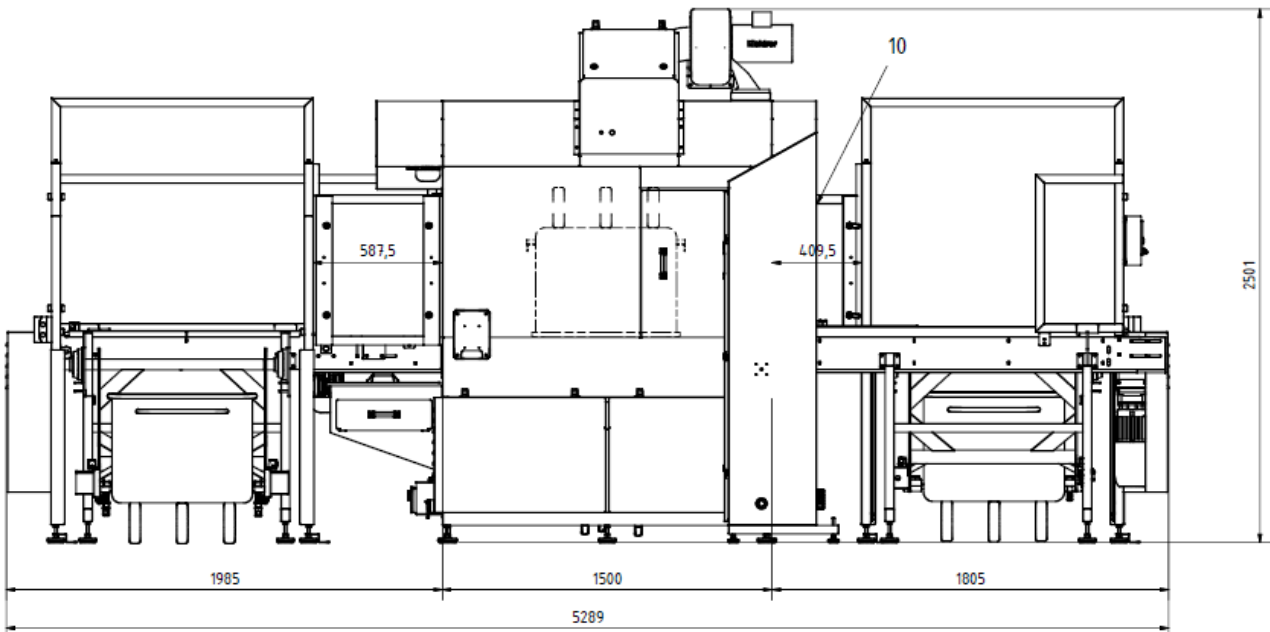
Electrical mains	: 400V / 50 Hz, +N +PE
Power consumption	: 18 kW
Electrical heating	: 12 kW
Alternative	: steam heating, 56 kg/h

Tank volume	: 450 litre
Water inlet	: R3/4", 2-4 bar
Pressure air	: R1/2", 6 bar
Water drain	: NW 50

