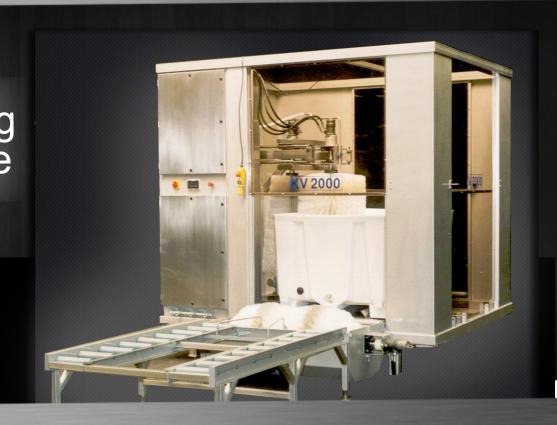


### Innovative rustfrie løsninger

Quality Designs Washing Machine

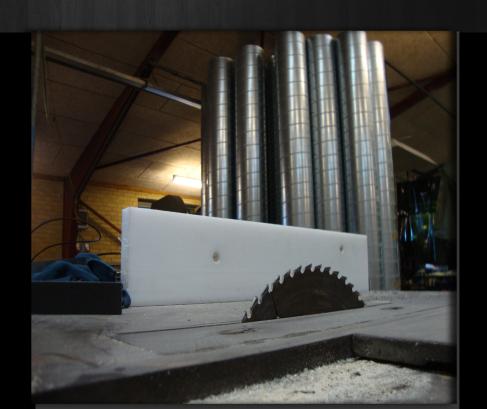


### Contents

s.3,4,5 Washing Machine 1000

s.6,7 Washing Machine 2000

s.8,9 Washing Machine 3000





### Description:

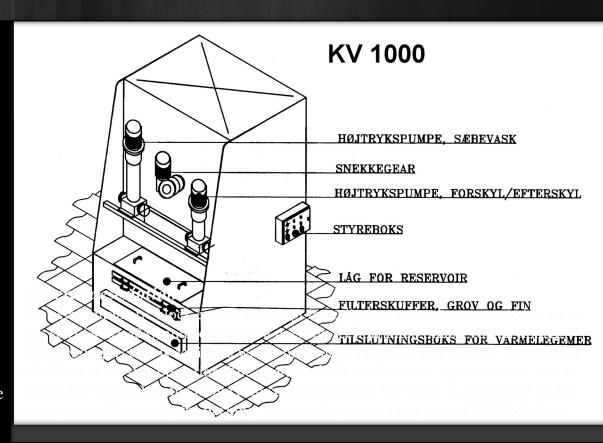
A tote bin is placed on the tiltable lid while it is resting on the floor. A guiderail secures that the tote is placed correct. The guiderail holds the tote when it is inside the cabin. The lid is tilted by means of 2 pneumatic cylinders.

When the cabin is closed the washing process can be started. The nozzle system inside the cabinet starts to rotate, and is guided in a rectangular track that follows the shape of the tote bin.

The washing program has 3 steps:

- 1) Pre wash with cold water at approx. 6 bar.
- 2) Main wash with heated water (500 C.) at approx. 12 bar.
- 3) After flush with cold water at approx. 6 bar.

Water from pre wash and after flush are lead to drain. Detergent water are lead from the cabinet to the tank via a set of filter trays. The water is recycled until it is to contaminated. The tank is equipped with heating elements to maintain the temperature of the water.





### Operation:

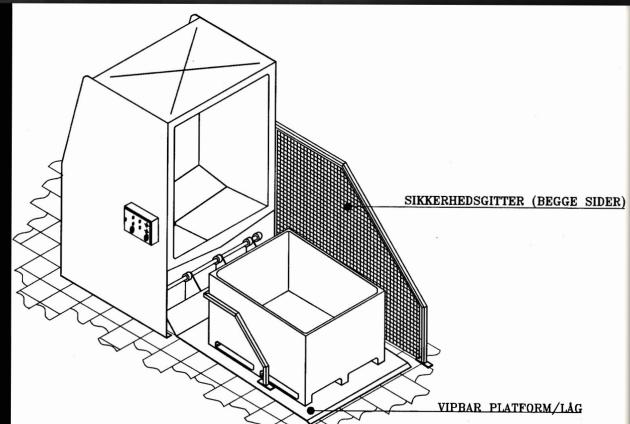
The machine is operated from the control panel on the side of the machine. The duration of each of the 3 steps can be programmed on the control panel. Furthermore each step can be individually cancelled. The machine is controlled by a PLC.

#### Cleaning/maintenance:

The filter trays of the machine must be taken out and cleaned thoroughly 1-2 times a day. When the water is changed it is recommended to clean the tank inside. Further the cabinet must be hosed down once a day.

#### Technical data:

Materials: All metal parts except pumps, gear, solenoid valves etc, is made in stainless steel (AISI 304).





Technical data:

Materials:

All metal parts except pumps, gear, solenoid valves etc, is

made in stainless steel (AISI 304).

**Dimensions:** Length: 3.900 mm (inclusive safety net)

Width: 1.800 mm (inclusive control panel)

Heigth: 2.900 mm

**Pumps:** Pre wash/after flush: Grundfos CR-4-40 ca. 4,0

cbm/h at 6 bar.

