

# **USE AND MAINTENANCE MANUAL**

# **BAZ**

Suction bench with filter and fan

**CE**

TRANSLATE FROM THE ORIGINAL

BAZ

Model machine: BAZ -10 - Baz -20

Serial number: 16.056641 - 16.056642

Construction month: October

Construction year: 2016

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## 1. Introduction

### 1.1 Aim of this manual

The "use and maintenance manual" describes all necessary steps for the correct installation and use of the machine with great care to safety and environmental protection.

This manual should be read carefully before starting up the machine and kept close to machine for the user or the maintenance staff.




The machine was designed and built in compliance with the standard safety of industry. As confirmation of this, the machine has been applied the "CE" that ensures compliance with the Machinery Directive.

Any work of tampering on the device, which is not authorized, and / or any work performed by unskilled personnel could undermine the good operation of machine and could also alter performances.

- The information contained in this manual are property of AERSERVICE S.R.L.
- Reproduction is forbidden, without prior written authorization of AERSERVICE SRL
- AERSERVICE S.R.L. takes no responsibility for any errors that may appear in this document and reserves the right to change, without notice, the features of products of this manual.
- AERSERVICE S.R.L. declines all responsibility for any damage suffered by third parties as a result of improper installation, misuse, removing or disabling of safety devices installed.
- In any case the company AERSERVICE S.R.L. declines all liability for accidents or damage to the machine and its components, described in this document, if caused or resulted from an incorrect information use contained in this manual.

### 1.2 Definitions

In this manual you will find the following terms ATTENTION, WARNING, NOTE to give emphasis to some instruction or information considered critical or unusual.

	<b>ATTENTION</b> <b>INFORMATION OR PROCEDURE THAT IF NOT STRICTLY PERFORMED CAN CAUSE INJURING OR DEATH OF PEOPLE</b>
	<b>WARNING</b> <b>INFORMATION OR PROCEDURE THAT IF NOT STRICTLY PERFORMED CAN CAUSE SERIOUS DAMAGES TO THE UNIT OR ITS COMPONENTS</b>
	Note Information or procedure able to make easier or simplify maintenance operations, or part of text to be highlighted.

### 1.3 Privacy

All technical information contained in this manual are a property of AERSERVICE S.R.L. and have to be considered of confidential nature: any disclosure or any copy are forbidden, without a written approval OF AERSERVICE S.R.L.

## 1.4 Normative reference

This filtering unit is compliant with the following rules:

Machinery directive **2006/42/CE**

Low tension directive **2006/95/CE**

Safety of machinery **EN ISO12100:2010**

Safety of machinery - Electrical equipment of machines **EN60204-1**

Electromagnetic compliance **2004/108/CE**

## 1.5 Notifications of errors and discrepancies

In order to insert in our manuals the most updated information, AERSERVICE S.R.L. is currently checking the reports received. We kindly ask to all operators to inform us about any error by using the enclosed form in enclosure no. 1.

## 2. Securities and safety regulations

### 2.1 General informations

This section contains some important security rules that should be followed by operators to avoid injuries to people or damages to unit.

AERSERVICE S.R.L. is not able to preview all the circumstances that could be dangerous during the use or the maintenance of the unit, therefore the "WARNING" or "ATTENTION" messages of this manual or placed on the unit may not include all the possibilities of security precaution.


The security information of this manual must be integrated by the specific laws in force and by the rules issued from the public bodies responsible for prevention.


### 2.2 Terms and general instructions for safety

- ❖ Respect carefully the safety instruction of this manual.
- ❖ Is recommended to use the personal protective equipment specified by relevant regulations.
- ❖ After having removed the product from its packaging, ensure the integrity of this. In case of damage or if in doubt consult immediately a qualified staff.
- ❖ In the case that product has undergone a collision or has been dropped, proceed with the inspection of all its parts.
- ❖ If there are any structural deformations, or malfunctions occur, or some component is damaged, you must contact an Authorized Service Center.
- ❖ Do not install the unit in locations with explosive or aggressive atmosphere, if not openly designed and manufactured for that use.
- ❖ Use the machine with an ambient temperature (motor) between 0 ° C and + 40 ° C and in any case with a maximum relative humidity not exceeding 85%. Operate the machine only on horizontal land or paving.
- ❖ The machine and the surrounding area must be free from deposits and dangerous materials in general. If the environmental features for which is designed the machine will change, the manufacturer takes no responsibility for malfunction or possible risks and damage that might occur.
- ❖ The explosion-proof version is equipped with a explosion relief panel. If the explosion relief panel of the collector is not connected to a vent conduit, it is essential to leave a minimum distance of 1000 mm between the panel and any obstacles for the correct operation of the panel. It's important to pay attention to the area where the explosion vents to prevent injury to persons and / or property caused by the shock wave and the flame.
- ❖ Before any operation of cleaning and / or maintenance, switch off the machine. Make sure the power is shut off and the collector can't switched on again by accident.
- ❖ The use of any electrical appliance requires the observance of some basic rules, including:
  - Should not be touched with wet hands;
  - Should not be touched with bare feet.

