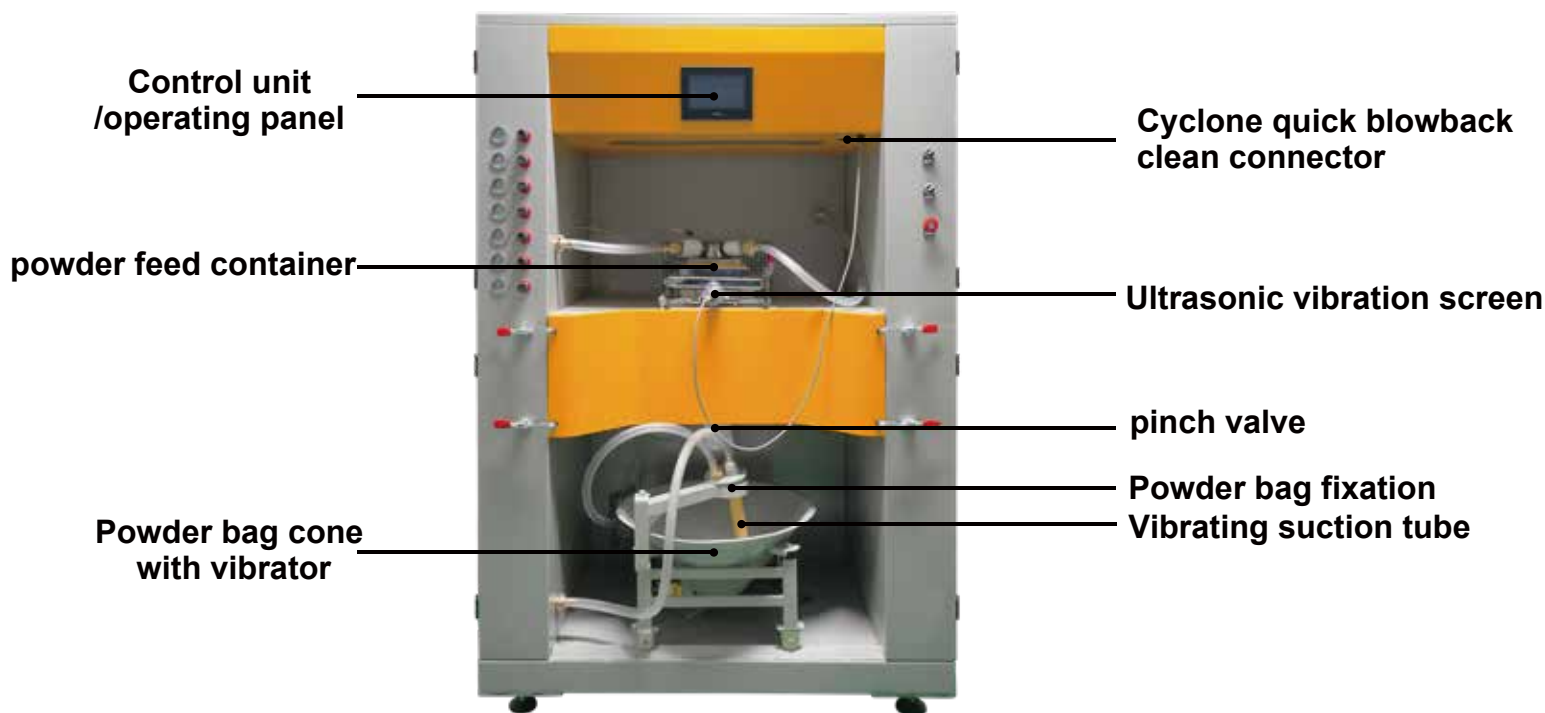


## CL-6200 powder feed center

### Operating instructions



## Safety Precautions

### Installation

Items installed by users must comply with local safety standards.

### Grounding

Check the grounding conditions of the spray booth and powder feed center every time before starting. The user should pay special attention to the ground connection. The grounding point include spray booth, cyclone separator and powder feed center. The grounding of workpieces and other devices also should be checked.

