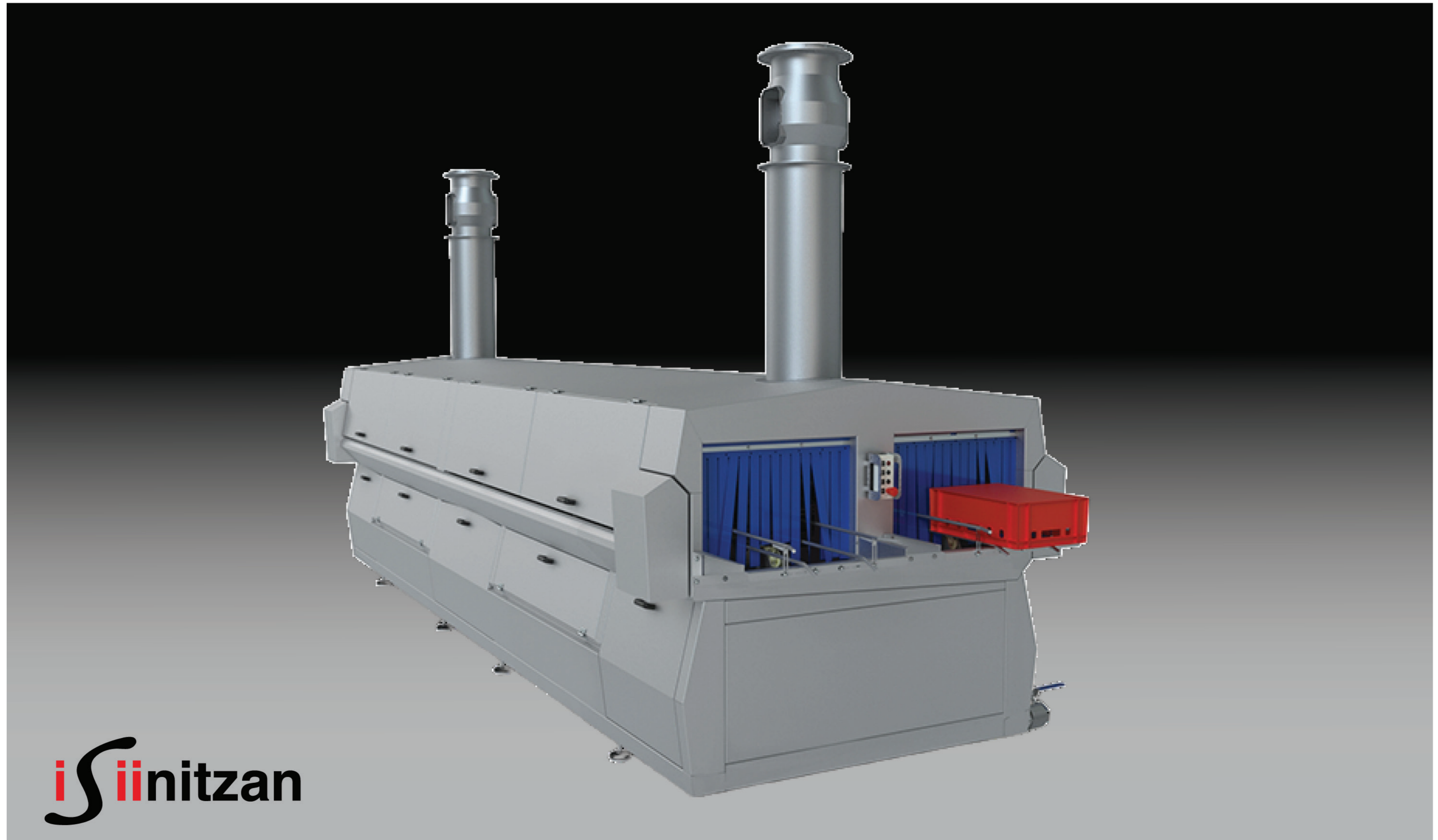


## Crate washer (ECW-D-700)



The entire system is constructed out of solid plates and profiles (stainless steel 304) and is placed on adjustable feet. The wash tunnel is accessible by means of very practical upward folding-doors. When a door is opened during operation, the washer will stop instantly. Transport of the crates is conducted by a synthetic chain. The spraying arcs are provided with a large number of synthetic click nozzles. The spraying pattern of these nozzles is easily adjustable without tools. The side guiding and movable top guiding (parallelogram) assure a proper position of the crates while being cleaned. In the after rinse zone the crates are sprayed with fresh water. The spraying arc is connected directly to fresh water supply.

