

äntelligent dry ice cleaner Instruction Manual

Contents

- I. Schematic diagram of machine structure
- II. Machine operation instructions
- II. Safety Precautions
- IV. Maintenance instructions
- V. The solution of common faults
- VI. Product parameter list
- VII. Packing list

II. Machine operation instructions

1. Preparation before starting the machine

(1) Take out two high-pressure airtight hoses from the chassis. One of the hoses with control wires is an outlet hose for connecting the main unit to the cleaning gun and the other is the intake hose.

(2) Connect the air intake hose to the air inlet (at the rear of the machine) and the external air supply, and securely connect to prevent air leaks. The external air source pipe of the machine is equipped with a standard 6-point pipe (at least 4 points in diameter), and the high-pressure airtight hose connection of the machine is 6-point inner diameter pipe thread, therefore, the external gas supply port should match the national standard 6-point outer wire joint.

(3) Connect the air outlet cleaning hose to the cleaning nozzle and main machine, and make sure that the connection is firm. Then correctly connect the associated nozzle to the aviation plug on the control line of the host.

(4) Check if the power supply meets the requirements, then

connect the power supply. Turn on the switch, if the power indicator on the control panel is on, the device is in standby mode.

(5) When in standby mode, observe the cleaning intensity shown on the control panel ($10 \leq \text{cleaning intensity} \leq 60$), and control the cleaning intensity between 20 and 50 during normal cleaning. Adjusting the "cleaning intensity" below 10 will result in no dry ice air flow out of the machine, so it is strictly forbidden to do so.

2. Usage of the machine's cleaning function

(1) Put dry ice particles (diameter $\leq 3\text{mm}$) into the feeding port with the attached ice shovel.

(2) Choose the right nozzle. Among the circular nozzle with a peripheral diameter of 8mm, the circular nozzle with a peripheral diameter of 26mm and the flat nozzle, the 8mm circular nozzle is specially used for cleaning the engine combustion chamber, while the flat nozzle is used for cleaning a large area.

(3) Ensure that the object is in a fixed state to prevent movement during cleaning

(4) Warning: when cleaning the engine combustion chamber, make sure that one side of the engine exhaust or intake manifold

has been removed, otherwise the dirt in the combustion chamber will not be expelled.

(5) Aim the nozzle at the object to be cleaned and press the button on the nozzle to start cleaning. The distance between the nozzle and the object should be controlled according to the severity of dirt -- the more serious the dirt is, the closer the nozzle is.

(6) When cleaning engine room, pay attention to protect the sound insulation sponge, foam cotton, insulation tape, air conditioning pipe insulation cotton and other fragile items. Aim the nozzle at fragile items and spray will damage them.

(7) Add dry ice according to the actual situation during the cleaning process.

(8) Adjust the dry ice supply through the "cleaning intensity" knob on the control panel. It is recommended to set the dry ice supply between 30 and 40 for regular cleaning. High cleaning strength will make the dry ice output too much, resulting in waste.

III. Safety Precautions

1. The dry ice temperature is extremely low, and it should be ensured that the exposed parts of the human body are not in

direct contact with dry ice at any time, otherwise it may cause skin burns.

2. Don't let children and other unrelated workers touch dry ice, which will cause frostbite.

3. Please store the dry ice material in a well-ventilated place. Do not place the dry ice in a completely sealed container (such as a mineral water bottle), otherwise an explosion may occur.

4. Thick gloves should be worn when taking dry ice (plastic gloves have no blocking effect). Gloves should be worn when opening the cover plate of the feeding port of the machine during operation, otherwise it may cause low-temperature burns.

5. Do not aim the nozzle of this machine at human body at any time, which may cause harm to human body, especially when the machine is working.

6. Before starting the equipment, confirm that the power supply is AC220V/10A, the grounding is reliable and the air supply is 0.6-1mpa. Mismatched base conditions can damage the machine.

7. Before starting the machine, make sure that the equipment is firmly placed and the front wheel brake is working, so as to prevent the equipment from moving by itself in the process of use and causing operational accidents.

8. Before starting the machine, make sure that the gas-path components are connected reliably, so as to prevent the gas-path components from disconnecting during the use of the equipment, which may cause operational accidents and injury accidents.

9. Before starting the equipment, ensure that the operator has put on gloves, face mask, goggles, earmuffs, long-sleeved work clothes and trousers to prevent the operator from being injured in the process of operation.

10. If the machine breaks down suddenly, the power should be cut off immediately.

11. After shutdown, all kinds of auxiliary equipment should be cleaned and put in place for later use.

12. It is strictly prohibited for non-professional personnel to disassemble the machine, including but not limited to electrical parts, electronic parts, pneumatic parts, mechanical structure, etc.

IV. Maintenance instructions

1. Please read this manual carefully before installation and use to give full play to the best performance of the machine and ensure safety.

2. Untrained personnel shall not disassemble or clean any parts of the machine to avoid damage to electrical equipment or causing electric shock, smoke, fire and other accidents.
3. It is recommended to check the machine once a month to ensure the working performance of the air switch with leakage protection.
4. After completion of each operation of the machine, the inlet hose and cleaning hose should be disassembled and put into the machine case after finishing. The hose shall not be placed on the ground at will and shall prevent damage or leakage due to rolling or impact.
5. The nozzle is a precision element, the nozzle bump or improper placement of deformation will seriously affect the efficiency of the machine.

V. The solution of common faults

1. If the power indicator is not on after opening the switch, please check whether the power supply of the equipment is normal and whether the connection is correct. If everything is normal, open the chassis board to check whether the air switch with leakage protection is in the normal position.
2. If there is no dry ice output during cleaning, please check

the dry ice allowance and check if the dry ice agglomerates.

The agglomerated dry ice can be used after separation.

3. Due to excessive air humidity in some areas, no ice will appear when the equipment works for a long time, which is a normal phenomenon. At this time, take out the dry ice in the ice bucket and leave the equipment for 20 minutes before resuming use.

VI. Product parameter list

Rated power:	AC220V/5A, 50Hz
Gas source:	$1\text{MPa} \geq P \geq 0.6\text{MPa}$
Gas consumption:	0.8-3.7m ³ /min
Consumption of dry ice:	0.3-1.3L/min
Dry ice bucket capacity:	13.5L
Machine net weight:	75KG

VII Packing List

The serial number	Item name	Equipped with
1	Air intake hose	√
2	Cleaning hose (with control line)	√
3	Spray gun	√
4	Nozzle 3 root Circular 26 mm Round 8 mm flat	√
5	Dry ice scraper	√
6	The deadening earmuffs	√
7	To protect the eye glasses	√