### Equipment Operation

In order to use the equipment safely, it is necessary to be familiar with safety precautions, production processes and functions of various parts of the system.

Therefore, before using the equipment, you should read the safety precautions, equipment operation instructions and instructions for device control.

In addition, should learn more detail instructions for special equipment, such as APS and other using Instructions of related parts.

To ensure normal production, must operate the machine as the requirements of the using instructions before every startup. After being put into production, some faults or doubts may appear, and the operation manual can help.

So the instruction manual must be placed near the equipment.

If you need help, COLO Technical Service Center will provide you with services at any time. Technical services contacts can be found in the corresponding information.

### Routine inspection

The following items should be checked before every startup:

- There should be no other foreign objects in the suction part of the spray booth and powder feed center.
- The powder sieve should be connected to the powder feed center well and fixed.
- The air hose and powder hose on the powder feed center should be connected well.

### Repair

Repair work must be done by trained personnel.

### Features

#### Delivery air

Working pressure (2-4 bar)

#### Vacuum pressure

Working pressure (2-4bar)

#### Powder tank Fludization

Working pressure (0.5-1 bar)

#### Vibration tube Fludization

Working pressure (0.5-1bar)

#### Powder hopper Vibration

Working pressure (1-2bar)

#### Middle Air (big cyclone clip valve )

Working pressure (3-4bar)

#### Back up

Powder supply center  
light switch

Spray booth light switch

Emergency stop button



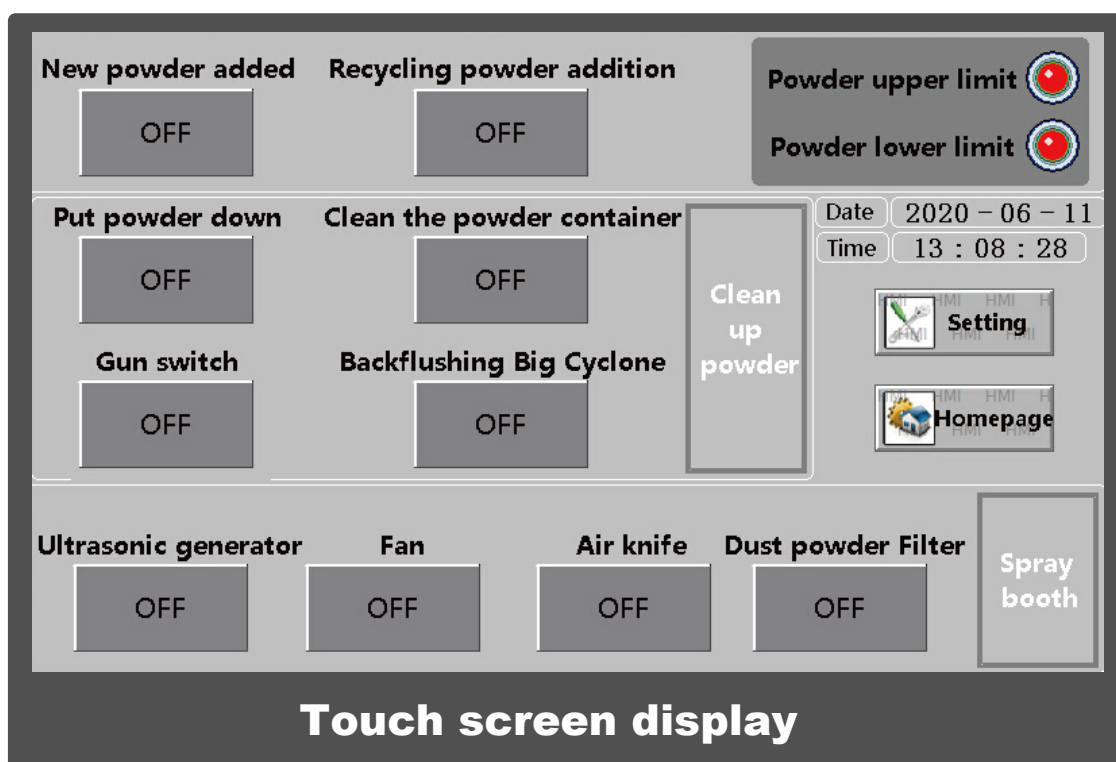
**Application** The Ultrasonic powder feed center is specially designed for quick color change, replacing the traditional powder supply hopper.

