

USE AND MAINTENANCE MANUAL

CENTRIFUGAL FAN

VTC 075

VTC 01

Co.1708.10

0. GENERAL SAFETY RULES

0.1 SAFETY RULES FOR OPERATORS

Consult the person in charge for details of the applicable safety requirements and accident prevention devices.

Do not start the machine if it is faulty.

Before using the machine, make sure all hazards have been removed.

Inform the head of maintenance whenever a fault occurs.

Make sure all the guards and safety devices are present and intact, and check their efficiency.

0.2 SAFETY RULES FOR MAINTENANCE PERSONNEL

The area where maintenance is carried out must be kept clean and dry. Spilt oil or grease must be removed immediately.

Maintenance must always be carried out with the machine stopped and disconnected from the electricity and the compressed air supply. Never allow unauthorised personnel to service the machine.

Do not perform any maintenance without prior authorisation.

Always follow the procedures detailed for maintenance and technical assistance.

Do not insert any part of the body, including limbs and fingers, in sharp-edge openings, that are not suitably protected.

Do not use petrol, solvents or other flammable liquids as cleaning agents. Only use authorised non-flammable and non-toxic solvents.

Compressed air should not normally be used for cleaning purposes, but if this cannot be avoided, wear safety goggles with side guards and do not exceed a pressure of 2 atm. (1.9bar).

When servicing or checking the machine, do not use a naked flame as a light.

Do not lubricate the machine while it is in operation.

In the case of electrocution, the victim is probably unconscious and need to be detached from the power source.

Caution: this operation is extremely dangerous because the victim also act as a conductor and touching him would result in electrocution. Before touching the victim, disconnect the power supply. If this is not possible, move the victim away using a non-conductor, such as a wooden stick or a PVC pole. Contact a doctor immediately and arrange for the person to be taken to hospital.

When servicing motors or carrying out any other interventions off the ground, the use of safety steps is mandatory.

1. INTRODUCTION

1.1 FOREWORD

Some illustrations appearing in this handbook depict the machine, or parts of it, without the guard or safety devices. This does not mean the machine is to be used under these conditions. The only purpose is to allow the operator to understand the operating principle.

1.2 CONSERVATION AND USE OF THIS HANDBOOK.

The purpose of this handbook is to provide the users of the machine with clear texts and diagrams, rules and essential instructions for transporting, handling, using and servicing the machine.

Please read this handbook carefully before starting to use the machine. This handbook must be kept carefully in a place of easy access for future consultation. It is important to make sure it is readable at all times, which means protecting it from sunlight, and keeping it in a clean, dry place, preferably right next to the machine.

If the machine is sold, the manufacturer must be informed of the name and address of the new owner/user.

1.3 WARRANTY (IF PROVIDED)

For the warranty to remain valid, the machine must not be tampered with for any reason. Please contact the manufacturer directly if any defects are found on delivery or during the warranty period.

Any attempts by the user or an authorised person to dismantle, modify or in general tamper with the machine or any of its parts will invalidate the guarantee and relieve the manufacturer of all liability connected with damage or injury, resulting from such action.

The manufacturer is also relieved of liability in the following cases:

- incorrect installation
- improper use of the machine or use by unsuitably trained personnel
- use not in compliance with the laws applicable in the country of installation
- failure to service the machine as required or incorrect servicing
- use of non-original or non-specific spare parts
- partial or total failure to follow the instructions provided.

1.4 INTENDED USE

The machine must only be used for the specific purpose for which it was built.

Do not use the machine if:

- it has not been connected correctly to the main installation
- it has not been connected correctly to the electricity supply
- it has not been connected correctly to the compressed air supply.

Do not stand on the machine (unless this is permitted in specially designated areas) even when it is switched off, as this could cause serious damage or injury.

Do not touch the electrical components without first disconnecting the machine from the power supply. This is to avoid the risk of electrocution.

When washing the machine, avoid getting any of the electrical parts wet.

1.5 SAFETY DEVICES

The machine has been designed in compliance with the mandatory rules covering CE marking, as well as voluntary standards (UNI) that we have always adopted. This means the machine is equipped with all the safety devices required to prevent operating hazards. These devices are of the following type:

- mechanical, i.e. built to avoid the possibility of human error
- electrical, i.e. all control panels/power units comply with CEI standards

For further details on the safety devices and their operating principles, please refer to the section on the components involved.

1.6 EMERGENCY OPERATION

The machine does not require an operator to be present. In the event of an emergency, the operator must press the emergency stop button on the power unit (right next to the machine) or the one on the control panel.

1.7 HAZARD AND WARNING NOTICES

CAUTION!

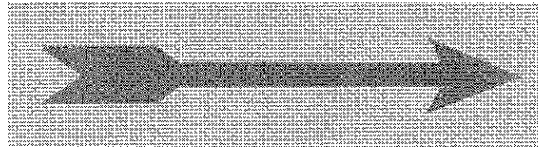
The electrical equipment can cause death or injury. Never place your hands anywhere near the machine while it is in operation. This is because there are moving parts, live elements and components that can get very hot.

