



BOS® Cleantec

BOS® CLEANING MACHINES Operation and Maintenance Manual

BOS® CLEANER 750p

PLEASE READ THIS MANUAL CAREFULLY BEFORE USING THE MACHINE –
IT IS ESSENTIAL FOR ENSURING CORRECT AND SAFE OPERATION!

- READ ALL SAFETY AND OPERATING INSTRUCTIONS!
- KEEP THE MANUAL FOR FUTURE REFERENCE!

Non-observance of warnings and instructions may result in electric shock, fire and/or severe injuries!



This manual only applies to BOS® Cleaner duct cleaning brushes. These may only be used in dry conditions in non-hazardous areas.

This item is not suitable for people whose physical abilities, perception and intellectual capacity are weak or compromised (including children), except under the supervision of a responsible and able person who has read these User Instructions. Children must be kept away from the machine.

Disclaimer: This manual has been reviewed, but 100 % accuracy is not guaranteed. As part of our policy of continuous product development, we reserve the right to revise any and all features and specifications of the product. Therefore, any claims based on the data, pictures, drawings or text set forth in this manual will be rejected. We cannot guarantee that the manual is error-free.

GENERAL NOTES

The products covered by this manual have been manufactured in Finland to existing laws, decrees and regulations as stated in the Declaration of Conformity below.

- The person in charge of the operation of this machine must be familiar with the construction and operation of the machine and must ensure safe operation.
- The machine may only be operated by people familiarised with its use.
- The removal of safety features and any modification of their original installation is strictly forbidden.
- Should it be necessary to install the machine in a way that prevents the operation of any safety features, the person in charge of machine operation must be informed.
 - The products covered by this manual are only intended for the uses for which they have been designed and which have been stated in the manual!
 - The products must not be used for any other purpose!
 - The machine operator and the person in charge of the machine are liable for any damage resulting from use in breach of regulations!
 - The manufacturer accepts no liability for any consequences of using the machine in breach of the instructions!
- Always store the manual where the operator can refer to it.
- Read the manual carefully before machine installation and commissioning.
- Observe the operating and maintenance instructions to ensure trouble-free machine operation.
- Observe the safety guidelines.
- For maintenance, only use spare parts and components approved by the manufacturer.

The BOS® Cleaner duct cleaning brushes have been designed and built in compliance with general and safety guidelines. They are intended for the cleaning and disinfection of air ducts. BOS® Cleaner BC 750p is a pneumatically driven cleaning brush for cleaning and disinfecting round and rectangular ducts. BOS® Cleaner BC 750p is suitable for 315-1200mm ducts.

The rotation direction of the brush is selected with the pneumatic valve and the speed is regulated with the main air valve. Rotation speed can be regulated continuously between 0 and 670 rpm.

Shaft length is 40 m and the total working range is approx. 70 m, when the brush is used from one service hatch in both directions

TECHNICAL DATA

	BOS® Cleaner BC 750p
Power source	Compressed air
Motor	Ober LFB3R
Motor air requirement	Optimal 400 l / min 6 bar (max 8 bar) (3,8 Nm (stall 6,5 Nm))
Required compressor	300-600 l / min, 6 bar max 8 bar
Brush speed	Continuously adjustable
Noise	78,5 dB (A)
Control devices	Manually adjustable compressed air valve
Brush control / change of direction	Air valve
Brush connector	M 12
Dimensions (height / width / length) mm	1200*500*1060
Weight	44 kg
Cleaning shaft length	40 m
Cleaning shaft	LDPE outer sheath +11 mm glass fibre rod, 2*12/10 PaP40, 1* 10(8 Pa12P40
Pressure	6 bar (pressure)
Air flow	300- 600 i/min
Material, housing / drum	Painted steel/marine-grade aluminium EN AW 5754
Wheels (Rear- / front wheels)	Ø 250 mm / Ø 100 mm locking swivel casters
Max brush size	1200 mm
High volume air jetting nozzle	yes
Adjustable liquid nozzle	yes
Oil dispenser	yes

INTENDED USE

BOS® Cleaner duct cleaning brushes have been designed for professional use. The tool may be used only for the purposes for which it was designed and which are mentioned in these instructions. Use for other purposes requires express prior approval by the manufacturer. The manufacturer accepts no liability for any consequences of using the machine in breach of the instructions.