Container Washer



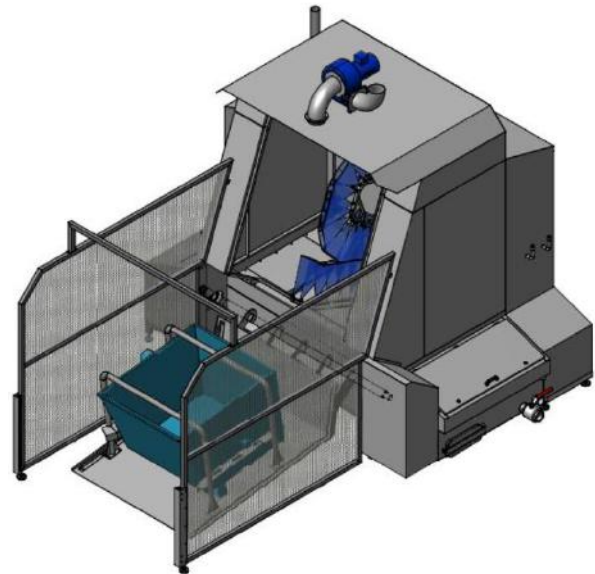
Article description	
Electrical heating	
Steam heating	
Possible Options	
Electrical heating	
Tank heating 48 kW	
Steam heating	
Steam valve air	
Electrical valve stem	
Steam-water mixing valve (Rinse water)	
Possible Options for all execution	
Electrical flow heater, 27 kW, for rinsing water 85°C	
Electrical flow heater, 54 kW, for rinsing water 85°C	
Conductivity controlled metering pump for detergent	
Metering pump 230 VAC, for rinsing aid, adjustable 010 - 3,0 l/hour	
Drum Filter	
Band filter	



3. Big Box Washing machine



**Big Boxes
Paloxen**



Loading: Front Loader

KBW.800

Capacity: 30 per hour

Compact washing machine for the efficient cleaning of charging trolleys and big boxes. The wash machine disposes of a combined prewash cycle (optional), main wash and rinse.

As a standard, the containers are loaded and unloaded via an electromotive operated loading door. The containers are easily placed directly on the water-tight door and are fixated. Thereafter the door (with drip water recovery) is closed and the washing cycle begins automatically. The door opens automatically at the end of the wash cycle.

The cleaning and washing cycles are adjustable (mean duration 100 sec.) and comprise 6 phases:

1. Loading and closing the door
2. Hot water cycle at 35 - 60 ° C
3. Break for the draining
4. Rinse with disinfectant action at 82 ° - 85 ° C
5. Break for the draining
6. Open the door, follow-up time from the steam outlet and remove the container


Technical Data (Example of washing machine):

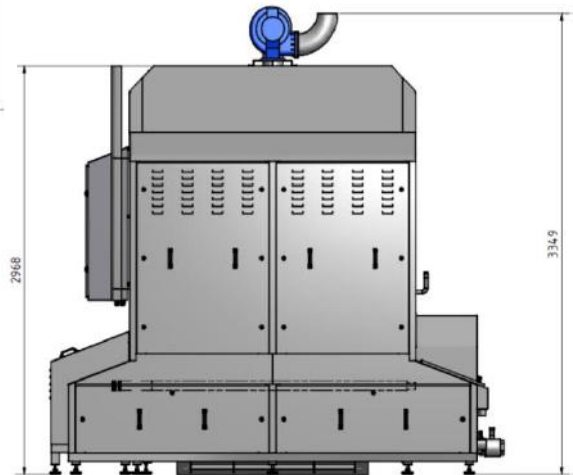
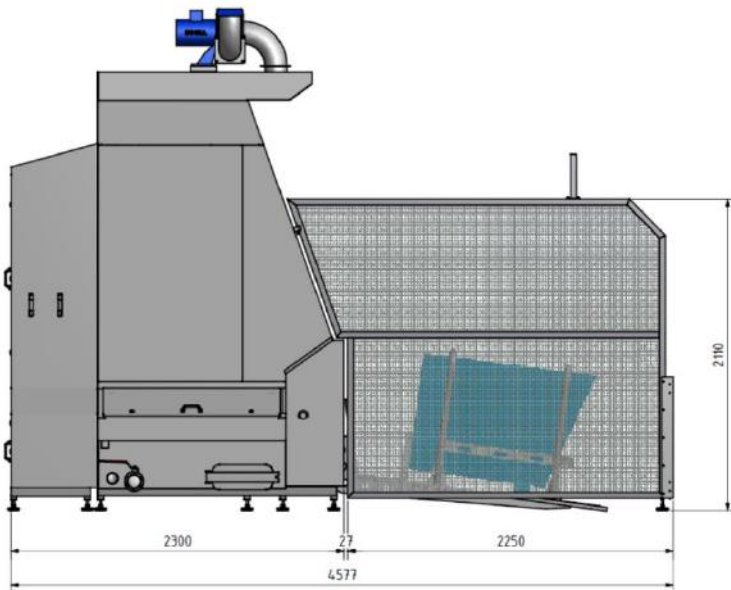
Electrical connection	: 3~400V/50Hz+N+PE
Protection class	: IP55
Pump capacity	: 22 kW ~ 90 mm ³ with 6 bar
Vapor extractor	: low pressure fan 2,2 kW
Water connection tank + rinse	: 3/4" AG
Water drain	: fast emptying valve 200 x 200 mm, with additional drain 3" ball valve
Tank capacity	: approx. 800 l
Noise level	: approx. 65db (A)
Electrical tank heating	: 4 x 9 kW
Total connection	: approx. 25 kW (without Tank heating and flow heater)
Washing time	: adjustable
Container per hour	: 15 - 30 containers/h depends on contamination level
Nozzle circle	: Stainless steel 1.4301
Washing temperature	: 35 - 60°C adjustable
Rinse temperature	: 82 - 85°C

