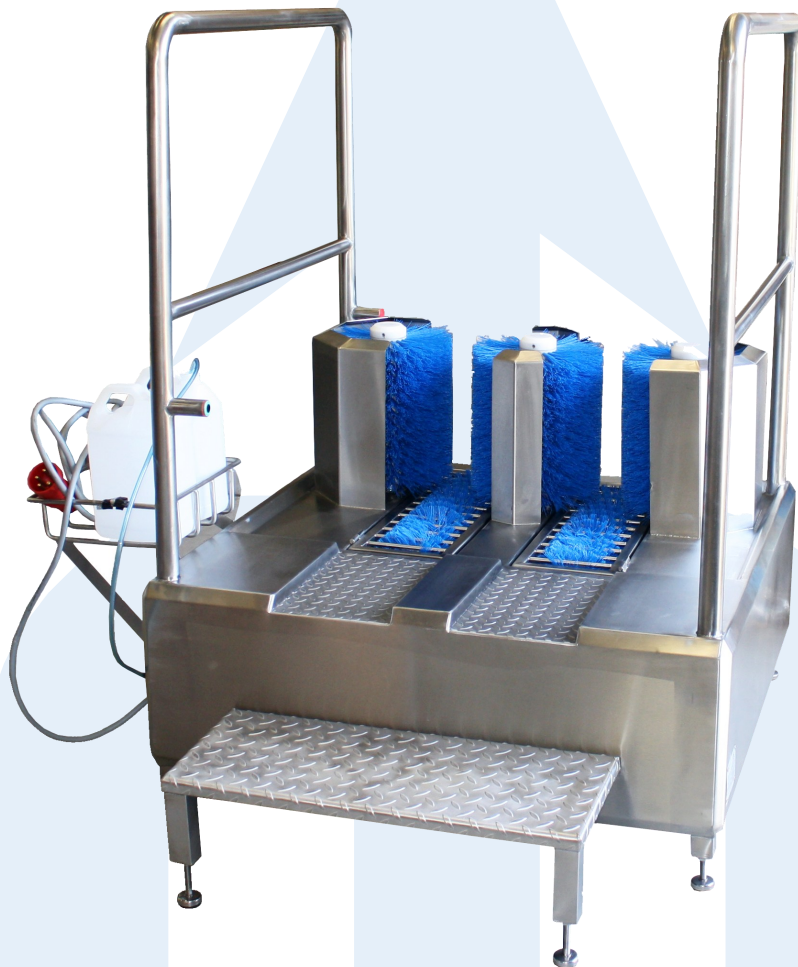


MEFE
MITCHELL ENGINEERING
FOOD EQUIPMENT PTY LTD

Instruction Manual



Walk Through Automatic Boot Wash

Bi-Directional

CAT 74-501B

Revision 10

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1. Product Description and Intended Use

Walk-through bi-directional automatic boot wash designed to wash soles and shanks of rubber footwear for use in food industries.

This device must only be used for the intended purpose stated above and according to instruction contained in this manual.

1.1 Construction

The primary element of the boot wash is acid-resistant steel AISI 304 (1.4301) body equipped with nylon brushes and hand rails welded on either side of the body.

Working elements of the boot wash are 3 vertical nylon brushes for washing shanks and 2 horizontal brushes for washing boot soles. Each horizontal brush is driven by a separate gear motor. A third motor drives 3 vertical brushes.

The water system consists of commercial linking elements connected by flexible tubes. Basic elements are: water connection, electromagnetic valve, spraying tubes. Water is supplied to the washer cleaning area via the spraying tubes (water is sprayed on the brushes). The electromagnetic valve controls water supply during the cleaning process. Used water is drained to sewer via underside drain pipe.

All electrical wiring is in-built into the body. The optical sensor is placed in a horizontal position on the rail at the entrance of the device. The boot wash is supplied with Stainless Steel stairs to equip at entrance and exit.

