



AirBench™ BD

Operation and Maintenance

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CAUTIONS



Use the AirBench only for the designed duty – consult the manufacturer on any change of use.

This unit is configured for blowdown of coolant and swarf only.



The filters are not self-cleaning.

They must be maintained / cleaned / replaced as described within.



Do not mix incompatible materials e.g. steel and aluminium.

It is the users' responsibility to comply with this legal requirement.



This unit is not ATEX rated.

It is your responsibility under ATEX regulations to ensure the AirBench is located in an area rated suitable for the specification of the AirBench.



Wear appropriate PPE. Use of this unit may expose operators to high noise levels due to compressed air; and splashed coolant to hands. Wear gloves and hearing protection.

INTRODUCTION

Overview

Thank you for choosing AirBench BD as your partscleaning system. Please read this document before installation and use.

This document details maintenance activities which are essential to the safe use of your AirBench. We recommend that the Responsible Person reads this manual fully prior to installation and operation of the AirBench.

This document refers to the AirBench BD type. Refer to the Commissioning Certificate provided with this unit for further guidance.

About AirBench

AirBench is a self-contained parts cleaning station which utilises a venturi system to generate airflow and a final multi-stage filter to contain coolant and swarf.

Some models vary in filtration and filtered air delivery point.

It is used by operating a foot pedal to trigger airflow; then operating a hand gun to blow excess coolant from parts.

About this Document

This document provides general maintenance and operation instructions for the AirBench BD range. It should be read in conjunction with the Commissioning Certificate supplied with the unit. If you have any concerns or doubts about maintenance or operation of this unit, contact the manufacturer.

INSTALLATION

General

Unpack the unit and check for damage, if not already completed.

The AirBench must be installed on a flat and level floor capable of carrying the weight of the unit. For nominal unit weights, see Specifications section at rear of manual. When determining an installation location, be aware that the air exhaust must discharge somewhere. Do not position the unit so rear outlets are blocked.

Air Supply

The unit must be connected to a supply of compressed air at 8 bar. A series 19 air inlet is provided as standard.

COMMISSIONING

General

The initial commissioning and testing of your AirBench has been performed prior to delivery. However, as part of in-house commissioning we recommend that you complete the following tasks and record the results as appropriate in the system logbook.

In House Commissioning

The following tasks should be completed by a responsible person; for example, the Health and Safety Officer, or Director, responsible for this process.

- Review the commissioning certificate for this unit, in particular any notes made by our engineer in relation to use.
- Ensure all operators are trained to use this machine and are aware of the effective capture zone in which they should aim to work.
- Ensure all operators are aware of the filter maintenance routine required for this machine.

Once complete, you should note this on the commissioning certificate and retain the certificate for future reference.

As operating conditions vary, each installation will vary in maintenance needs and this is best established by empirical means, regularly checking filter condition in the first weeks of operation to establish a procedure. Reduced airflow is a key indication of filter condition. If the filter pressure gauge on the right side of the unit is showing in the red zone while operating, this indicates low airflow and filters should be checked and cleaned or changed promptly, according to the instructions contained within this manual.

We recommend keeping the commissioning certificate, Quick Start guide, and logbook with the machine at all times for operator access.

If in doubt please contact the manufacturer quoting the machine serial number.

OPERATION

This page contains the same information as the Quick Start guide provided with your AirBench.

Prior to use

Check the system logbook to ensure no routine maintenance is required.

General use

To use AirBench, ensure it is plugged in the air supply and your compressor is switched on.

Check the filter pressure gauge on the side of the bench. If the needle on the gauge is showing within the RED zone while the unit is in operation with peddle depressed, check the filter condition – they may require cleaning or replacement.

You should aim to work within the enclosure of the unit. Working outside the front face of the enclosure will lead to escape of particulate.

Record any maintenance you have undertaken, or any that is required, in the logbook.



Wear appropriate PPE. Use of this unit may expose operators to high noise levels due to compressed air; and splashed coolant to hands. Wear gloves and hearing protection.

MAINTENANCE

Filter care

The filters are not self-cleaning and must be maintained / cleaned / replaced as described below. Proper filter care is essential for the effective operation of your AirBench. If in doubt, contact the manufacturer for advice.

The filter pad fitted is a multi-stage M5 pad. Take note of the pad installation method prior to removing existing pads.

All filters should be regularly checked for wear, damage, or by-passing.

When completing filter maintenance activities these should be recorded in the accompanying log sheet.



Take precautions and wear appropriate PPE when handling filters.

They may contain hazardous materials.