Container Washer



Door closing motoric : above 0,37 kW; below 1,10 kW
 Water consumption : approx. 10 - 20 l per washing circle
 Electrical consumption : approx. 0,266 kW/h – 1,416 kW/h

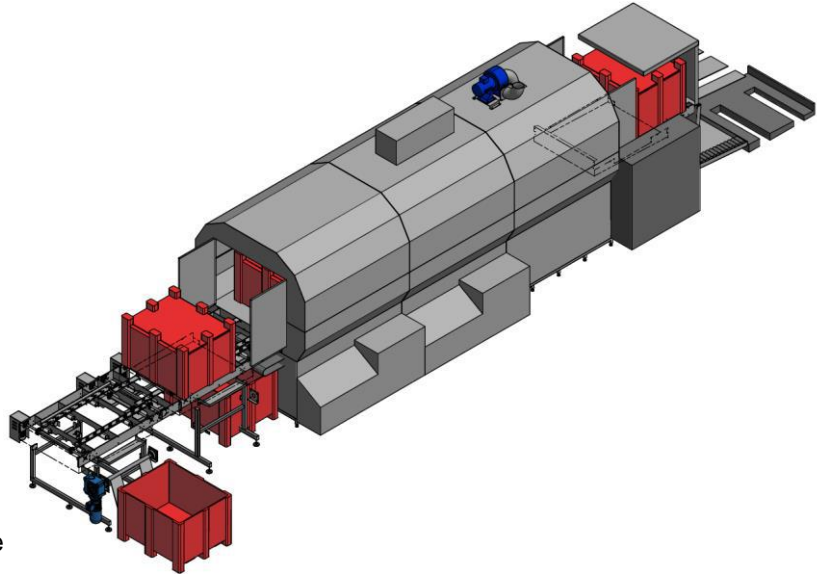
Article description	
Electrical heating	
Steam heating	
Possible Options	
Electrical heating	
Tank heating 48 kW	
Steam heating	
Steam valve air	
Electrical valve stem	
Steam-water mixing valve (Rinse water)	
Possible Options for all execution	
Electrical flow heater, 60 kW, for rinsing water 85°C	
Vapor extractor with integrated stainless steel piping (Activation when door is open)	
Conductivity controlled metering pump for detergent	
Metering pump 230 VAC, for rinsing aid, adjustable 010 - 3,0 l/hour	
Drum Filter	
Band filter	



Container Washer



**Big Boxes
Paloxen**



Loading: Pass-Through Machine

KBWD.800

Capacity: 30 -100 per hour

Big Box washing machine this model is a tunnel type washing system for 200 liter charging trolleys with a closed cabin and washing with infeed and discharge loader for the trolleys.

Washing sequence

The container is easily inserted and fixed directly in infeed loader.