Detergent wash: Grundfos CR-8-120 ca. 5.5

cbm/h at 12 bar.

*Tank content:* Approx. 500 l. (Automatic level control).

Heating elements: DEVI 5 x 9 kW.

**Power consumption:** Tank (heating elements) 45,00 kW

(Maximum).

Pump (Pre wash/after flush) 0.75 kW (Maxi

mum).

Pumpe (Detergent wash) 4,00 kW (Max. ef

fekt). Gearmotor 0,37 kW (Max. effekt).

*Options:* Heated after flush water (via heat exchanger).

Desinfection by means of chlorinated after

flush water.

Steam heating instead of electrical heating



### Advantages:

- Quick and efficient cleaning by means of rotating brushes.
- Eliminates hard and monotonous work.
- Easy programming.
- Flexible design allows for various ways of assembly.
- Made from stainless steel.

### Description:

The machine operates as follows. A dirty bin is placed on the inlet roller conveyer. The operator starts the bottom brushes by activating button (1), and pushes the bin into the machine. The bin will then pass the rotating brushes that clean the bottom of the tote-bin. When the bin is placed on the platform, the operator activates button (2), and the vertical brushes start to rotate and to move downwards. When the brushes are in bottom position, the platform will start to rotate e.g. 2 times clockwise and 2 times counter clockwise, (the number of rotations can be programmed on the machine between 1 and 999 rotations). During the rotation the brushes will clean the bin on the inside bottom and sides as well as the outside sides.





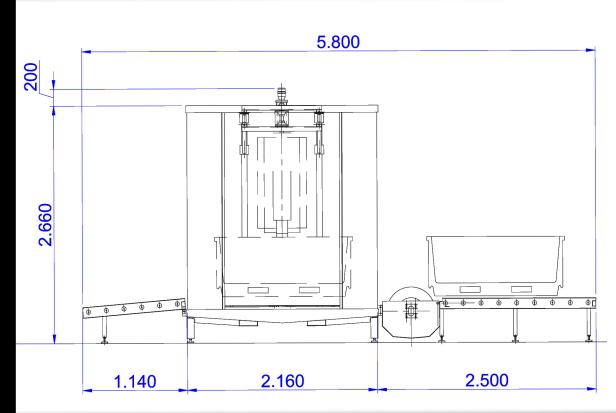
### Description:

When the rotation is finished the brushes will go up again and the bin is cleaned. The cleaned bin is either pulled out by hand or pushed out

by the next bin. When the cleaned bin is on the outlet roller conveyer, the operator removes the residues by flushing the bin with a hose. During operation water will be added to the cleaning process. The main purpose of adding water is to keep the brushes clean. If the bins are very dirty, it is recommended to flush them with foam-detergent and let the detergent work for approx. 15 minutes before running the bins through the machine.

#### We can also apply you:

- Washing machines for meat trolleys
- Washing machines for boxes of all sizes
- Stacking and de-stacking units
- Stainless steel food processing equipment





### Description part 1:

KV3000 is designed for cleaning tote bins from 600 L to 1100 L. The machine is made from stainless steel (AISI 304) and consist of 3 sections; Inlet module, wash module, and outlet module. Integrated in all 3 sections is a double plastic chain-conveyer that carries the tote bins through the machine. The machine operates as follows: A dirty tote bin is placed upside down on the inlet side by means of a forklift. By means of the remote control the machine can be started from the forklift. When the machine is started, the conveyor transports the tote bin into the washing section. When the tote bin is correctly positioned in the washing section, the conveyer stops and the cabinet doors close automatically. The washing cycle can contain the following: Pre-wash, main wash and after flush. The duration of all 3 processes can be programmed on the control panel of the machine.



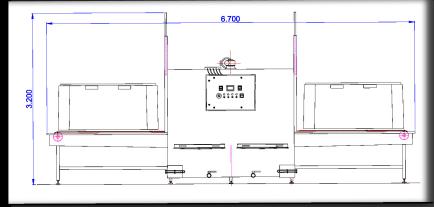


#### Description part 2:

During washing the outside surfaces of the tote bin are cleaned by high pressure water coming from a set of rotating nozzles. The inside surfaces are cleaned by means of 2 rotating turbines. During pre- and main wash the washing water comes from an 11kW pump. The pump has a capacity of approx. 350L/min. at a pressure of 10 bar, which ensures efficient cleaning of the tote bins.

After flush is done with freshwater at a pressure of 3-4 bar. After use the cleaning water flows via a set of filter trays back into the tanks, where it is reheated and recycled. The tanks of the machine are equipped with automatic level control, heating elements (or steam nozzle), a cleaning door size 250x200 mm (8" x 10") and a drain valve (2"). When the washing is finished, the doors open and the cleaned tote bin is carried out at the outlet side of the machine. A new tote bin can be placed at the inlet and the procedure can be repeated.

**Advantages:** Quick and efficient cleaning, Eliminates hard and monotonous work, Environmentally friendly, Economical, Easy programming of washing-cycles, Made from stainless steel.



#### Standard equipment and options:

- 11 kW pump (10bar 350L/min)
- Thermostatic controlled steam- or electrical heating •
- Automatic water filling
- Dry-run protection
- Double filter tray (1,0 resp. 2,0 mm)
- Detergent-dosage unit

Vapour-exhaustion system

Remote-control

Tilting units by inand outlet

Rotating drum filter







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