1.2 Technical Specifications

Power Supply	Power	IP	Drain Diameter (mm)	Water Supply	Dimensions	Weight
400V 50Hz 3-phase	1.1 kW	IP65	50	1/2"	1000/1612 x 1318 x 1400	160kg

1.3 Components

- Stainless Steel body and stairs
- 2 x 0,25 kW and 1 x 0,55 kW gear motors
- x5 nylon rotary brushes
- Electromagnetic valve
- Photocell as activating sensor
- x2 stairs and shelf with container for detergent or disinfectant and injector tube

2. Installation

Installation consists of connection to the water system using an elastic hose (connection 1/2"), drainage to sewage (50mm, you must guarantee sealing and tightness), electrical installation of 3x400v 50Hz socket (must be secured by a residual-current switch).

Electrical connection must ensure correct direction of brushes (horizontal brushes should rotate inward).

The washer does not require special foundations. It should be set directly on the floor and levelled by using the adjustable feet beneath.

Please ensure all "work" is complete prior to installation such as grinding and cutting of regular steel as residue of work may settle on the surface of the washer and cause damage.

2.1 Operation

The user steps up on the grates in the washing area. The main working parts; brushes driven by gear motors, are auto activated by the control system when the sensor detects movement. This also activates water supply to the spray nozzles.

Water combined with detergent is sprayed on the rotating brushes to clean and remove contaminants. The end of the injector tube must be immersed in the container of liquid detergent or disinfectant.

The time of washing can be set and adjusted as necessary between 1—12 seconds wash according to the user's requirements. Use the potentiometer in the middle on time relay PCS-519DUO (Figure 1).

Before starting the machine you must check all electrical and water connections.

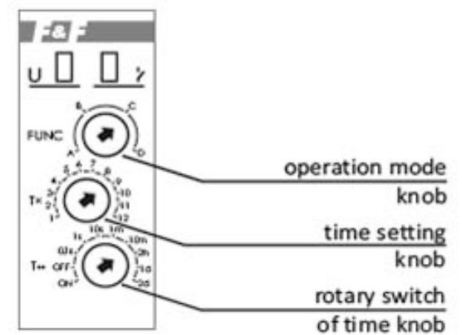


Figure 1

2.2 End of Work

1. Remove the plug from the mains.
2. Clean the washer and surrounding area with commercially available cleaning agents for Stainless Steel to preserve the life of the machine. The use of conventional cleaning detergents can cause damage to the stainless steel.

2.3 Safe Work Conditions and Requirements

1. The washer must be properly maintained and cleaned.
2. In the event of any failure, the washer must be turned off and disconnected from the mains. It is forbidden to perform any work on the washer before disconnection from the mains. Restarting must only occur following removal and/or repair of any defects and proper check and test of the washer by maintenance personnel.
3. Any repairs must be performed by authorized and licenced technicians.
4. The washer must be connected to the mains with electric shock protection.
5. There should be proper lighting in the room where the washer is placed, in accordance with requirements.
6. Power cable with diameter 5 x 2,5mm (Cu) and length 3m, ended with plug 5b 32A is an element of the machine.
7. The water source must not contain any impurities. In addition, the water system must provided with appropriate filters. In the event servicing states any failure was caused by impurities in the water network, and the network is not equipped with appropriate water filters, repair of the defective parts is not covered in the warranty period.