You can directly put the original powder box in the position of the fluidizing powder bucket, then collect the original powder box into warehouse after use. The powder feed center is an important part of auto powder coating line, is an integrated component in the quick color change system, which affects the quality of the final coating.

The main features of the powder feed center :

*The powder feed container can contain 8/9 kgs powder, and can be equipped with up to 12 or 18 powder injectors.*

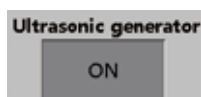
1. Handling the powder provided by the original powder box or the new powder device.
2. Has the recycling device.
3. Integrated electrical PLC control system.
5. The powder position is monitored by the powder sensor detector.
6. The powder sensor detector controls the rise and fall of the powder transmission device, and the powder transmission device is equipped with powder pump and fluidized hoses.
7. Powder suction tube, powder pump, powder tube and spray gun can be cleaned automatically.
8. The recovered powder is directly feed into the powder supply box.
9. With recycling system, can prevent powder overflow during spray process and color changes.



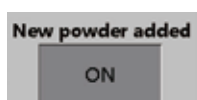
### Powder supply operation

- Put the original powder bag into the powder hopper, insert the vibrating tube into the powder, and fix it with the ring.

Open

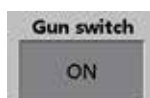


- Open



Supplying the powder, until the alarm of the Minimum of powder position

- Open



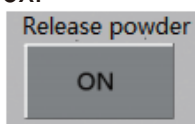
Auto gun work

### Color change operation

- Turn off all switches on the touch screen, as shown in the "touch screen schematic"

- Draw out the vibration suction tube and remove the powder bag fixing ring, and connect the powder bag mouth to the pinch valve of the powder supply box.

Open

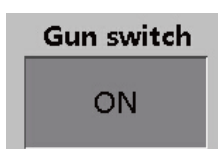


Let the powder sieve box release the powder until finish, then close

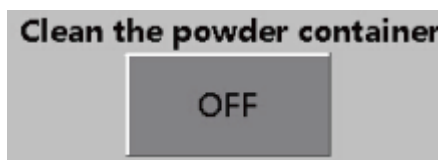


- Return back vibration suction tube and the powder bag to the fixing ring, connect the quick connector of the cyclone recovery to the powder Bag fixing ring

Open

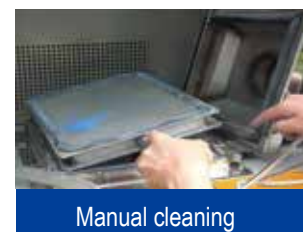


and



Clean the powder box, powder pump and powder tube, automatic cleaning for 3-5 minutes. Then open the powder sieve box cover, manually clean the ultrasonic vibration screen, the powder box and the remaining powder on the table.

After cleaning, turn off the "gun switch" button and "clean powder container" button;



- Clean up the powder in the spray booth, then sort out the powder bag and get out from the powder hopper.

- ⑤ Open the manual solenoid valve at the bottom of the cyclone (disconnect the cyclone powder leakage port and the large cyclone), clean the powder feed center cabin body, quickly connect the Cyclone powder supply to the Cyclone cleaning back blowing quick connection, clean the Cyclone.



Close button after cleaning And transferred the MONO cyclone powder supply quick connection to the powder supply box recovery quick connection

- ⑥ Change new powder and continue the powder supply operation.

