

Operating instruction

Colo-660T-06C
Manual coating equipment



→ FUNCTIONS

.The fluidized powder in the powder hopper is sucked up in the injector by the conveying air. .The powder is electrostatically charged immediately it reaches the gun nozzle. An intense field also exists between the gun nozzle and the grounded workpiece. The electrostatically charged powder sprayed onto the workpiece adheres to the surface.

.This line voltage is converted in the control module to high –frequency current this currents stepped up by the high-voltage transformer and the HV-cascade in the gun to 100KV and applied to the electrodes.

.The conveying air and the dosing air is to be regulated on the control module , the fluidizing air on the pneumatic unit.

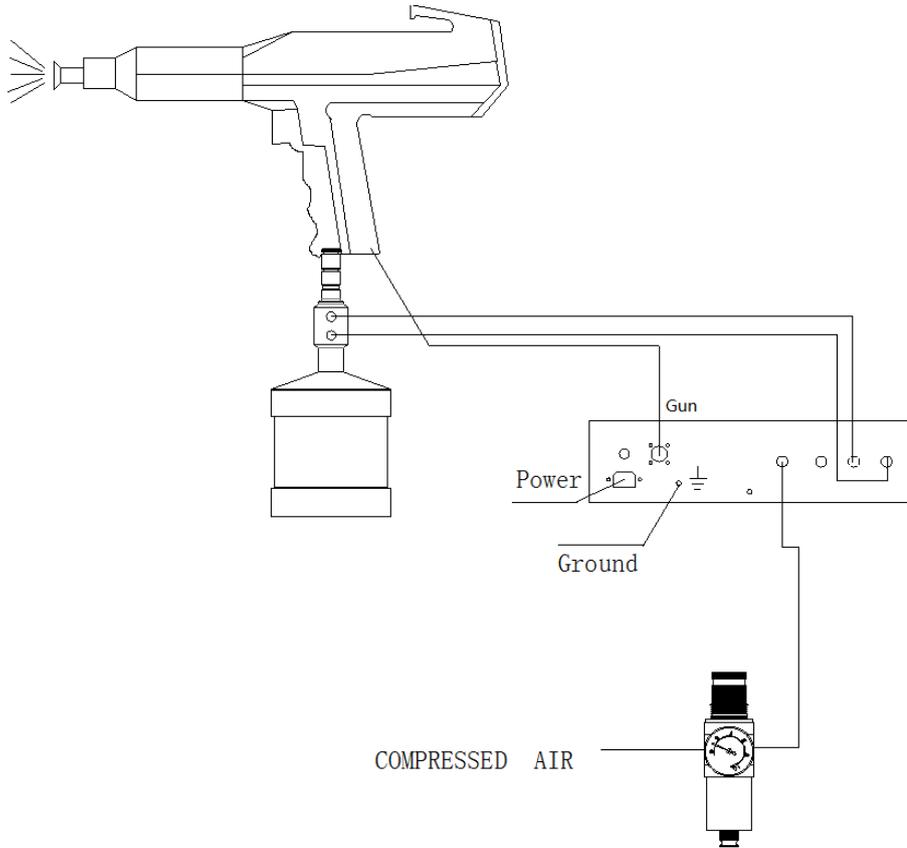
.The powder is fluidized by forcing air from blow through a porous plastic plate.

.The fluidized powder gets liquid –like properties..

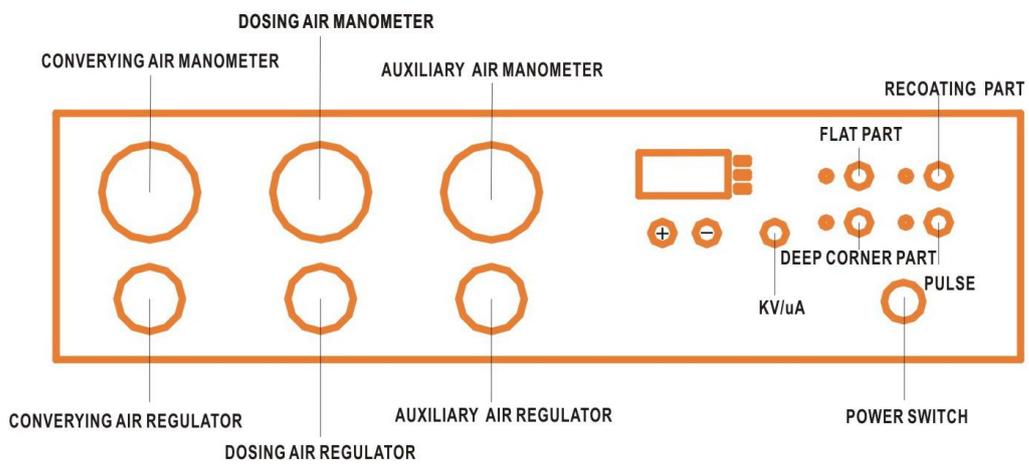
→ Technical Data

Power range	220v
Frequency	50/60HZ
Temperature range in use	-10 °C +50 °C
Powder Gun	
Gun weight:	500G
Rated output voltage	24VDC
Input voltage	- 200kv
Maximum output current	180Ua(max)
Maximum output voltage.....	0-100KV (adjustable)
Maximum powder injection :.....	600g/min
Polarity	negative (-)
Pneumatic technical spec	
Maximum input-air pressure	8kg/cm
Optimum input-air pressure.....	6kg/cm
Minimum input-air pressure	4kg/cm
Maximum water vapor content or compressed air	1.4g/N m ³
Maximum oil vapor content of compressed air	0.1ppm
Maximum compressed-air consumption.....	13.2 m ³ /h
TPulse coating	15~20 clock/sec