The product may only be used by a person who has read the operation and maintenance instructions.

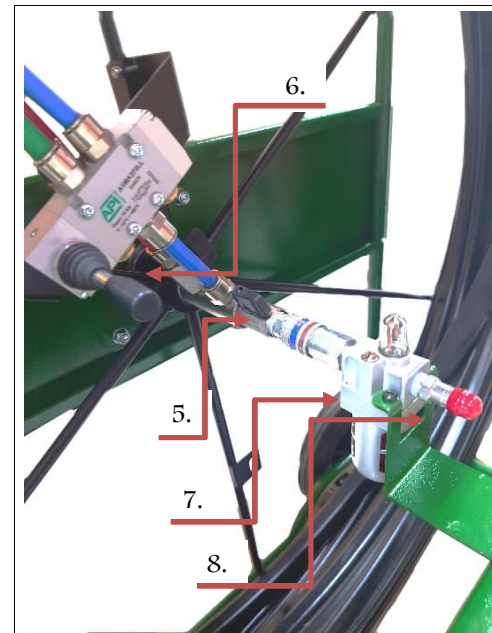
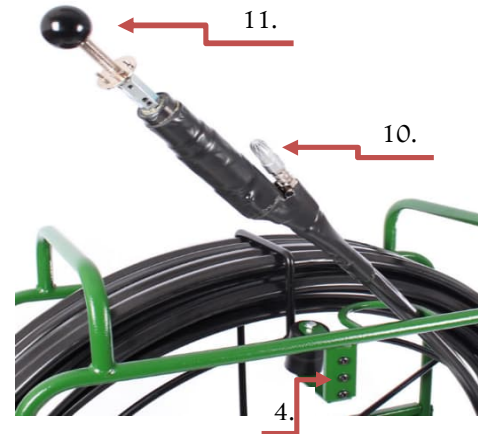
When working with the machines, the following safety aspects should be considered:

- Protect the machine against moisture and vibration!
- ONLY USE THE MACHINE IN DRY CONDITIONS IN NON-HAZARDOUS AREAS!
- Protect the machine against moisture and vibration!
- Protect the machine against water during cleaning!

- The removal and any modification of safety features is strictly prohibited!
- The information on the type plate must be observed during maintenance and when ordering spare parts!
- Observe national regulations!
- Observe local regulations governing the use of these machines!
- No-one must stay in the vicinity of the machine while it is being operated!
- The machine operator is liable for any damage resulting from use in breach of regulations!
- BOS® Cleaner duct cleaning brushes machines must not be modified in any way. The manufacturer accepts no liability for any damage resulting from modifications!
- Clean the machine and the shaft carefully after use!
- To achieve the best possible results, the machine should be used only with brushes recommended by the manufacturer!
- Observe the instructions given on the type plate and in this manual!

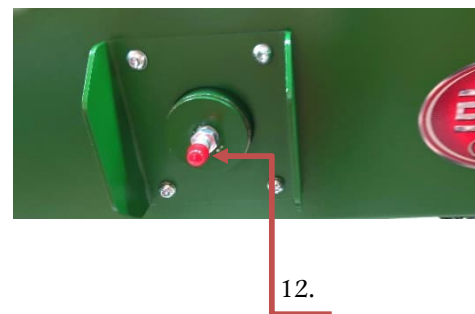
CONSTRUCTION AND CONTROLS

BOS® Cleaner 750p















1. Cleaning shaft
2. Swivel lockable front wheels
3. Rear wheels
4. Perimeter support rollers
5. Rotation speed control with shut-off valve
6. Changing the rotation direction of the brush with a compressed air valve
7. Oiler (for air motor maintenance)
8. Compressed air supply to the air motor
9. Liquid nozzle
10. Air nozzle
11. Brush holder for nylon center brushes
12. Liquid or air supply

Liquid or air supply on the back panel to make brushing more efficient



ACCESSORIES AND SPARE PARTS

When ordering spare parts, please always state the model, type and serial number of the machine. This information can be found on the CE plate, which is located on the back plate.