## Technical data

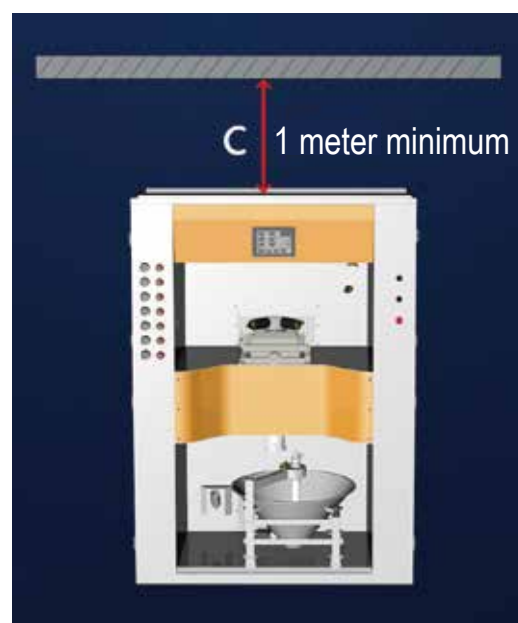
Category	Parameter	Category	Parameter
OutsizeW*H*D	1350*2035*900mm	Voltage	Single phase 220V (customizable)
Frequency	38±1 KHz	Power	100w (adjustable according to configuration)
Air Supply pressure	6-10bar	Equipped with air compressor	20kw(30HP)
Air consumption	About 300 standard cubic meters/hour	Air storage tank	2 cubic meters
Maximum water content	1.3g/m <sup>3</sup>	Maximum oil content	0.1g/kg
Powder supply	3-5kg/min	Powder Sieve machine	80 mesh screen
Powder box size	310*240*270mm	Screen size	345*275mm