Follow the warning notices. Failure to do this may cause serious injury or even death.

Check that the warning notices are always present and legible. Apply any missing ones and replace any illegible ones.

1. "Direction of rotation of the rotor"
2. "Do not remove the safety devices"

1



2



1.8 DATI ANAGRAFICI.

L'esatta citazione del modello, del numero di matricola e dell'anno di costruzione faciliterà risposte rapide ed efficaci da parte del nostro servizio di assistenza. Ogni volta che contattate tale servizio o richiedete particolari di ricambio riferite sempre tali dati che sono indicati nella targa di identificazione.

SUCTION FANS

L-series fans are a rational and affordable method of conveying cereals, granules and other dry loose materials.

- L55-75-100-150-300 suction fans can be equipped with an (optional) suction control valve, which keeps the amount of air constant, even if the back-pressure in the duct changes during operation.
- L20-40 fans must only be operated with an injector. The lack of an injector can cause a motor overload.
- The fans are supplied without a cable and plug. They must be connected up by a qualified electrician.
- The fan rotor must turn clockwise, looking through the suction opening. The motor must be suitably protected against motor overloads.

SAFETY

- Before and during operation, check that all the screens are in a good condition and are mounted correctly.
- Before cleaning, inspecting, servicing or disassembling the machine, disconnect the power supply and wait for the motor to stop completely. Extreme care must always be taken when carrying out any interventions or manoeuvres.
- **Never insert your hands in the fan or the feed cell.**

Each fan of ours is an integral component of a larger system and cannot be used on its own. It is up to the fitter or the end user to ensure that accessible parts of the machine are suitably protected in order to prevent injury.

START-UP

- Before switching on the motor, make sure the motor is linked to a delta connection at all times. If the star connection is used, the motor is likely to get damaged as it is no longer protected.

MAINTENANCE

- Lubricate the bearings on the belt side of the fan every 200 hours of operation. Never overlubricate the bearings as this would cause them to overheat.
- All the other bearings are permanently lubricated by the manufacturer, so they do not require further lubrication.
- The motor must not be covered and must be kept free from impurities that would prevent it from cooling down.
- L100-150-300 fans have a transmission belt. Check the tension periodically. V-belts must be checked when the side guard is removed. Press on the belts and make sure they are taut.
- V-belts can be tensioned by moving the motor over the slots. Make sure the belts remain centred.
- Tighten all the bolts after the first day of operation.

SUCTION FANS

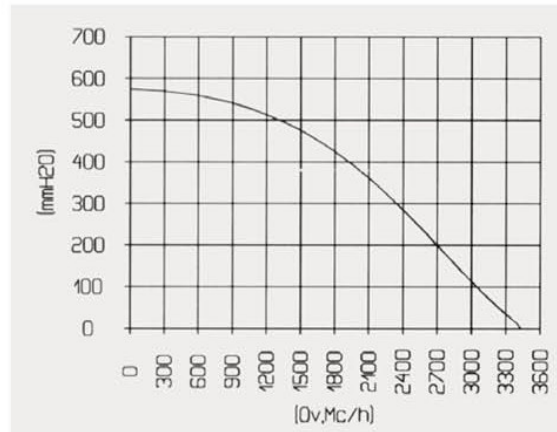
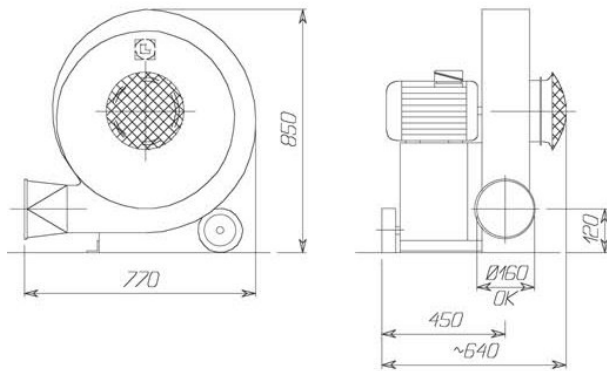
IMPORTANT NOTES:

- At least two metres of duct should be installed between the feed device and the first fitting.
- There should also be at least two metres of duct between the two fittings. This gives the best performance.
- Avoid laying ducts at an angle as this will have a lower conveying yield than vertical ducts do.
- End the duct with a cyclone or a delivery head.