Basic brush M12 400–600 mm, medium, Perlon bristle	
Soft brush with nylon center 200–1000 mm, PEH 300, PES Ø 0.5 mm	
Combination brush with nylon center and disc 200/400–800/1000 mm, PEH 300, PES Ø 0.5 mm / nylon (PA 6.6) Ø 0.75 mm	
Hard brush with nylon center, 300—600 mm, PEH 300, nylon (PA 6.6) Ø 1.0 mm	
Soft brush for small ducts, Pes bristle 0,35 mm M 12 125 – 350 mm	
Brush with nylon center, tynex / nylon bristle 200/400- 800/1000 mm	
High volume air jetting nozzle for BOS® Cleaner 750p	
Liqued Nozzle with backpressure valve for BOS® Cleaner 750 p	
Foam Nozzle with backpressure valve for BOS® Cleaner 750 p	
Oil dispenser for BOS® Cleaner 750 p	
Brush adabter for nylon center brush M-12	
Ready to instal shaft BC 750p	

OPERATING AND SAFETY INSTRUCTIONS

PLEASE CAREFULLY OBSERVE THE FOLLOWING BEFORE AND DURING OPERATION:

- The machine operator must ensure that the machine is fit for the intended purpose.
- The machine operator must ensure that the air supply matches the ratings on the CE plate.
- The air must be dry and clean.
- All regulatory requirements must be observed.
- There must be no flammable particles nor danger of explosion present in the operating environment.
- No flammable or explosive materials or substances must be used or stored at the location where the machine is used.
- The machine must be protected from moisture, vibration and water.
- Only use spare parts that are suitable for the machine (are approved by the manufacturer).
- Do not cover the machine during operation.
- The machine must be kept as clean as possible.
- Do not stay continuously in the immediate vicinity of a machine in operation.
- The machine must not be used in the vicinity of explosive, toxic or corrosive gases.
- The operating temperature must not exceed +40°C or fall below -20°C.
- The machine must not be modified in any way.

It is recommended that these machines are operated by two persons at a time, to avoid accidents caused by the force of the rotating shaft and brush.

The shaft may only be rotated while the brush is inside a duct. Before starting work, make sure the brush is properly attached.

The person(s) performing the work must, depending on the work performed, wear respiratory protection, a helmet, hearing protection, safety goggles, clothing and footwear as well as other personal protective equipment.

OPERATION

1. Transport

The machine must be protected against dirt and moisture during transport. The machine must not be stored outdoors unprotected. Exercise extreme care and caution when moving or lifting the machine. The machine must be transported in a vertical position and securely tied down. Avoid impacts and knocks during transport and handling.

Before commissioning, inspect the machine to make sure it is exactly as it should be (and without any transport damage).

2. Storage

Store the machine in a dry place, protected from weather conditions.

Avoid extreme temperatures (high and low) during storage.

3. Commissioning

Mount the machine in a vertical position on a flat surface, and make sure to protect it from weather conditions. Provide for lighting, ventilation and the necessary equipment (platforms, ladders). Protect the machine against vibration and impacts.

Check that all components are in place and that the machine is in proper working order. Check that the capacity of the compressor is sufficient. The maximum permitted operating temperature is 40 °C. The motor works when the temperature is at the correct level.

When not in use, the machine must be disconnected from the pneumatic system.

Inspect the condition of the ducts for damage before starting work and remove any obstacles.

4. Operation

- Before starting any work, make sure the work area is clear and free of obstacles and any superfluous personnel.
- Wear personal protective equipment.
- For efficient cleaning, create a negative pressure inside the ductwork to be cleaned.
- Equip the machine with a brush that is suitable for the work. Check the condition of the shaft and the mounting of the brush. Adjust the brush speed to suit the job at hand.
- Check that the main air valve is closed and the valves are in the centre position. Open the air supply.
- Insert the shaft into the duct and make sure there are no obstacles. Start the machine by opening the main air valve and then select the rotation direction by turning the air valve. Adjust the speed of the brush using the main air valve. The machine operates at the maximum speed when the main valve is fully open.
- Feed the shaft steadily. For best results, rotate the brush both clockwise and counter-clockwise. In rectangular ducts it may be necessary to clean the duct one side at a time (with the brush rotating in the same direction).
- Feed the shaft steadily avoiding excessive force, as this may damage the duct.
- It is recommended to work in pairs when cleaning ducts with a powered duct cleaning brush.

