

# USER MANUAL

Air Abrasion System with spray

CA-1



**COXO®**

## **1. Introduction**

Air Abrasion System with spray is a safe and reliable device.

Its functional characteristics are as follows:

Provide a very small abrasive flow

Use water mist to restrain sand powder from scattering.

Using the power of compressed air to spray fine abrasive

particles at high speed, Quickly remove stubborn adhesions

## **2. Safety**

- 1) Consult instructions for use;
- 2) This device cannot be used in human oral cavity;
- 3) Nothing can be mixed in the abrasive. Otherwise it is easy to cause blockage;
- 4) Any disassembly or modification is prohibited;
- 5) Contact professionals for repair;
- 6) Stop using the device immediately if there is obvious aging or abnormal phenomenon;
- 7) Check and maintain regularly;
- 8) Only use original connector, otherwise it will cause damage.

## **3. Intended use**

- 1) This product can only be used by qualified dentists during dental treatment;
- 2) Porcelain tooth bonding and comprehensive restoration, porcelain veneer bonding preparation;
- 3) Maryland fixed bridge bonding preparation;
- 4) Bonding preparation of brackets;
- 5) Resin bonding preparation;
- 6) Repair and replacement of porcelain teeth.

## 4. Contraindications

This device cannot be used in human oral cavity;

## 5. Choice of powder

The powder should be dry, loose. The wet powder can be baked at 120°C for half an hour.

- Used to quickly remove stubborn adherents on the treated surface: white alumina particles with a particle size of 90 microns;
- Used for bonding preparation on metal or non-metal surface: white alumina particles with a particle size of 50 microns,
- For surface polishing: white alumina particles with a size of 27 microns.

## 6. Product list

O-ring ( $\varphi 9 \times \varphi 7 \times \varphi 1$ ) x 1

O-ring ( $\varphi 8.7 \times \varphi 7 \times \varphi 0.85$ ) x 2

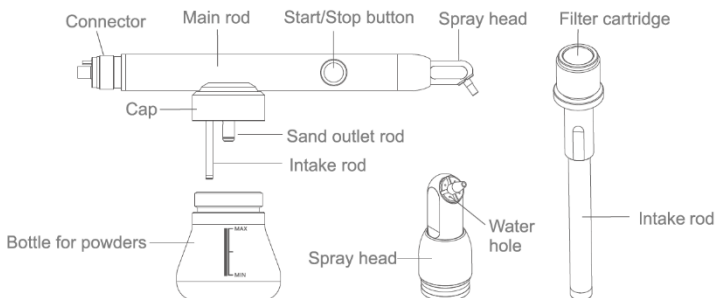
Filter cartridge x 2

Bottle for powders x 1

Tip x 1

Wrench x 1

## 7. Device overview

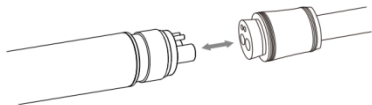


## 8. Technical specifications

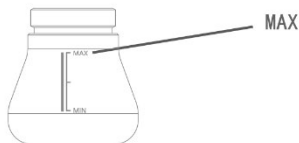
Recommend working pressure	0.4MPa	Spray nozzle diameter	1mm
Input water pressure	0.2MPa	Powder spray	≤9g/min
Working pressure	0.3~0.6MPa	Water spray	>20ml/min
Effective distance for spray	2mm~10mm		

## 9. Installation and operation

- 1) Connect the connector to the pipe of dental chair;



- 2) The powder cannot exceed the "MAX", one mark is equal to about 6ml powder;



- 3) Adjust the air and water pressure to the required range, press down Foot pedal and press and hold start/stop button to start working;
- 4) Release foot pedal and start/stop button to stop working ;
- 5) Turn off water when not in use.

## 10. Maintenance

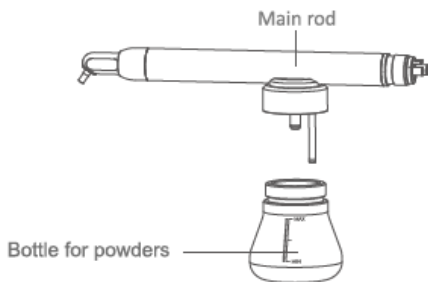
- 1) After connecting the air source, run the device several times to remove residual powder to avoid blocking; Make sure the bottle is empty.
- 2) Disconnect the connector form the pipe of dental chair, Use

three ways syringe to blow air at the pipe of the connector to drain remaining water.

- 3) When not in use, put the device and powder in a dry place.

## 11. Cleaning, Disinfection and Sterilization

- 1) Unscrew bottle, use three ways syringe to empty the remaining powder and water in the instrument;
- 2) Use three ways syringe to clean up the remaining powder at the cap and connector;
- 3) Wipe the surface with alcohol;
- 4) Remove spray head and clean it with alcohol, then use three ways syringe to clean up the remaining powder, and then blow the head dry;
- 5) If necessary, the instrument can be sterilized at 134.



(Note: Bottle for powders cannot be sterilized, high temperature and high pressure can cause damage to bottle; Bottle for powders must be removed before sterilizing the instrument.)

## 12. Troubleshooting

Malfunction	Cause	
No gas coming out	No air supply	Please turn on the air supply
	Remove the spray head, if there is gas out, the spray head is blocked.	Remove the spray head, flush the spray head with water, and use a tip to unclog the hole of the spray head; after unclogging, blow the spray head dry with a three ways syringe.
Out of gas but no sand of blasting	Powder tube is blocked	Clean the filter cartridge: Remove the intake rod with a wrench and pry out the filter cartridge with a tip, rinse the filter cartridge with water and blow it dry;
	The filter cartridge inside the intake rod is blocked	Replace the filter cartridge : Remove the intake rod with a wrench and pry out the filter cartridge with a tip, replace

		it with a new one.
Water discharge anomaly	Water hole is blocked. anomaly	Remove the spray head and repeatedly blow the water holes with a three ways syringe.
Air/water leakage	Broken O-ring on spray head	Replace the O-ring on spray head
Water in the bottle for powders	Broken O-ring on spray head	Replace the O-ring on spray head and blow- dry the center hole of the main rod and the hole of the sand outlet rod with a three ways syringe

### 13. Operating environment ,Storage and Transportation conditions








#### Operating environment

Operating temperature	5— 40℃
Operating humidity	20%— 80%
Atmospheric pressure	86— 106kPa

#### Storage and Transportation conditions

Storage temperature	-10—55℃
Storage humidity	≤93%
Atmospheric pressure	50— 106kPa

## 14. Symbol

	Consult instruction for use		Serial number		Warning/Caution
	This way up		Keep dry		Fragile, handle with care
	Manufacturer				

## 15. Guarantee

Air Abrasion System with spray is guaranteed for 12 months from the date of purchase. The guarantee is valid for normal usage conditions. Any modification or accidental damage will render the guarantee void.



Foshan COXO Medical Instrument Co.,Ltd.

No. 17, Guangming Ave., New Light Source Industrial Base, Nanhai National High-tech Zone, Foshan 528226, Guangdong P.R. China



Lotus NL B.V.

Koningin Julianaplein 10, 1e Verd, 2595AA, The Hague, Netherlands.

E-mail: [info@lotusnl.com](mailto:info@lotusnl.com) Tel: +31644168999

Version: 1.5 Revision date: 2025.06.23