



## **BLOWER USER MANUAL**

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## **1. GENERAL SAFETY RULES**

Kozmaksan recommends adherence to the following safety rules for all machines produced and sold by Kozmaksan. Most of these rules are ordained by law in many countries.

- Before placing and starting the machine, the manual accompanying the product must be read and the instructions must be followed.
- While transporting the machine, use the relevant lugs and only carry after lifting it. Install the machine on a solid ground.
- Before electrical wiring, check the available electrical system compatibility with the electrical equipment of the machine. All mechanical, electrical connections and installations must be carried out by competent and qualified technicians. If needed, Kozmaksan can provide guidance on this matter.
- Before the machine starts to run, it must be ensured that the safety apparatuses placed inside the moving assemblies have been removed. If an abnormal situation is observed while running the machine, the machine needs to be immediately stopped and relevant staff are notified. Do not attempt to run the machine again before making sure that the problem has been solved.
- Conduct the periodical maintenance duly and timely. If you happen to use the machine for food sector, never use oil containing lead while doing lubrication works. While replacing worn or broken parts, it is recommended to use the original spares provided by Kozmaksan.
- Any error or defects arising from non-compliance with main rules and the foregoing in this manual while doing installation and operation shall not be under warranty coverage.



## **2.MACHINE STRUCTURE**

The machine is used in pneumatic transmission systems in order to feed the product inside pneumatic transmission pipes regularly and without leakage. The machine is composed of a cast main body placed on steel curvature chassis with blower pump and electric motor inside. The blower pump is housed by ball-bearings on body caps on both sides. The power is transmitted to blower pump, which is electrically driven, by means of a belt and pulley. Blower is the first component of the pneumatic transmission line.

## **3. TRANSPORTATION**

The machine is transported as a single piece. After taking relevant safety measures by strapping, it can be carried on the top and on the ground by pallet jack. The machine must not be dragged on the ground while moving to the installation spot.

## **4.MACHINE INSTALLATION**

Machine installation spot must be clean, levelled and robust. There must be enough space spared around the machine. After placing the machine, it is fully placed horizontally through bubble level. This is extremely important for smooth operation of the machine. Once placing the machine into its spot and fitting the air output pipes is done, a second check must be conducted on horizontal position by bubble level.



## **5.STARTING THE MACHINE**

It must be checked whether there is any valve or similar device on or at the end of the pneumatic transmission line. The machine is started by turning on the switch on the blower compressor electrical control panel. It must be checked after starting the machine whether there is any noise. All checks must be done before the start up.

## **6.MAINTENANCE**

- Blower pump oil inspection must be conducted monthly, and oil must be added where necessary (SHELL OMALA C220 and equivalent)
- Blower pump oil gaskets might get deformed over time. Necessary checks must be done and gaskets must be replaced in case of leakage. The belts must be inspected at certain intervals. Worn, deformed or broken belts must be replaced.

–The spring inside the safety relief valve might get deformed over time. It must be periodically checked and replaced if necessary.

–Air filter must be maintained and cleaned weekly, and replaced every 3 months.

## **7.BELT STRETCHING AND OIL CHANGE**

Blower belt dimensions are defined by the pulley, which is chosen according to the desired power and kW of the electric motor. The belt is used in order to transfer the desired power to the blower pump. It is crucial for machine efficiency not to run the machine before achieving optimal belt tension. The tension is conveniently adjusted by tightening the tension bolts on the machine by applying equal force on both sides.



## 8. MACHINE INSTRUCTIONS

THE MACHINE	CUASES	REMEDY
<b>TOO MUCH NOISE!</b>	Insufficient belt tension	Stretch the belt
	The ball-bearings completed their life cycle	Replace
	Oil decreased or completed its life cycle	Add
	Slackened bolts on connections	Maintenance
<b>MACHINE SHAKES!</b>	Ground not level	Level
	Installation not done on balance	Balance
	Pulleys out of balance	Replace
	Vibration pads slackened or worn	Replace-Maintenance
<b>OIL LEAKAGE!</b>	Oil gaskets worn or deformed	Replace-Maintenance
	Excessive oil added during change	Discharge
<b>AIR NOT PUMPED!</b>	Blower pump shaft broken	Replace-Maintenance
	Electric motor shaft broken	Replace
	Belt tension lacking	Maintenance
	Air filter clogged	Replace
	Output pipe clogged	Maintenance



## 9.PERIODICAL MAINTENANCE INSTRUCTIONS

<b>1</b>	<b>First 3 hours</b>	Fasten the bolts again after the machine cools down. Check V belts, pulley adjustment, manometer pressure, safety plug and oil level.
<b>2</b>	<b>First 25 hours</b>	Check V belts, pulley adjustment and oil level.
<b>3</b>	<b>Weekly checks</b>	Check if the filter is clogged. Clean or replace if necessary.
<b>4</b>	<b>First 500 hours</b>	Change first filled oil. Check V belts and pulley adjustment.
<b>5</b>	<b>Every 1000 hours</b>	Check if safety plug works. Clean air inlet and outlet grids if there is acoustic cabin.
<b>6</b>	<b>Every 4000 hours</b>	Check V belts and pulley adjustment. If the environment is dusty, clean the air suction filter.
<b>7</b>	<b>Every 8000 hours</b>	Check the V-belts and pulley adjustment. Change the air suction and filter. Change the oil. Check the check valve.
<b>8</b>	<b>Every 20000 hours</b>	Please contact technical service for revision of blower body. Check all components of the machine.
<b>9</b>	<b>Electric Motor</b>	Replace the oil of the electric motor with the specified grease at the intervals specified in the engine operation and maintenance manual. Lubrication period and oil type may vary depending on engine brand, size and ambient conditions.