

CE

SMART STATION

STONE (COMPRESSOR MIRAGE line + SEMI-DRY SUCTION or
AIR RING SUCTION)

User and installation manual



4tek S.r.l

Viale Dell'Industria 66
20037 Paderno Dugnano (MI) ITALY
Tel +39 02 91082211 Fax +39 02 91084668
P.IVA C.F. 05133430966
www.4-tek.it
contact@4-tek.it

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1. Caution/hazard symbols used

Reading the manual, pay attention to the parts marked with the following labels:

WARNING AND CAUTION



WARNING

Warning (Advice) = errors in following the instructions can cause problems for people



CAUTION

Caution (Attention) = errors in following the instructions can cause damage to the machine and the machines close to it

The following labels are visible on the machine



Caution / Warning – Refer to accompanying documents



Electrocution – Attached label at the products



Hot surface– Attached label at the products

	Electric shock		Hot surface
	Alternating current		CE mark
	Attention -consulting manual		Protective earth (ground)
	ON: power		OFF: power
	Date of manufacture		Manufacturer
	Serial Number		Refer to instruction manual
	Dispose of Electric and Electronic Equipment correctly		

2. Safety instruction

2.1. Caution: to prevent injury

- Never operate this product if it has a damaged cord or plug. If it is not working properly, has been dropped, damaged or has fallen into water, please contact appropriate service center for examination and repair
- Keep the cord away from heated surfaces. All electrical products generate heat. To avoid serious burns, NEVER touch suction motor or compressor during or immediately after operation. The temperature of them can be reach 120°C.
- Never drop or insert fingers or any other object into any openings
- Use only in well-ventilated areas. The motors of all products are totally enclosed fan cooled



WARNING

Do not operate the unit in an atmosphere containing flammable or explosive gases/vapors

- Be sure to properly identify intake and discharge hoses before using the unit
- Protect unit from contaminants and moisture

2.2. Caution: to reduce risk of electrical shock

- Do not disassemble. Disassembly or attempted repairs if accomplished incorrectly can create electrical shock hazard. Refer servicing to qualified service agencies only
- Do not use this product in or near area where it can fall or be pulled into water or other liquids
- Do not reach for this product if it has fallen into liquid. Unplug immediately
- Never operate this product outdoors in the rain or in a wet area

2.3. Danger: to reduce risk of explosion or fire

- Do not use this unit in or near explosive atmospheres or where aerosol (spray) products are being used
- Do not use this product near flames

2.4. Description and classification

The equipment is a SMART STATION consisting of an oil-less compressor with floatant pistons and a suction unit; the suction can be a semi-dry suction or an air ring suction according to the request of the client during the purchasing.

- Class I equipment according to EU REG 745/2017
- Ordinary equipment (IPX0)
- Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide
- Continuous operation

This equipment has been tested and found to comply with the limits for medical devices in IEC 60601-1-2. These limits are designed to provide reasonable protection against harmful interference in a typical medical installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions,

may cause harmful interference to other devices in the vicinity. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to other devices, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving device
- Increase the separation between the equipment
- Connect the equipment into an outlet on a circuit different from that to which the other device(s) are connected
- Consult that manufacturer or field service technician for help

3. Installation notes

Intended use: The device is a SMART STATION consisting of an oil-less compressor and a semi-dry suction or air ring suction according to the customer's request during the order phase: its function is to supply compressed air to the dental office and suck liquids, saliva and blood from the patient's mouth. If a semi-dry suction is installed, these liquids flow into the separator: using the rotation speed of the motor tree, air and liquids are separate so the exhausted air will be conveyed outside of the building, while the liquids will be conveyed into the sewer.

Equipped with a metal cabinet it can be used in any room of the dental practice.

3.1. Environmental conditions

Temperature: from 10°C to 40°C.

Humidity: 30% to 80%

Pressure: 700hPa to 1060hPa

3.2. Introduction

This manual has been compiled not only for the care and maintenance of equipment now in your possession, but as a helpful reference and guide to prevent many problems which can occur if used improperly.

3.3. Unpacking

Carefully remove the machine from the shipping case. Preserve all paperwork for future reference. If damage has occurred from shipment a claim must be filed with the carrier immediately; preserve the shipping carton for inspection by the carrier. If you are required to communicate with your dealer, be sure to include serial numbers for quick identification.