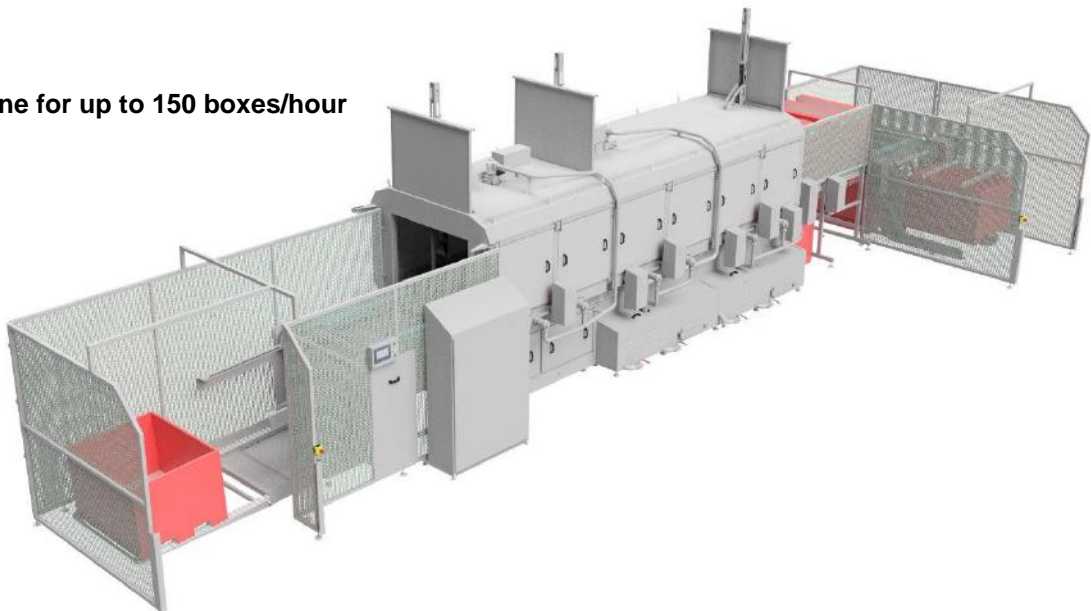
By pressing the pushbutton, the container is clamped, raised and rotated 180 ° on the infeed conveyor and then transported into the wash tunnel

The closing of the doors automatically starts the following wash cycle.

1. Loading and closing the door
2. Pre washing 30°C
3. Main washing (50-60°C)
4. Opening the door and unloading
5. Rinse zone 80-82°C
6. Unloading


After the wash cycle is completed, the doors at the exit side open and the container is transported on the discharge conveyor to the discharge loader. The container is clamped, rotated 180° back and placed down on the ground.