TROUBLE-SHOOTING CHART

Problem	Causes	Solutions
Conveying yield too low or complete failure	A fitting has been installed too close to the feed cell or the injector.	Make sure there are at least two metres of duct before the first fitting.
	Too short a distance between the two fittings of the duct.	Make sure there are at least two metres of duct between the two fittings.
	Ducts, fittings or joints non-hermetic.	Replace non-hermetic parts. Lay the pipes correctly.
	Impurities in the ducts.	Clean the ducts.
	Duct does not end correctly.	End the duct with a cyclone or a delivery head.
	Ducts at an angle.	Run the ducts horizontally or vertically.
	Duct clogged.	Check whether the fan can clear the duct by closing access to the feed cell / injector.
	The feed cell is wrongly positioned.	Invert the feed cell / injector. Refer to the arrow on the cell / injector.
	The feed cell is not suitable for the fan.	Use the right feed cell / injector.
	Rotation in the wrong direction (refer to the arrows on the fan and feed cell.)	Have the direction of rotation inverted by a qualified electrician.
	The V-belts are too slack or worn.	Tension or replace the V-belts.
	The rubber blades of the feed cell are worn.	Replace the rubber blades.
	The wheel is jammed by foreign bodies (stones, pieces of wood, etc.)	Remove the foreign bodies and check that the wheel is intact.
The suction control valve does not move freely.	Free the valve or remove any foreign bodies.	

Use and maintenance manual – VTC 075



VERSIONE	CODICE
CON MOTORE <i>With motor</i>	VTC 075

MOTORE <i>Motor</i>	5,5 Kw 2915 rpm IP 55 IM B3
INSTALLAZIONE <i>Electric installation</i>	3x380 volt, 50 Hz
ACCENSIONE <i>Start</i>	DIRETTA <i>Direct</i>
AMPERE RICHIESTI <i>Nominal amp requirement</i>	11,3 A
TELAIO <i>Blower house</i>	LAMIERA sp. 1,25 mm <i>1,25 mm pressed steel sheet</i>
ROTORE <i>Rotor</i>	2915 rpm ROTORE Ø570 mm CON PALETTE CURVE INCLINATE SUL RETRO <i>Closed rotor with backward curved blades</i>
VERNICIATURA <i>Paint treatment</i>	SMALTO A POLVERE <i>Phosphated/powder enamel</i>
PESO CON MOTORE <i>Weight with motor</i>	100 Kg
PESO SENZA MOTORE <i>Weight without motor</i>	55 Kg
RUMORE A DISTANZA MIN. DI 7 Mt. <i>Noise level distance, 7 mt.</i>	85 dB (A)

Dimensioni in mm, indicative e non impegnative.
The dimensions in mm are indicative and not binding.

Use and maintenance manual – VTC 075

SAFETY AND WARRANTY NORMS

- The proper and correct use of the machine requires the careful acknowledge of the above instructions and of all risks related to an incorrect behaviour using and maintaining the machine.
- Authorized maintenance and running staff must be properly trained and equipped according to the safety rules and norms of accident prevention measure. **SV impianti s.r.l** therefore refuses every responsibility on accidental events due or consequent to default or non-observance of safety norms or running training instructions.
- Use reliability is guaranteed only where the machine is used for the purposes and according to the material data stated on the contract and technical specification for which it has been designed and supplied. **SV impianti s.r.l** refuses every responsibility where the machine will be used for other not specified purposes or modified in whatever part or technical data.
- **SV impianti s.r.l** does not consider itself responsible regarding reliability, safety and performances in case where warnings and instructions quoted on the present manual are not been respected above all for activity regarding maintenance and correct use.
- User electrical plant must be in accordance with the norms CEI 64.8. **SV Impianti s.r.l** refuses every responsibility in case of the machine is not correctly earthed and protected by security electrical devices according to the a.m. regulations.
- For repair and original spare parts it is recommended to contact the supplier, therefore **SV Impianti s.r.l** refuses every responsibility for repair and for replacing parts with not original ones where these activity are executed directly by the user or by a third part.

RECOMMENDATIONS

- Follow the above installation, use and maintenance instructions..
 - Do not introduce hand, arm or touch any part inside during machine running.
 - Do not walk or cross over the covers machine.
 - Do not remove with whatever tool clogging material inside the machine during working.
 - Do not make cleaning or maintenance during machine working.
 - Do not start the machine without installed protection on transmission belts or moving parts.
 - Let clean and free from any tool or any abandoned thing around the machine after repair or maintenance operation. Take care that charging and discharging hoppers are free.
- Check the machine is can not be started during maintenance operations.

WARRANTY

The machine has a warranty for a period after installation as per warranty terms stated on the contract. Validity of warranty depends on the application of the norms quoted on the present manual and expire when the following events are verified:

- Use of the machine for purposes or in technical conditions not in accordance to the contract .
- Repair or maintenance executed by not authorized part or without the writted authorisation of the supplier **SV impianti s.r.l**.
- Missing maintenance or not in accordance with the related instructions.
- Use of not original spare parts or not advised lubricants.

Warranty will not apply for the components liable to consumption and wear as scrapers strip, rubber boarders, belts and impact wear plates.