3.4. Mounting

The product is equipped with 4 swivel wheels, 2 of which are equipped with brakes: these wheels are very important caused, by limiting vibrations, they help to reduce the sound level of the unit. Once the installation has been carried out, remember to block the wheels equipped with brakes in order to stabilize the device.

3.5. Installation location

The equipment should be located preferably in a clean, dry and well-ventilated area. Please be sure not to block the ventilation ports located on the motor housing. The unit should be placed where the surrounding temperature remains between 10°C and 40°C (50°F and 104°F). Always check to ensure the location chosen is protected from direct or indirect moisture contact.

CAUTION: The maximum allowed distance between the unit and the dental chair is 6m.

CAUTION



For installation, use only rylsan pipes for the compressor and PVC pipes with integrated metal spiral for the suction.

3.6. Electrical connection

The mains connection must only be made by well-trained electricians.

To ensure safe installation, check local current and voltage. Serious damage may occur to the motor if it is connected improper voltage.

CAUTION: Please not change the electrical connector. If you need to change it, we kindly inform you that this has to be done by producer or authorized technician. Changing the power connector with a non-authorized cable could cause harmful interference to other devices in the vicinity and/or malfunctions.

3.7. Electrical shock hazard

Disconnect electrical power at the circuit breaker or fuse box before installing this product. Install the system in a location where it will not come in to contact with water or other liquids. Install the system in a location protected from the weather. Electrically ground the system. Failure to follow these instructions can resulting death, fire or electrical shock.

4. Operation

Check list before start up the system

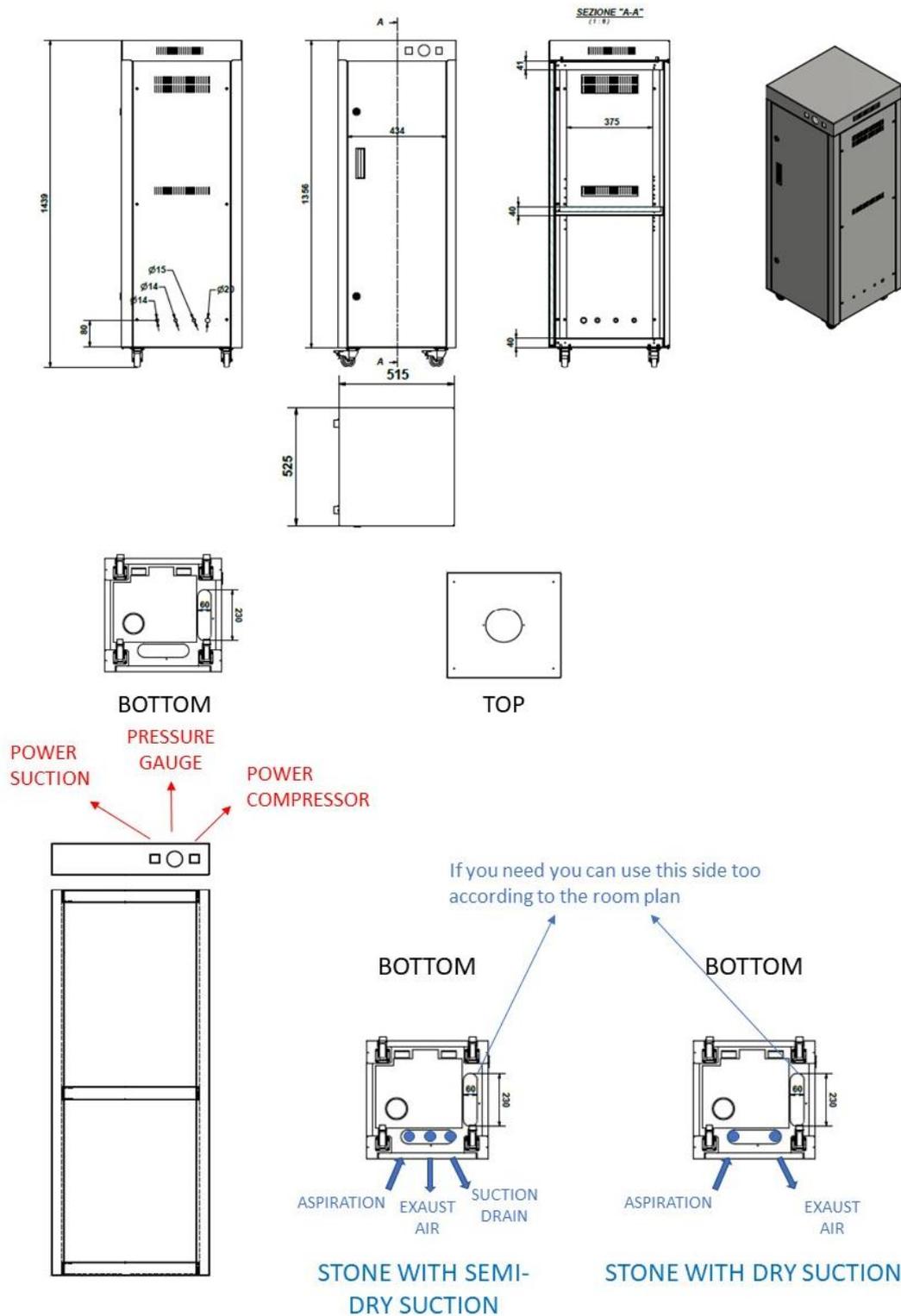
- Check that there are no foreign objects in the cooling fan.
- Check the device for any abnormal noise or vibration.