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- ❖ The stickers, which indicate a possible danger or recommendation of use, must not be removed.
- ❖ The machine must be subjected to periodic checks as indicated in the use and maintenance manual.
- ❖ The machine must be used only by authorized and trained people for the purpose; the same precaution applies also for people who have to perform maintenance. During maintenance take all possible safety rules, precautions and procedures required for each operation. During maintenance require that persons may be present as collaborators take the necessary security measures.
- ❖ The machine or its components must not be modified without the prior written authorization OF AERSERVICE S.R.L S.R.L. If you perform modifications to the machine and its components, without the prior written authorization of AERSERVICE S.R.L. any form of warranty will decay. AERSERVICE S.R.L L. takes no responsibility for any machine malfunction, damage to property or persons if they run unauthorized intervention.
- ❖ AERSERVICE S.R.L. takes no responsibility for any different use for which the machine was designed. For the use of this machine, see Section 6 of the manual - Designated use.
- ❖ Make sure all protections are properly fixed; in case they are damaged proceed to their immediate replacement and repair. Don't approaching the equipment unprotected and don't remove the cover when the circuits are working.
- ❖ At the end of the maintenance and / or repair, before reconnecting the machine to the power supply, the project supervisor must ensure that the protections and safety devices are properly installed.
- ❖ During cleaning and maintenance, wear suitable clothes and protective equipment.
- ❖ Don't carry out operations on the machine when it is working and without verifying that the machine is disconnected from the power supply.
- ❖ Use equipment and tools of the approved type.
- ❖ Check that the safety devices on the machine are kept in perfect working.
- ❖ Use only suitable devices in accordance to the handling of the machine.
- ❖ Do not fasten the machine to other foreign material.
- ❖ Do not place any tools and / or object on the machine.
- ❖ Do not insert foreign material of any kind that may cause damages or obstructions of the filtering section. Smoke near suction hoods is forbidden.
- ❖ The company responsible for safety must ensure that the staff in charge to use the machine has read and understood this manual in all its parts.
- ❖ It's responsibility of security manager of the company to verify the risk status of the company according to the current regulations.

 <b>ATTENTION</b>	<b>REMOVE POWER BEFORE ANY ORDINARY OR EXTRAORDINARY MAINTENANCE OF THE COLLECTOR; ALL OPERATIONS MUST BE MADE WITH MACHINES ORDERED IN SAFE CONDITIONS.</b>
	<b>CONTACT WITH ELECTRIC CONDUCTORS NOT PROPERLY PROTECTED OR INSULATED CAN BE DEADLY. ONLY QUALIFIED PERSONNEL IS AUTHORIZED TO PERFORM ON PLANT AND ELECTRICAL COMPONENTS. DURING MAINTENANCE ISOLATE FROM ELECTRICAL ALL CIRCUITS AND EQUIPMENT ON WHICH YOU HAVE TO TAKE ACTION.</b>

 <b>WARNING</b>	MAKE SURE THAT THE DEVICE IS INSTALLED AND USED IN ACCORDANCE WITH THE CURRENT LOCAL LAWS AND REGULATIONS.
	AERSERVICE S.R.L. TAKES NO RESPONSIBILITY FOR CONSEQUENTIAL ACCIDENTS OF THE MACHINE IN THE FOLLOWING CONDITIONS: - REMOVAL OR MODIFICATION OF SAFETY DEVICES; - NON-COMPLIANCE USE AS INDICATED BY AERSERVICE S.R.L - MODIFICATION WITHOUT PRIOR AUTHORIZATION OF AERSERVICE S.R.L L.; - USE OF ACCESSORIES AND SPARE PARTS NOT SUPPLIED BY AERSERVICE S.R.L.L.; - USE THE COLLECTOR FOR DIFFERENT PURPOSES FROM DESIGNATED USE.

### 3. Machine identification

The CE plate fixed to the machine identifies it.