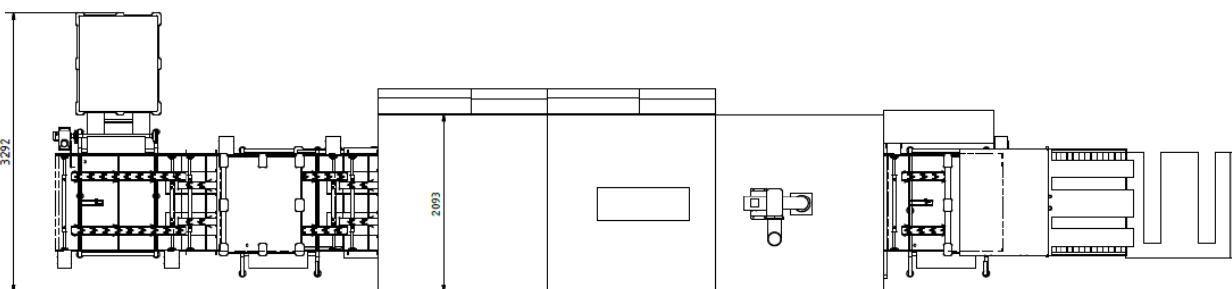
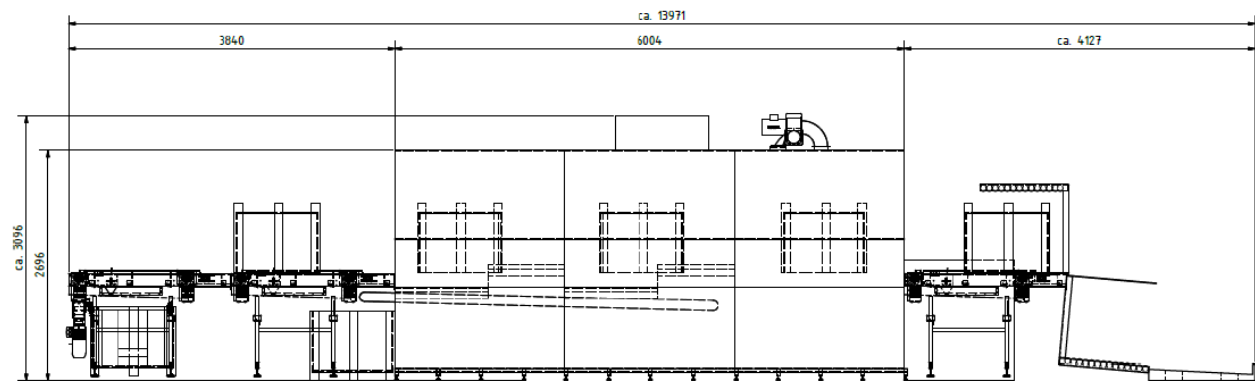
Example machine for up to 150 boxes/hour



Container Washer



Article description	
Electrical heating	
Steam heating	
Possible Options	
Electrical heating	
Tank heating 48 kW	
Steam heating	
Steam valve air	
Electrical valve stem	
Steam-water mixing valve (Rinse water)	
Possible Options for all execution	
Frequency converter, adjustable +/- 30%	
Vapor extractor with integrated stainless steel piping (Activation when door is open)	
Conductivity controlled metering pump for detergent	
Metering pump 230 VAC, for rinsing aid, adjustable 010 - 3,0 l/hour	



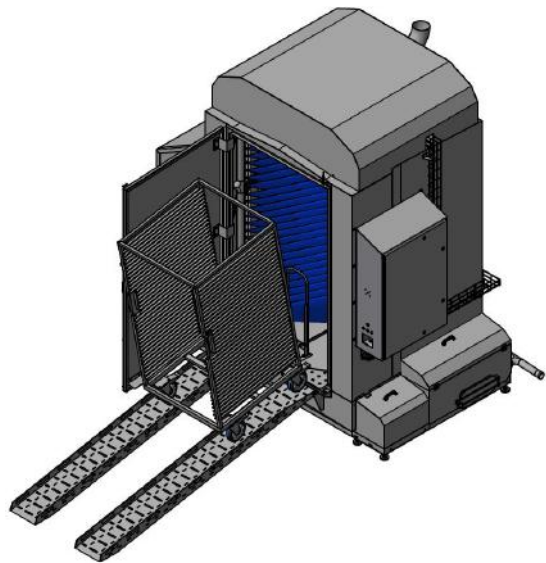
4. Trolley washing machine



Smoke House trolleys

LxWxH 1000 x 1000 x 2000 mm

Loading: Front loader
also as Pass-through machine available



KRW.1

Capacity: 30 per hour

The system is mounted on the ground, thereby the trolley, can almost at ground level, be retracted via a ramp.

The loading door is requested via a limit switch in its closed / open end position. This ensures that the doors are actually closed. By closing the door the wash cycle starts automatically.