If you have this type of problem, refer to the "possible anomalies" guide in this manual.

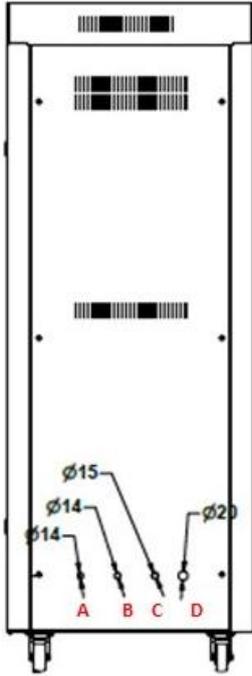
Once the noise or vibration is eliminated, re-boot the device.

5. Product information

5.1. Dimensions and installation instructions according to SMART STATION: STONE



Aspiration and suction drain should be at floor level with dimensions of 40mm each



- A: OUT OF COMPRESSOR (AIR IN PRESSURE)
- B: DRAIN FOR HUMIDITY OF COMPRESSOR
- C: SUCTION ELECTRICAL CONSENS
- D: POWER CABLE COMPLETE UNIT

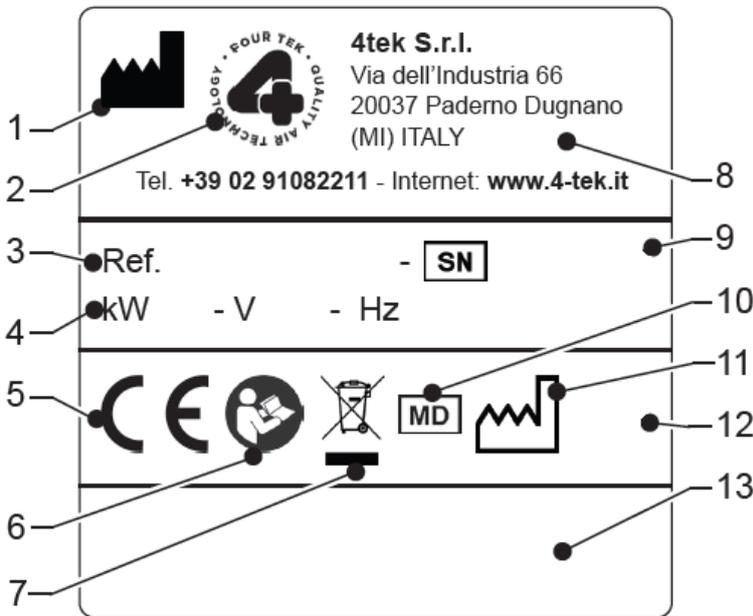
IMPORTANT!! PLEASE NOTE THAT FROM EACH SIDES YOU NEED TO LIVE MINIMUM 10 CM OF EMPY SPACE FOR A GOOD VENTILATION AND FOR HOSES CONNECTION