The plate contains the following data:

- ❖ Company logo
- ❖ Machine model
- ❖ Serial number
- ❖ Power
- ❖ Amperage
- ❖ Construction months
- ❖ Construction year
- ❖ Total weight

### 4. General description

The suction bench BAZ consists of a suction unit, a filter unit and an outlet of clean air. The structure of the filter unit is made of galvanized sheet panels grade punched with punch control and bended with 6 axes bend machine. The panels are coupled with electric welded or bolted together to form a single supporting container sealed. The air flow to be purified is conveyed to the filter thanks to the vacuum created within the bench, by a suitable fan connected to it through the pipe. The inlet of polluted air takes place both from the supporting surface that from the front wall. The filter section consists of metallic pre-filters and then pocket filters with filtering media in glass microfiber. The suction zone is placed on the side wall of bench. The impeller and the casing of the fan are placed internally to suction bench, while the electric motor is external of structure. On the same side there is the discharge section of clean and filtered air.

#### 4.1 Noise risk


Source of noise is made by air flow from the collection devices: the more the air flow go slowly, the less noise you heard. Also to have a good filtering performance and to prevent the deposit of powder inside the pipe, you have to maintain a minimum speed flow which depend on the treated dust.

Another source of noise is the fan: to reduce the perceived noise, the compartment in which is contained the impeller is coated with sheets of flexible polyurethane foam with open cells deadening.

#### 4.2 Fire risk

The plant is fire risk if there are any incandescent particles contained in the air flow to be treated.

When the working can not exclude that fact will be appropriate to take further measures to detect the presence of sparks or adopt suitable alternative devices.

	<p><b>ATTENTION</b> <b>DO NOT USE THE MACHINE ON OIL OR DIRTY SHEETS.</b></p>

### 5. Technical and mechanical features

BAZ

Mod.	A1	A	B	H1	H	C	D	E	Dim. e Nr maglia metallica	Dim. e Nr tasca rigida	Sup. filtrante m <sup>2</sup>	Scarico
BAZ10	930	1210	900	850	1330	870	715	410	592x490x23 nr1	592x490x292 nr1	15	415x200
BAZ15	1430	1710	900	850	1330	1370	715	410	592x490x23 nr1	592x490x292 nr1	15	415x200
BAZ20	1930	2210	900	850	1330	1870	715	410	592x490x23 nr2	592x490x292 nr2	30	415x200
BAZF30	2820	3100	900	850	1330	2760	715	410	592x490x23 nr3	592x490x292 nr3	45	415x200

Tab.1

If not indicated measures are expressed in mm

POCKET FILTER DATA		METALLIC PRE-FILTER DATA	
The filter media is of glass microfiber paper, flame retardant and water repellent.		Efficiency class (CEN EN779)	
Efficiency class (CEN EN779)		F7	G2
Average colorimetric efficiency :		80-90%	Average gravimetric efficiency :
MERV		13	70%
Maximum operating temperature:		80°C	Maximum operating temperature:
Relative Humidity:		100%	Relative Humidity:
Reaction to fire (DIN53438):		Classe F1	100%

## 5.1 Performances

Performances are measured with certificated and calibrated tools.

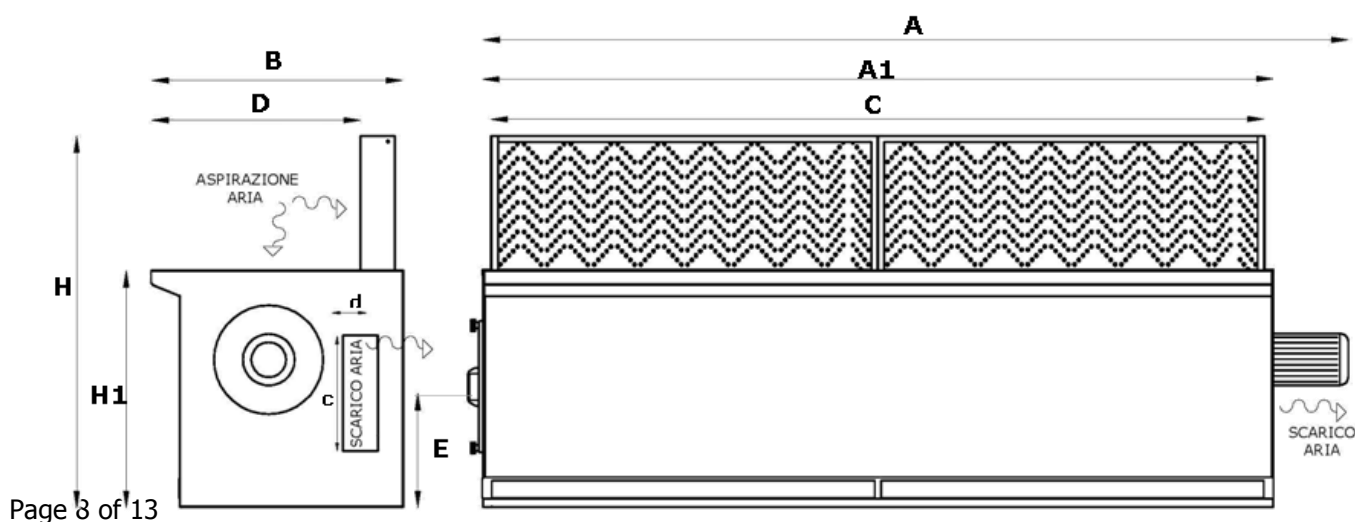
For machine performance, see fan specifics.