MAINTENANCE

- Before starting any maintenance or cleaning work on the machine, make sure to disconnect it from the air supply!
- Service the machine regularly!
- Remove all dirt and dust from the machine after every use!
- Risk of injury!

All maintenance and repair work that requires opening the air motor cover must be carried out by an authorised service centre.

Only genuine spare parts may be used.

A machine in continuous professional use must be serviced at intervals of one year.

If any mechanical faults are discovered, the machine must be serviced without delay.

During handling and transport, the machine must be protected to prevent further damage and personal injuries.

Routine maintenance and care covers cleaning the machine and checking the condition of the shaft.

A shaft with minor damage can be repaired using a heat-shrink tube.

- Check the oil mist reservoir daily and add oil if necessary (prevents air motor breakage)!
- Any repairs must be performed by a professional service workshop approved by the manufacturer!
- After every use, all dirt and grease must be removed from the shaft using a mild detergent!
- The air nozzles must be cleaned after use!
- The manufacturer accepts no liability for any maintenance work performed by a third party!

WARRANTY

Provided that the operating and maintenance instructions are strictly adhered to, the product is covered by a 12-month factory warranty starting from the date of purchase.

Any defects discovered during this warranty period are rectified free of charge, provided that

- The defect is caused by defective materials or components.
- The defect has occurred during normal use.
- The warranty does not cover defects resulting from improper maintenance or use.
- All maintenance and repair work on the machine has been performed by the manufacturer or an authorised representative. The manufacturer accepts no liability for any maintenance work performed by a third party.
- A warranty claim has been submitted in writing.

The warranty does not cover defects resulting from normal wear and tear, negligence, improper use or maintenance/repair works not performed by the manufacturer.

The product has been manufactured in compliance with existing international regulations. In case of any questions regarding commissioning or malfunctions, please contact the manufacturer.

For maintenance or warranty repair, the machine should be sent to the following address:

Bierkühl Oy
Pellonlaita 1, 50600 Mikkeli
Puh. +358 440 178 111

Bierkühl reserves the right to make changes.

ENVIRONMENT/RECYCLING

- Waste materials must be disposed of in compliance with the relevant regulatory requirements and without harming the environment!
- A decommissioned machine or any part of it must not be disposed of together with household waste!
- Discarded machine parts and accessories must be taken to an environmentally compatible recycling point!
- The valuable materials and components contained in the machine should be recycled and reused!

If an appropriate recycling point cannot be found, the product can also be returned to the seller or manufacturer for recycling.

Metal parts (housing and motor) can be recycled as scrap metal.

Electronic parts (air motor, air valve) should be taken to an authorised recycling facility.

Other parts can be recycled as mixed waste.

Note that the European Directive on waste electrical and electronic equipment and its implementation in accordance with national law requires that discarded electric tools be collected separately and returned to an approved recycling facility.

DECLARATION OF CONFORMITY

Manufacturer: Bierkühl Oy, Pellonlaita 1 50600 MIKKELI FINLAND
Tel.: +358 440 178 111
Website: www.boscleantec.com
www.bierkuhl.com
Product designation: Pneumatically driven duct cleaning brush
Product name: BOS® Cleaner
Intended use: Cleaning of air ducts
Serial Number:
Year of manufacture:

We hereby declare that the product named above has been designed to comply with the Finnish Government Decree on the safety of machinery (400/2008) and meets the requirements of the Machinery Directive (2006/42/EY).

We also declare that the following Directives and harmonised standards have been applied:

Essential characteristics and performance	Harmonised technical specification
Safety of machinery	SFS – EN ISO 12100:2010
Decree on the safety of machinery	Finnish Government Decree 400/2008
Machine Directive MD	MD 2006/42/EC
Restriction of Hazardous Substances RoHS Directive	2011/65/EU
Waste Electrical and Electronic Equipment (WEEE) Directive	WEEE 2012/19/EU

This product conforms to the requirements to achieve CE marking.

Bierkühl Oy 30.03.2024



Pentti Hiltunen
Managing director