5.2. CE label

Identification of 4tek S.r.l. as the manufacturer of the equipment in compliance with the statutory legislation by means of the following deeds:

- **Instruction Manual**
- **CE marking (CE plate)**
- **Declaration of Conformity in compliance with Regulation (EU) 2017/745 (MDR)**

CE data plate description



- 1 - Manufacturer's identification symbol
- 2 - Manufacturer's logo
- 3 - Compressor model
- 4 - Electrical technical data
- 5 - CE logo
- 6 - Symbol showing obligation to read the Instruction Manual
- 7 - Identification symbol for disposal of electrical and electronic components
- 8 - Manufacturer's contact details
- 9 - Serial number
- 10 - Medical Device identification symbol
- 11 - Manufacturing date identification symbol
- 12 - Year of manufacture
- 13 - UDI

The original CE plate is applied to the SMART STATION as the main device: in order to be able to identify aspirator and compressor contained therein in the future, a CE plate is also applied on the devices themselves; all 3 serial numbers are then also shown on the transport document and invoice.

It is prohibited to remove the CE plate or replace it with plates from compressors or suction units of the same model in the possession of the user. If the CE plate is damaged or becomes detached from the unit, the user must inform 4tek S.r.l.

5.3. Installation, maintenance and possible faults of the compressor

Regarding installation, maintenance and possible faults of the compressor, please refer to what is reported in the relevant manual that is supplied together with the device.

5.4. Installation, maintenance and possible faults of the suction

Regarding installation, maintenance and possible faults of the suction, please refer to what is reported in the relevant manual that is supplied together with the device.

6. Disposal

CAUTION



This product may be contaminated after using years. Please make the disposal organization aware of this in order that they can take the proper safety actions



Uncontaminated plastic components of the product may be recycled

The built-in electric circuit board and other electric components should be disposed as electric waste.

Other metal components may be disposed as metallic waste.

If the suction is equipped with an integrated or external amalgam separator, please remember that the amalgam must be disposed as dangerous waste and so it is mandatory to send it to a company authorized to collect and discharge it according to ISO11143:2018.

If the product is returned to the local dealer or 4TEK S.r.l., all connections should be closed so that they are water-tight.

7. Trouble shooting chart

This trouble-shooting is carried out by qualified technicians only.

Problem	Possible reasons	Remedy
Unit does not work	<ul style="list-style-type: none"> -Mains supply is not connected. -Incorrect electrical connection or power source 	Check mains power, fuses and reset circuit breaker if necessary
Unusual noise increased	Solid particle or debris is coming into the suction motor or it could be a mechanical problem of the compressor	Please refer to what is suggested to paragraph "Possible Trouble shooting" inside of the suction or compressor manual
Excessive vibration	The wheels are worn or the brakes of the 2 wheels equipped with brakes have not been locked.	Check the wheels
Unit is very hot	<ul style="list-style-type: none"> - Wrong wiring -Low voltage -The ventilation holes are blocked 	<ul style="list-style-type: none"> -Check wiring -Supply proper voltage -Clean the ventilation holes
Compressor or suction motor overload	Low voltage	<ul style="list-style-type: none"> -Check power source -Check wire size and wire connections - Refer to what is suggested to paragraph "Possible Trouble shooting" inside of the suction or compressor manual

8. Warranty

4TEK S.r.l devices, if installed and sized correctly based on the dental office dimensions, are warranted for a period of 24 months or however no more than 36 months after the date of 4TEK invoice.

In order to obtain performance under this warranty, the buyer must promptly (no later than 30 days after discovery of the defect) give written notice of the defect to 4TEK S.r.l. ((E-mail: stefano.caudano@4-tek.it, riccardo.caudano@4-tek.it, gabriella.panico@4-tek.it, contact@4-tek.it) or to a representative in his country.

Customer is responsible for freight charges to 4TEK S.r.l. in all cases.

4TEK S.r.l. is not responsible or liable for indirect or consequential damages of any kind however, including but not limited to those for use of any products, loss of time, inconvenience, lost profit, labour charges, or other incidental or consequential damages with respect to persons, business, or property, whether as a result of breach of warranty, negligence or otherwise.

This warranty can be modified only by authorized 4TEK personnel, by signing a specific written description of any modifications.



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