Technical Data	
Capacity	2240 (1120 per lane) crates per hour at a staying time of 45 seconds.
Dimensions of the crates:	Maximum dimension 600 x 400 mm (based on E-crates). Maximum crate height is 300 mm.
Type	ECW-D-7000 (double lane)
Electric safety	3x 40A (values change based on chosen options)
Current	440V - 60Hz.; 3 Phase + E + N
Transport chain	Synthetic
Drive	0,18 kW
Machine length	7,90 meters
Control panel	Plastic
Switch box	Stainless steel
Controller	Siemens LOGO
IP-rating switch box	Depending on options

## Prewash zone

During the transport through the prewash zone the crates are cleaned and the larger dirt is removed from crates. The spraying pattern of the nozzles is configured to reach maximum cleaning results. They are supplied with water by a powerful and energy efficient pump.

Before the rinsing water runs back into the tank to be re-used, a stationary filter tray ensures it is thoroughly filtered. This filter tray can be taken out. After removing the filter tray the large tank is easily accessible. The prewash tank is filled by its own filling connection equipped with level sensors. A high level sensor closes the water supply as soon as operating level is reached. The low level sensor opens the water supply as soon as water level is too low.

An overflow prevents the water level from becoming too high. For easy emptying of the water tank a ball valve is mounted, enabling the system to be emptied within a short amount of time. The tank is constructed with a slanting bottom, enabling a quick flow of water towards the drain when emptied.



Prewash zone	
Length	(2x) 3,5 meters
Tank	(2x) +/- 500 litres
Pumps	(2x) 7,5 kW*
Capacity	48 m3/hr, 3,2 bar
Nozzles	Synthetic click nozzles
Filter	Filter tray
Manhole	Max. 70°C
Filling connection	1/2"
Overflow	2 1/2"
Drain	3"

## Main wash zone

In the main wash zone the crates are cleaned and the residual dirt is removed from the crates. Also, in the main wash zone the spraying pattern of the nozzles is configured to reach maximum cleaning results. They are supplied with water by a powerful and energy efficient pump.

Before the rinsing water runs back into the tank to be re-used, a stationary filter tray ensures it is thoroughly filtered. This filter tray can be taken out. After removing the filter tray the large tank is easily accessible. The main wash tank is filled by its own filling connection, equipped with level sensors. A high level sensor closes the water supply as soon as operating level is reached. The low level sensor opens the water supply as soon as water level is too low.

An overflow prevents the water level from becoming too high. For easy emptying of the water tank a ball valve is mounted, enabling the system to be emptied within a short amount of time. The tank is constructed with a slanting bottom, enabling a quick flow of water towards the drain when emptied.



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Filter	Filter tray
Manhole	Max. 70°C
Filling connection	1/2"
Overflow	3"
Drain	3"

## After rinse zone – fresh water

In the after rinse zone the crates are rinsed with fresh water. The majority of the residual detergent will be removed. To achieve this, the rinsing bow is directly connected to the fresh water supply. A sensor controls the after rinse bow. The fresh water supply stays closed when no crates are transported.