The wash cycle can be regulated (mean duration approximately 3 – 6 min) and comprises 5 phases..:

1. Loading and closing the door
2. Main washing
3. Rinse zone 80°C
4. Dripping
5. Unloading of the trolley


Technical Data (Example of washing machine):

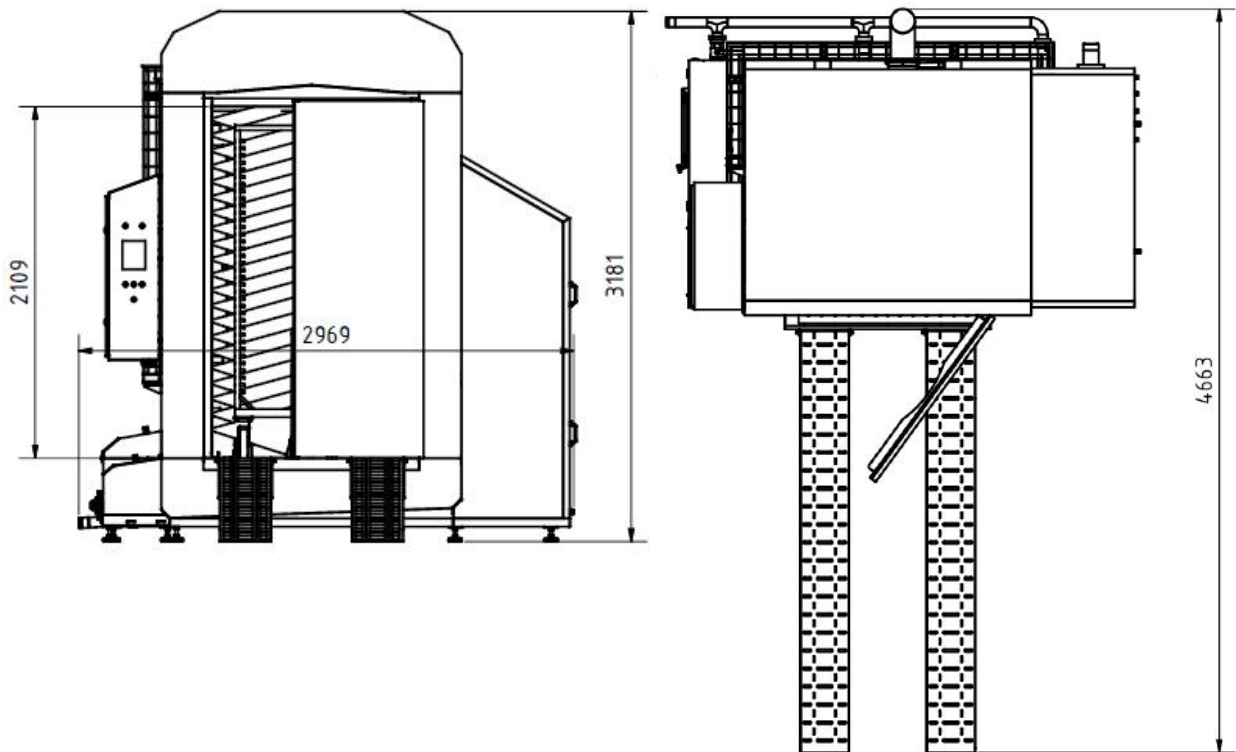
Capacity: approx. 10 – 15 trollies per hour, depends on degree of contamination

Electrical mains	: 400V / 50 Hz, +N +PE
Control voltage	: 24 V
Washing tank	: 450 litre
Power consumption	: 3 kW
Engine	: SEW Gear engine
Pressure air connection	: 4-6 bar
Steam connection	: 3-4 bar
Tank heating	: direct steam
Rinse	: steam mixing valve
Pump	: 22 kW Stainless steel medium pressure centrifugal pump
Gear engine	: 0,55 kW