Drawing of connection



Control unit –Front

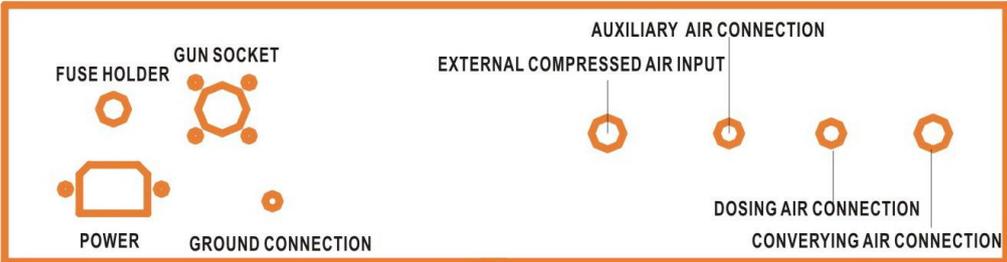


Control unit function explain

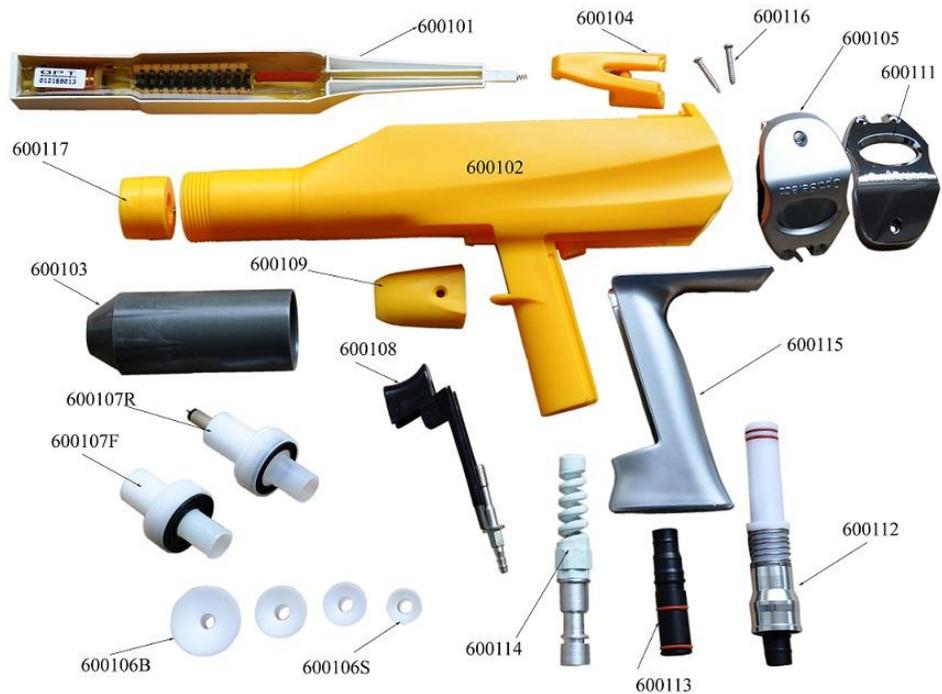
- Flat model: maximixed voltage for superiod transfer effiencence with coating flat parts
- Recoat model: Adjusts the voltage and current automatically for recoating of parts
- Complex model: Adjusts the voltage while holding current when coating complicated Shapes and corners
- Pulse model :Rapidly recharges the powder to coat complex shapes

Allows user manually adjust the voltage as needs

Control unit –back



Manual powder Gun



PLS supply the item number will order the spare parts for colo gun !

Function check

1. Turn on the gun control unit
2. Press the desired application key on the control unit
3. Pick the gun up and point it at a grounded object, at a distance of approx. 20 cm
4. Press the powder gun trigger
 - The display for current and high voltage on the control unit shows the actual value.
 - The high voltage can be set with the corresponding keys
5. Select the powder output and total air volume
6. Press the corresponding key for the rinsing air on the control unit (according to the used nozzle)

If all the checks are positive, the application cup is ready for operation

Start-up

Fill in powder

1. Fill the application cup with powder
2. Carefully place the dip tube into the powder, in order to avoid the clogging of the dip tube

Switch on the control unit

1. Press the **ON** power switch.
The displays illuminate and the control unit is ready for operation
2. Select the coating parameters
3. Point the gun to the workpiece and coat normally

Maintenance and cleaning

Cleaning the application cup

Frequent cleaning of the application cup helps to guarantee the coating quality.

Note:

Before cleaning the application cup, switch off the control unit. The compressed air used for cleaning must be free from oil and water!

1. Empty any powder out of the application cup
2. Clean the gun and the outside of the application cup by blowing off, wiping etc.
3. Release the bayonet closure between cup cover and cup
4. Clean the cup
5. Pull out the dip tube and clean it
6. Clean the cup with compressed air

Troubleshooting

Fault	Cause	Troubleshooting
No powder output	The application cup is incorrectly connected or not connected at all to the control unit	Check the pneumatic connections, and if necessary, connect
	Injector nozzle clogged	Dismantle the application cup completely and clean it
	Dip tube clogged	Blow through the dip tube with compressed air, and place it in the powder carefully
Irregular powder output	Poor leak proof closure	Dismantle the application cup completely, check the O-rings and replace, if necessary
	Pneumatic hoses not correctly connected	Check the elbow joints and connect correctly, if necessary
	Powder fluidization insufficient or not available	Dismantle and clean the fluidizing plate, replace if necessary

Ordering spare parts

When ordering spare parts for powder coating equipment, please indicate the following specifications:

- Type and serial number of your powder coating equipment
- Order number, quantity and description of each spare part

Warning !

It need at last 3 seconds when changing the pulse,current and voltage each time,or it will cause damage to the circuit board.