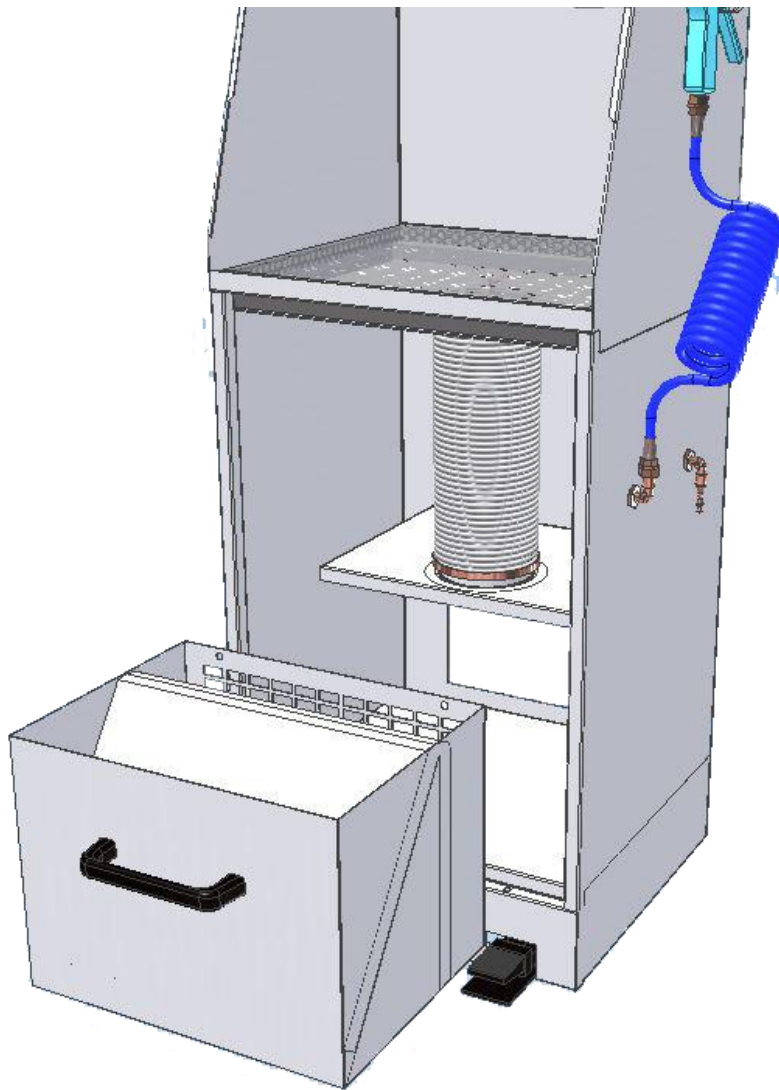
FILTER ACCESS

Filters are accessed by removing the front door of the unit. Unclip the lid of the swarf bin, and lift lid to remove – taking care not to damage ducting. The bin can then be slid forwards to remove and empty.



WARNING! Risk of personal injury.

- **Always isolate the air supply before changing filters or removing any components from the BD.**
- **Use necessary PPE**



Surfaces can be heavy and have sharp edges.

Wear appropriate hand protection.

SPARES

See the specific list for your machine shown on the commissioning certificate.

When ordering, please contact the manufacturer quoting the serial number of this machine.

Other routine maintenance

We recommend the following tasks be performed on a regular basis. Suggested intervals are shown and these should be reviewed dependent on level of use. Actual completion of these operations and any variation to these recommended maintenance intervals should be recorded in the system logbook.

If completion of routine maintenance tasks suggests additional issues, contact the manufacturer for advice.

DUCTING

When checking / changing filters. Check flexi ducting for damage and replace if required.

SURFACE

At least monthly, or as routine, check the surface condition. Clear any blocked holes.

AIR SYSTEM

At least 6 monthly. Clean and check for damage / leaks. Replace any damaged components.

THOROUGH EXAMINATION AND TESTING

If AirBench is used as an LEV system it must be tested at regular (normally 12 month) intervals and certificated under the COSHH regulations. This service is available from us, or our approved testers.

Thorough examination and test should include:

- Ensuring the prescribed maintenance routines are being completed and recorded within the system logbook.
- Condition check of air mover, filters.
- Performance testing according to recommended face velocities.
- Visual check that operators are working within effective area.
- Visual check of effectiveness using, for example, smoke tubes.

Recommended face velocity is 0.5m/s RVA.

Completion of Thorough Examination and Testing should be recorded within the system logbook.

TECHNICAL DATA

Model	Width	Depth	Height	Weight
	(mm)	(mm)	(mm)	(kg)
BD500	500	450	1482	40
BD1000	1000	450	1482	60

Data shown is for standard models. Check the Commissioning Certificate for details specific to your unit.

DECLARATION OF CONFORMITY

Manufactured by:	AirBench Ltd. 6b Commerce Way Colchester, Essex. CO2 8HR
Responsible Person:	Simon Cook
Description:	Ventilated work bench known as "AirBench BD"

DECLARATION OF CONFORMITY

BY

AIRBENCH LIMITED

RELEVANT DIRECTIVES

Machinery Directive 2006/42/EC

We; AIRBENCH Limited, declare that "AirBench BD" when supplied as self contained equipment complies with the Machinery Directive.



Simon Cook