Mod.	Airflow m <sup>3</sup> /h	Power Kw	Volt V	Power supply A	Residual pressure mmH <sub>2</sub> O
BAZ V 10	2000	0.75	400/230	1.7 / 1.92	60
BAZ V 15	2700	1.1	400/230	2.5 / 2.67	60
BAZ V 20	3300	1.5	400/230	3.3 / 3.6	60
BAZ V 30	4800	3	400/230	5.9 / 6.5	60



Tab.2

## 5.2 Electrical features

This suction bench is suitable with single-phase 220 V – 50 Hz tension





	<b>ATTENTION: DISCONNECT THE ELECTRIC POWER BEFORE MAINTENANCE OPERATION</b>
	WARNING: ONLY A QUALIFIED STAFF IS AUTHORIZED TO CHANGE THIS PROCEDURES.

Feed cable: 3 x 1,5 sq mm

Electric features of the motor: see tab.2 chapter 5.1

Circuit diagram: see par.9.3

## 6. Designated use

The machine is designed and built for suction and filtration of dust produced by processing of specific materials.

	<b>ATTENTION: ANY OTHER OPERATION OR WORK NEAR THE EXHAUST HOODS IS FORBIDDEN BECAUSE IT MAY CAUSE DAMAGE OR FIRE.</b>
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## 7. Packing procedures

The machine is supplied mounted.

## 8. Transport and handling

During the transport:

- Do not place material on the packed machine;
- Do not expose the machine to atmospheric agents;

	<b>ATTENTION: FOR HANDLING THE COLLECTOR USE PROPER TOOLS AS CURRENT REGULATION</b>
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## 9. Installation and startup

### 9.1 Positioning

Do not expose the machine to weatherings, especially during use and / or storage in the warehouse. Use the machine in temperature (to the motor) between 0 ° C and + 40 ° C and in any case with a maximum relative humidity which does not exceed 85%.



Switch on the machine only on land or paving horizontal. Do not place any tools and / or object on the machine. Do not place the bench near machines or anything that can produce or produces sparks or flames or any other element that can be a source of fire ignition.

The area location must be accessible to any cleaning, maintenance and repair, and must present leveled and still be able to withstand a distributed load and concentrated suitable to the machine installed.

### 9.2 Assembly


The machine is supply assembling.

### 9.3 Power supply connection

	<p><b>ATTENTION</b>  <b>ALL OPERATIONS ABOUT THE CONNECTION OF COLLECTOR TO THE MAINS AND STARTING MUST BE MADE BY A SPECIALIZED PERSONNEL.</b></p>
	<p><b>ATTENTION</b>  <b>THE MAIN MUST BE PROTECTED AGAINST ANY INDIRECT IEC 204-1</b>  <b>ATTENTION</b></p>
	<p>WARNING          BEFORE CONNECTING THE MACHINE TO THE MAIN, VERIFY THAT POWER SUPPLY IS 400 V / 50 Hz THREE PHASE. FOR OTHER CASE FOLLOW THE INSTRUCTIONS CONTAINED IN THE "WARNING" SECTION 5.2</p>

**Machines with fan but without a control cabinet and / or circuit breaker**

The customer have to provide the supply line with suitable safety switch properly sized, positioned upstream of the switch on / off of fan. For normal operation the machine must be provided for a Start button and stop button.


	<p>WARNING          FOR NORMAL OPERATION THE MACHINE MUST BE PROVIDED FOR A START BUTTON AND STOP BUTTON.</p>
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### 10. Preparation for use

The unit preparation consists:

- ❖ connection to power supply of fan, see section 9.3;
- ❖ connection to expulsion piping.