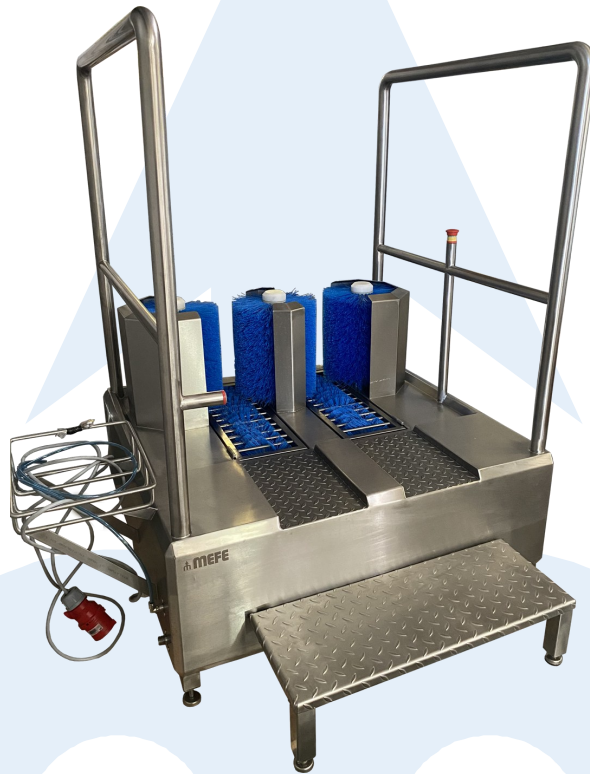
3. Cleaning and Maintenance

1. The condition of the strainer, valve, and nozzles must be checked regularly and not less frequently than every 1000 hours.
2. The condition of the electric cable must be checked regularly and not less frequently than every 1000 hours.
3. The condition and quality of the oil in the worm gear must be checked regularly and not less frequently than every 2000 hours and if necessary, replaced.
4. The condition and quality of installed sealing elements must be checked regularly and not less frequently than every 1000 hours and if necessary, replaced. Repairs and maintenance must be performed only by authorized and licenced technicians.

3.1 Routine Inspection

1. Assessment of the condition and if necessary lubrication of motor bearings.
2. Check the oil level in the gearbox of gear motor.
3. Check the electromagnetic valve (if necessary, disassemble the head of valve and remove accumulated sediments).
4. In case of high hardness or high content of iron in water, the valve inspection should be performed every 500h.
5. Check for worn brushes and replace when needed.

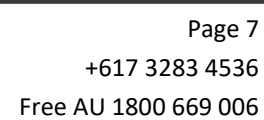
3.2 Diagram and Parts List

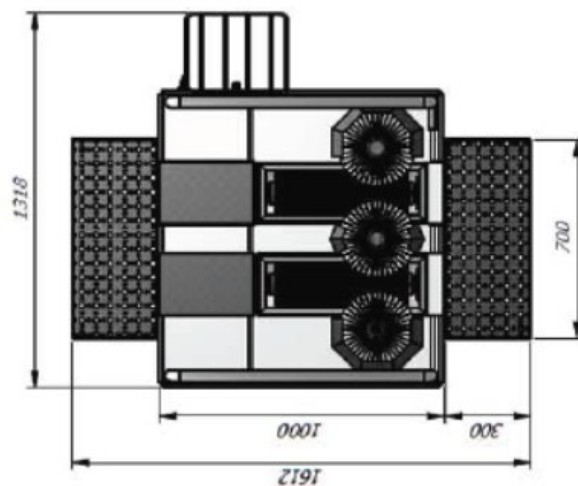
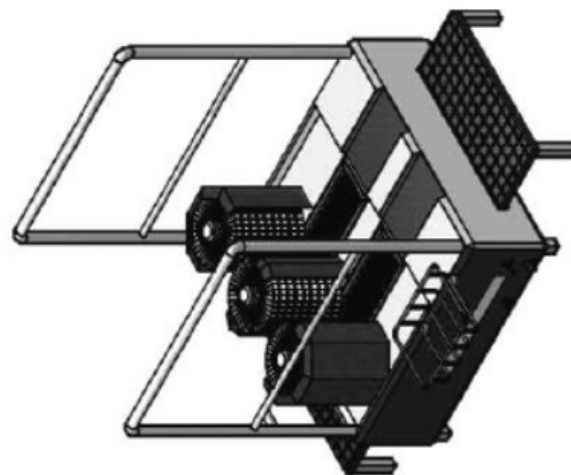
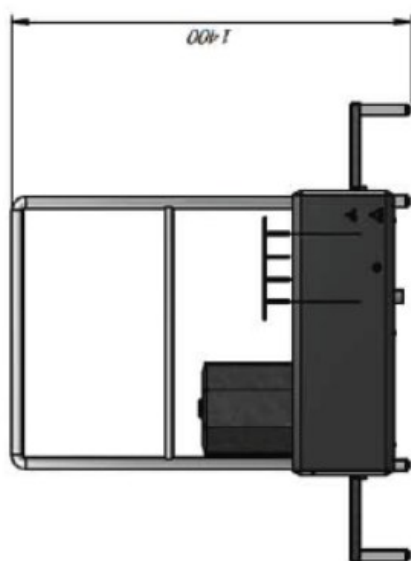
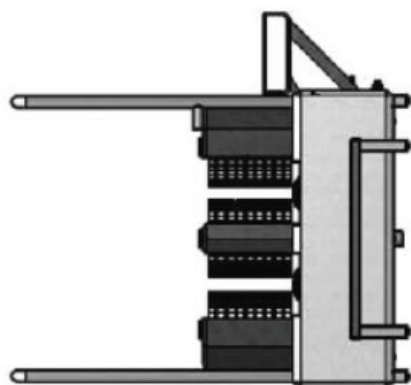
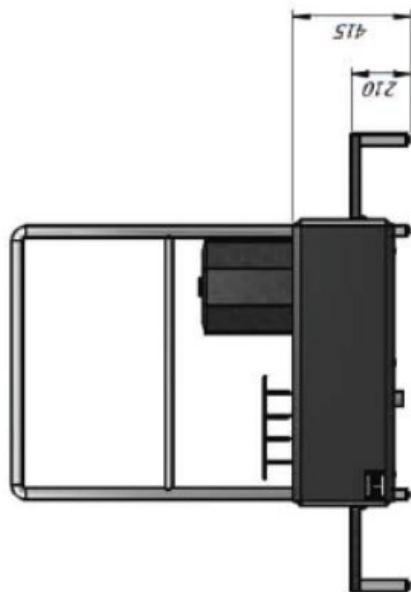