## Installation Precautions

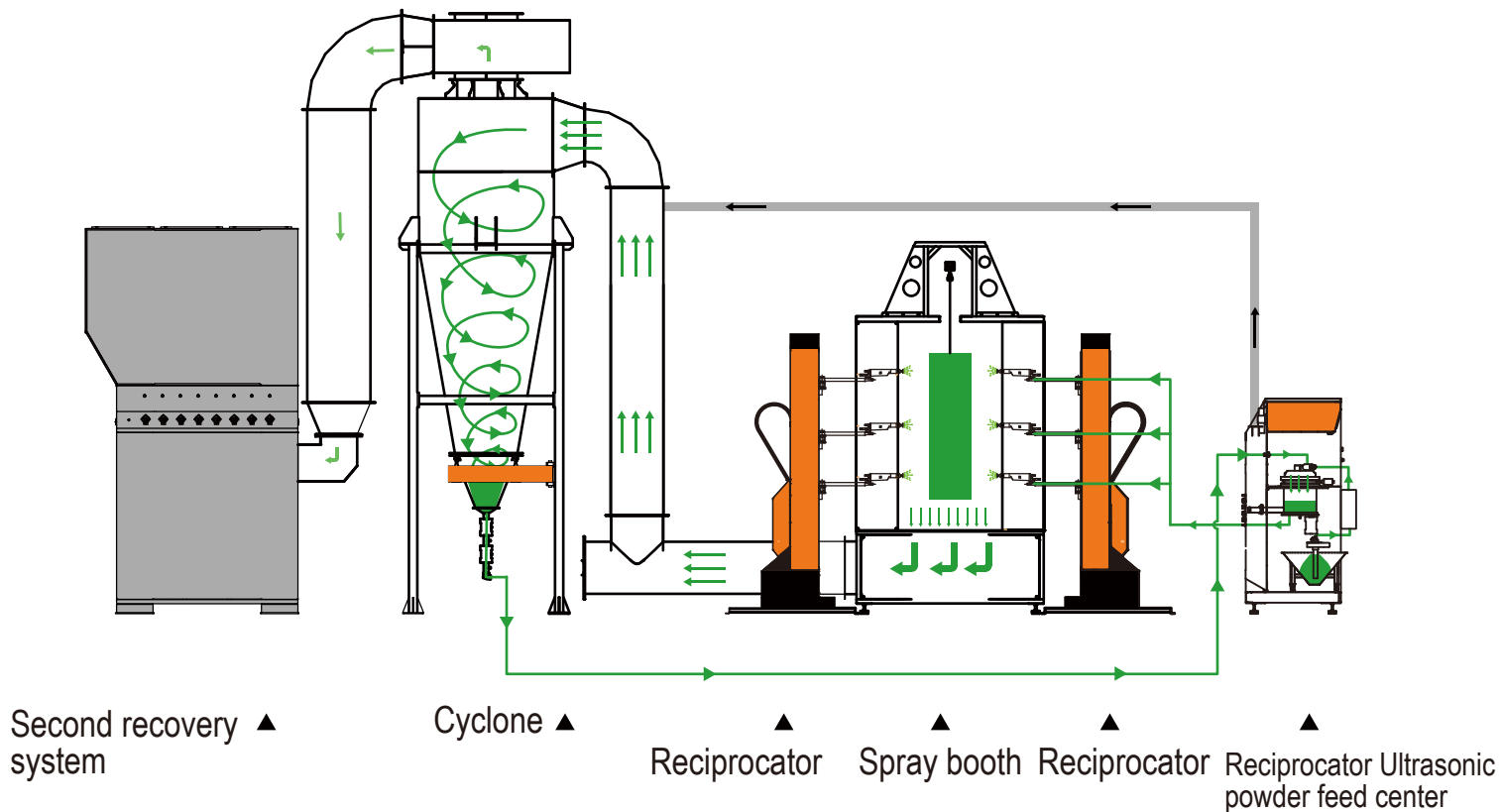
### Installation matters

When installing the powder feed center, the following requirements must be observed:

- The powder feed center must be placed steadily and the entire platform must be adjusted to Absolutely horizontal.
- Must be grounded according to local standards.
- In order to avoid the convection interference of the air, the upper part of the powder feed center (C) There must be at least 1 meter of space. And Leave 1m space to open the door on both sides.
- When laying the pipeline, try to increase the turning radius (the minimum radius is 300mm). This can reduce pressure loss and powder tube wear, Reduce the accumulation of powder in the inner tube wall. Properly arranged powder tube can make the whole equipment Simple and beautiful, safe operation, easy fault finding



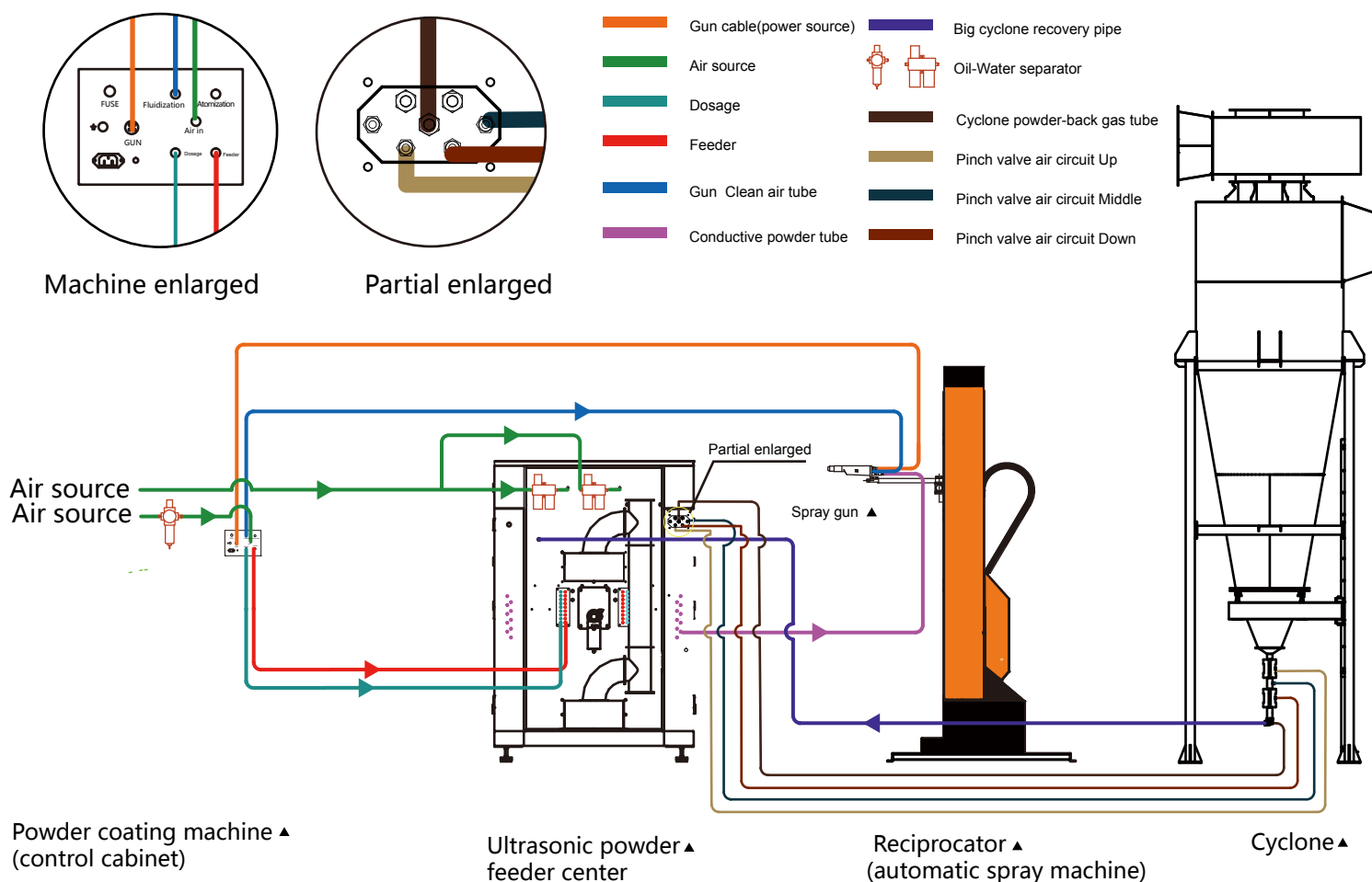
## Powder feed center Powder flow diagram