### 11. Utilization

	<p><b>ATTENTION</b>  <b>CHECK CAREFULLY THAT THE SUCTION PLACE CONNECTED TO THE MACHINE ARE OPENED, FREE OF FOREIGN BODIES AND UNABLE TO SUCK ANITHING NOT SPECIFY IN CHAPTER 6 "DESIGNATED USE"</b>  <b>IMPROPER USE MAY DAMAGE THE MACHINE, AND ALSO INVOLVES THE END OF WARRANTY.</b></p>
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Press the power switch.

Once finished the processing press the shutdown switch.

### 12. Maintenance

	<p><b>ATTENTION</b>  <b>READ CAREFULLY SECTION 2 BEFORE DOING ANY MAINTENANCE</b></p>
	<p><b>ATTENTION</b>  <b>ALL MAINTENANCE AND REPAIR WORKS SHOULD BE DONE BY A PROFESSIONAL WHO HAS READ AND UNDERSTOOD THE MANUAL OF USE AND MAINTENANCE.</b></p>

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Open drawers and empty collection. The frequency of cleaning is determined by the amount of slag produced. In any case it is advisable to empty it daily.



## 12.1 Checking and replacing filters

Access to filters is done by removing the front door.

The maintenance and / or replacement of the filters is periodical. Maintenance should be done according to the following table:

Period [HOURS]	Operation type	Filter
100	Verify the integrity of filters and possible cleaning. If it appears dirty, wash it completely with a degreaser in apposite rooms in relation to operation. Blow with compressed air	Metallic pre-filter
300	Verify the integrity of filters and possible cleaning with compressed air	Pocket filter
900	Filters replacement	Pocket filter

The cleaning period is indicative, we recommend check the condition of the filter elements as soon as the suction power of bench decreases.

	<p><b>WARNING</b></p> <p>COMPLETING THE MAINTENANCE, CHECK THAT EVERYTHING WAS REASSEMBLED CORRECTLY</p>
	<p><b>Note</b></p> <p>Follow the regulations for the disposal of dirty filter bags</p>

## 13. Assembly / Disassembly

### Authorized personnel

Assembly and disassembly can be done only by skilled personnel, trained and authorized knowing all the procedures described in this manual. All the mentioned operations must be performed at least by two people.

### Disassembly

Follow the instruction here below for a correct disassembly of the unit:

- ❖ Unplug the machine from the power line;
- ❖ Disconnect the machine from the exhaust line;
- ❖ Remove / disconnect any other element connected to the filter but not belonging to it.

## 14. Research and deleting defects of the plant

There is a wide range of defects that can occur while unit working. Here below you will find a list of the most common defects and their probable cause and solution. If defect still remain despite the proposed solution we suggest you to contact AERSERVICE S.R.L L. describing the problem and the conditions of the unit.

For defects research and elimination see table enclosure5.5 table7

Defect	Cause	Solution
<b>Machine turning off</b>	No power	Check the connection to the power line
	No power because circuit breaker is	Reset the circuit breaker. If the problem

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	tripped	persists, contact authorized technical department.
	Blown fuse	Replace blown fuse
	Cable disconnected	Contact authorized technical department
<b>Increased vibration or noise fan</b>	Various	Contact authorized office
<b>Electrical panel is supply but motor doesn't work</b>	Check that the fuses are damaged	Replace blown fuse
	Internal cable to electrical panel detached	Contact authorized office
	Motor burned	Contact authorized office
<b>Motor doesn't start up</b>	Electrical panel not supplied	Power to electrical panel
	Internal cable to electrical panel detached	Contact authorized office
	Motor burned	Contact authorized office
<b>Insufficient suction</b>	Closed shutters on suction points	Open shutters on suction points
	Ejection grid obstructed	Remove obstruction
	Clogged filters	Check operation of cleaning system. Replace filters
	Opposite rotary direction	Check par 9.4
	Suction and / or expulsion line obstructed	Remove obstruction

## 15. Spare parts

Contact the company providing label data

## 16. Waste disposal

For disposal of used filters, please contact the relevant organs or specialized companies.

## 17. Attachment

### Attachment 1 - Reporting discrepancies in the publication

If you think you have detected a mistake or discrepancy in this publication please send us the following form with the description of the anomaly.

Product name:		
Date:	Revision no°:	Page no°:
Your data:		

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Description:

Spedire questo foglio,  
completo nei suoi dati e  
con eventuali allegati, a:

Send this form, complete in  
its data and any  
attachments to:

Nous Vous prions  
d'envoyer cette page  
complète des éventuelles  
pièces jointes à :

Enviar este formulario,  
completo en sus datos a:

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