Part Number	Description	Qty	Part Number	Description	Qty
74501 1	OPTICAL SENSOR	1	74501 11b	NYLON V BELT PULLEY	4
74501 1A	OPTICAL SENSOR RELAY	1	74501 12	INJECTOR TUBE WITH NOZZLE (YELLOW) K1000	1
74501 2	HORIZONTAL BRUSH	2	74501 13	SIMMERING 30*47*7	3
74501 4	VERTICAL BRUSH	3	74501 14	BALL BEARING	3
74501 6	MOTOR BONFIGLIOLI 0,25 kW 4P B14	2	74501 15	LOWER BEARING FRAME	2
74501 7	GEAR MOTOR BONFIGLIOLI VF-44/F1-10 P63 B14 B3 (Horizontal Brushes)	2	74501 16	UPPER BEARING FRAME	2
74501 8	Motor IP55 0,55 kW Bonfiglioli IP55 (For 3 Vertical Brushes)	1	74501 17	DETERGENT NOZZLES 15 PCS -	1
74501 9	Gearbox Bonfiglioli (For 3 Vertical Brushes)	1	74501 18	DPDT Multi Function Timer Relay, 12 → 240 V AC/DC 100 ms → 10 days, DIN Rail Mount	1
74501 10	ELECTROMAGNETIC VALVE: 1/2" WITH COIL AND PLUG FOR 24V DC	1			
74501 11	V-BELT: A1000	2			

4. Warranty Conditions

1. The manufacturer's warranty covers a period of twelve (12) months from the date of delivery to the final user.
2. All spare parts supplied during the warranty period are not covered by a separate warranty, but included in the original warranty.
3. A prerequisite for the use of the guarantee is to use original parts recommended by the manufacturer, and that no modifications are made.
4. The warranty does not cover damage caused by deficient maintenance or installation.
5. The guarantor is not responsible for any damage caused by power supply other than 220V +/- 5-10% (for one phase) or inadequate frequency (other than 60Hz).
6. The manufacturer must agree to undertake within 14 days (from the date of notification by the user of the product for repair), how and when to repair, as well as free repair or parts replacement within the shortest realistic term (if the part was damaged due to defects in material or performance errors).
7. The manufacturer is liable only if the product is used in conformity with the user manual and it is revealed the defect arose from causes inherent in the goods sold.
8. Warranty does not cover damage caused by transportation and also in the case of:
 - Improper operation
 - Improper storage and maintenance
 - Repairs carried out by unauthorized persons or establishments





Konstruował	Kolfer	2011-02-14	CAT 74501B		Materiał	
Rysował	Kolfer	2011-02-14			Masa [kg]	
Sprawdził					Zast. przez rys. nr	
Zatwierdził					Zast. rys. nr	
Podziałka	Nazwisko	Data			Arkusz	
					A3	