- Put the powder bag into the powder hopper, insert the vibrating tube into the powder, and fix it with the powder bag fixing ring.
- The powder enters the powder supply box through the powder pump box, and is sieved by an ultrasonic vibrating screen in the powder supply box
- The sieved powder is fluidized by the fluidized air pipe in the powder supply box
- The fluidized powder is sucked into the powder tube by the powder pump, and is sprayed out through the spray gun.
- The powder that has not been sprayed onto the workpiece, falls on the floor of the spray booth, then sucked into the cyclone separator to become a gas-powder mixture.
- In the cyclone separator, the powder is separated, then sent back to the powder supply tank through the recovery powder pump, and sieved through the ultrasonic vibrating screen



### Connection diagram of powder feed center and other equipment



## Start-up preparation

**Before opening the powder feed center, must finish the following work :**

- Security check
- Check the grounding conditions of powder spray booth, powder feed center and other powder coating equipments, if necessary, complete the corresponding Connection.
- Check the compressed air

## Start the powder feed center

**Note:** You can only use your finger to press the input key. Under no circumstances should you use your fingertips or hard objects to press the input key!

1. Start the spray booth (more details please check the booth operating instructions)
2. Turn on the main switch of the powder feed center
3. Start the powder supply operation (check page4 for powder supply operation)

## Close the powder feed center

1. Check if all workpieces have been coated.
2. Turn off the main switch of the powder feed center.

## Technical maintenance

### Maintenance after every shift

1. Coarse cleaning spray booth
2. Clean as shown in Page4 Change Color Operation (1-2-3-4-5)
3. Clean the sensor of the powder supply box on the vibration platform
4. Check the nozzle wear (check powder spray gun instruction manual)

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### Weekly inspection

1. Check the powder at the fan outlet of the rear filter, where the amount of powder means the filter Damaged or there is a problem with the filter fixing
2. Thoroughly clean the powder supply center  
(do not wash wet)
3. Check the oil-water separator, if necessary, empty it  
(if you see oil and water, you must check air compressor)

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### Check every 6 months

Remove the barometer measuring line on the pressure gauge ,purge from the direction of the pressure gauge to the direction of the measuring point

**Note: Only purge in the specified direction! !**