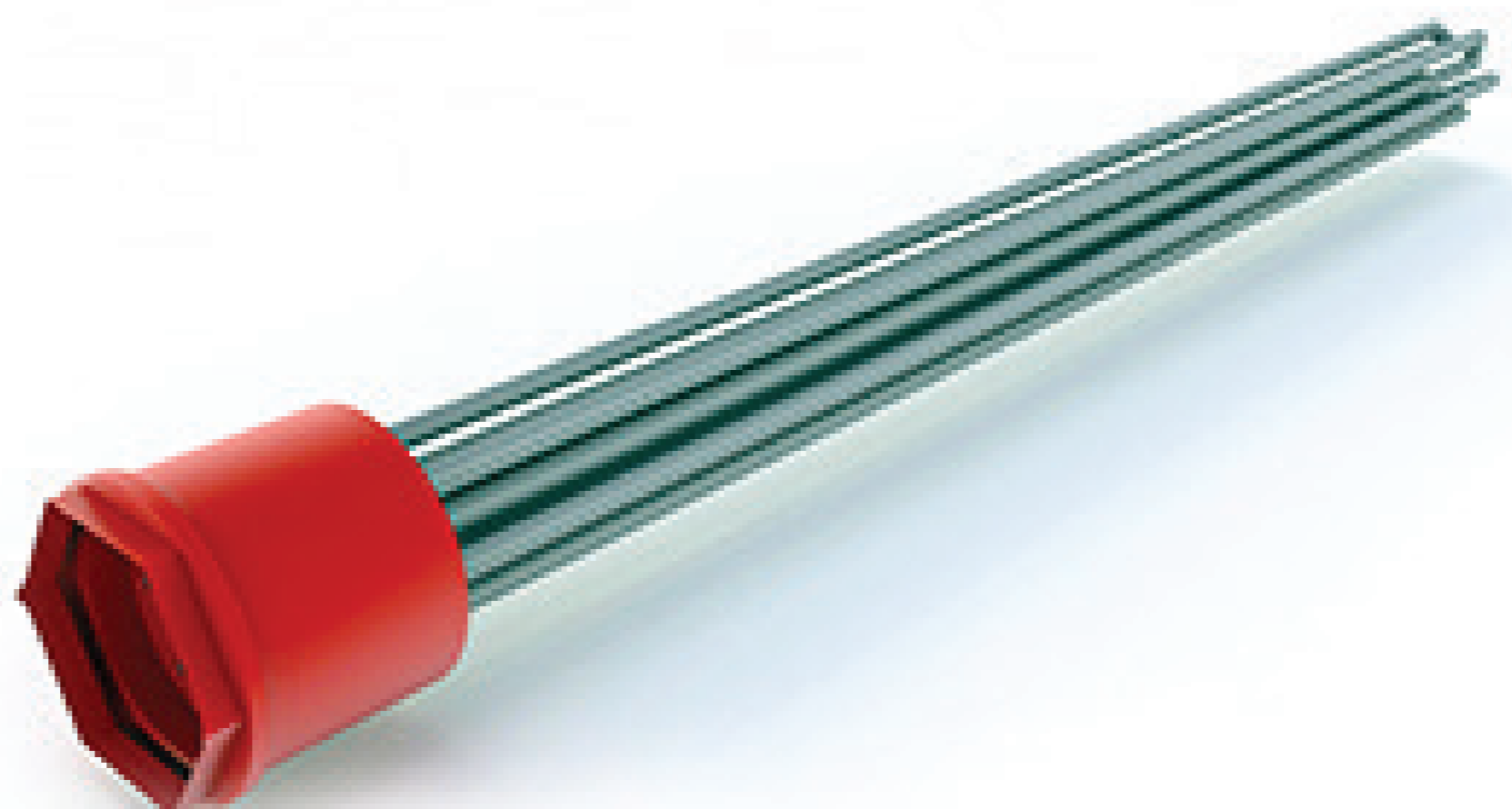
After rinse zone	
Length	Integrated in main wash zone
Connection water supply	Max. 80°C, to be provided by client
Temperature	1/2", to fresh water source
Nozzles	If no crates are transported, the fresh water supply is closed.
Water consumption	Ca. 0,3-0,5 liters per crate

## Safety

- Sensors are placed on all crate washer doors. When a door is opened during operation, the washer will stop instantly.
- Easily accessible emergency stop.
- Water level switches in the water tanks, to prevent the pumps from running dry.
- Protective cover on all rotating parts.
- \* Pump equipped with SiC/SiC seal: higher closing resistance, better chemical resistance (SiC = Silicon - Carbon).

## Heating by electric element

To heat up the water an electric body of 30 kW is installed. A PT-100 sensor controls the temperature and switches the element on or off.



## Dosing pump for detergent

To optimize the cleaning result a detergent is dosed into the main wash zone. The dosage is adjustable.



## Dosing pump for rinse aid

To optimize the cleaning result a rinse aid is dosed into the after rinse zone. The dosage is adjustable.



## Vapour extraction

On the roof of the installation a stainless steel ventilator for vapour extraction is possible. The capacity of this ventilator is 1600m<sup>3</sup>/hr at 150Pa. The power of the drive is 0,37 kW. Connection to the exhaust channel is Ø 315 mm.