Washing time	: 0-12 min.
Drip time	: 0-3 min.
Material	: stainless steel 1.4301

Container Washer

Article description		
Electrical heating		
Steam heating		
Possible Options		
Electrical heating		
Tank heating 48 kW		
Steam heating		
Steam valve air		
Electrical valve stem		
Steam-water mixing valve (Rinse water)		
Possible Options for all execution		
Medium pressure centrifugal pump 17 bar		
Dosing pump		
Vapor extractor with integrated stainless steel piping (Activation when door is open)		
Installation in existing floor pan		

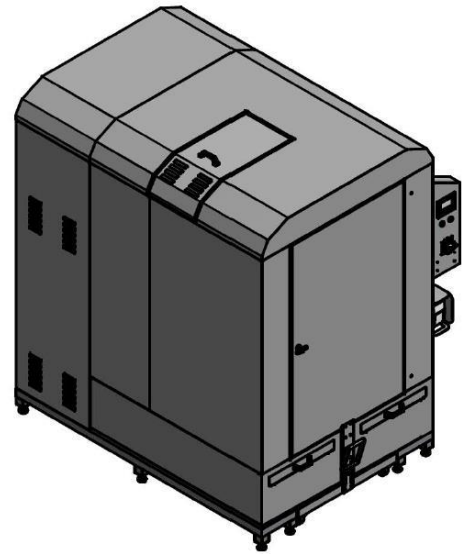
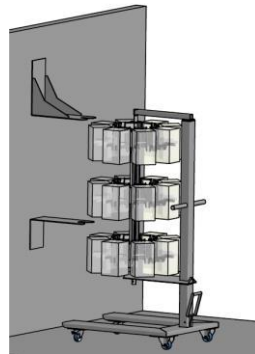


5. Multi-Head-Hopper Washing Machine



Weigh hoppers

Loading: Front loader



MHW24

Capacity:

per hour

Compact washing system in a hygienic design with integrated main wash, thermal rinse and blow-drying for fast and effective cleaning of moderately to heavily soiled weigh hoppers (for dimensions please see technical data below). The weigh hoppers can be easily cleaned and dried with a minimal handling effort. The washing system is made out of stainless steel in a combined tube and sheet metal construction.

The washing system is loaded with a specially developed easy glide-in mobile rack and suspension system, designed for both the transportation of the weigh hoppers as well as for the suspension during the washing cycle. The suspension rod of the trolley is rotatable and has an adaptable capacity, 3 x 8 hoppers, which can be deposited on a wall bracket and exchanged to provide for a format change by exchanging the suspension rack. The suspension rack is customized to accommodate the weigh hoppers at hand.

A gear motor and clutch provide for the defined rotation and motion within the machine. The wash, rinse and blow-drying nozzles are securely affixed in between the weigh hoppers (hopper positions).

Technical Data (Example of washing machine):

Main Wash

Pump	: 3S 40-160/7,56
Tank heater	: direct steam injection
Washing temperature	: 35-60°C, adjustable
Nozzles	: Clip eyelet (rotating flat jet nozzles) + flat nozzles
Metering pump for detergent	: Concept 2117 + ILFS02

Rinse

Nozzles	: Clip eyelet (rotating flat jet nozzles) + flat nozzles
Heating	: steam/water mixer
Rinse temperature (recommended)	: 82-85°C

Miscellaneous


Height adjustable feet

Container Washer



Electrical & utility connections

Wash water inlet	: 3/4"
Rinse water inlet	: 1/2"
Water drain	: 2" on ball valve
Electrical mains connection	: 3~400/230V 50Hz, + N + PE
Motor protection	: IP55

Article description	
Electrical heating	
Steam heating	
Possible Options	
Electrical heating	
Tank heating 48 kW	
Steam heating	
Steam valve air	
Electrical valve stem	
Steam-water mixing valve (Rinse water)	
Possible Options for all execution	
Holder for weigh hoppers	
Holder for weigh hoppers (Wall mounted)	
Trolley for holder for weigh hoppers	
Installation in existing floor pan	

