

It is welded with 3mm thick steel plate and painted on the surface. The key parts are provided with a shield and rubber skin to prevent dust from escaping. The lower part of the cabin has a filter screen to prevent large debris and workpiece from falling into the sand. The observation machine on the main part of the blasting machine can observe the whole process and handle the unexpected situation at any time.

Spray mainframe dimensions: 1700mm (length) \* 1800mm (width) \* 2150mm (height) (excluding separator height);

Dust box dimensions: 1000mm (length) \* 1000mm (width) \* 2000mm (height) (excluding fan height)

Large turntable size: Ø2100mm is placed on 40 small sandblasting stations;

Sandblasting gun: 2 groups of 8 (swing speed can be frequency-controlled, the angle can be

adjusted by 360°);

Total equipment power: about 10.5kw.

#### **Dust removal system**

This machine is equipped with a 6 filter dust box to prepare a special dust filter for PHOENIX brand of Sino-Japanese joint venture. The filtration efficiency is 99% larger than 10 microns. It can effectively separate the dust from the gas, remove the dust generated during the work, and greatly reduce the damage caused by environmental pollution. Its exhaust gas emission can reach the national environmental protection emission standard (GB-/T16157-1996): TSP≤120mg/m3.

The filter dust collector is composed of a high-efficiency filter element, a backflushing filter mechanism, a centrifugal fan, a dust collecting bucket, a body, a duct, and a duct elbow.

- 1) The body is welded by 2.5mm high-quality low-carbon steel plate, and the inner and outer surfaces are painted. Dimensions:  $1250 \times 1000 \times 2000$  (mm).
- 2) High-efficiency filter element  $\phi 320 \times 600$ , a total of 6 pieces. The high-efficiency filter element is used for dust removal treatment, and the purification effect is in line with national environmental protection standards. The high-efficiency filter element is made of 100% polyester fiber material with a thickness of 0.7mm, a gas permeability of 10um, a gas resistance of 2.98mbar (the required pressure is 2.98mm water column when the air flow rate is 40cm/s), and the temperature resistance is up to 130 degrees.
- 3), centrifugal fan 4-72 type, A-type transmission, power: 7.5KW, speed: 2900 rev / min.
- 4) The back-blowing filter mechanism is composed of a gas storage tank, a pulse solenoid valve, a gas pipe and the like.
- 5) The dust collecting truck is welded by 3mm high-quality low-carbon steel plate and painted on the surface. Dimensions:  $400 \times 400 \times 300$  (mm).
- 6) The air duct is made of PVC pipe and the surface is painted. An air volume adjusting plate is arranged at the elbow of the air duct to adjust the amount of air intake.
- 7), cleaning method: pulse vibration cleaning.

### The supporting requirements of the machine

Power supply: three-phase, 380V, 7KW, 50HZ power socket;

Gas source requirements: dry compressed air, the pressure is selected within the range of 5~8bar, the flow must reach 6 cubic meters;



Abrasive requirements: For the best results, 60-180 mesh brown corundum or glass beads can be used.

Gas source pipeline requirements: pressure pipeline, 1.5 inches or more.

Workshop requirements: solid and level ground, 15~25m2 space, height 4M or more.

Air compression system (customer-owned):

The blasting pressure can be adjusted according to the process requirements. The pressure varies from 1 to 7 bar. The spray gun is controlled by a pressure regulating valve and equipped with a pressure gauge. The air compressor is required to meet the air pressure of not less than 7 bar, and the six spray guns must be equipped with a flow rate of 6 m3. /min Dry compressed air (owned by the user) and equipped with a 1m3 gas tank. One dryer.

#### **Energy allocation and consumption**

- 1. 1 centrifugal fan: power 7.5kw
- 2, the spray gun swing motor 1: power 0.4kw; (City State)
- 3, turntable motor 1: power 1.5kw; (City State)
- 6, lighting and control circuit: power about 0.25kw;
- 7, the total power of the machine: about 10kw except for the air compressor.

# 2. Machine parameters

Function: This machine processes the inner and outer surfaces of workpieces such as discs

Power requirements: voltage 380v frequency 50HZ three-phase five-wire system

Machine size: length 2400mm×width 2200×height 2200mm (this size is for reference)

Technical parameters: Processing workpiece size Ø380\*230mm

1-2 RPM for large turntable, 3-100 RPM for small turntable. (The speed can be adjusted according to the actual situation)

There are 12-18 pieces placing stations, 4 processing stations, and the single output is about 1000-1500 pieces/hour, (stretched aluminum pot),

The maximum power of the machine does not exceed 13KW.

## 3. Technical parameters of main components

1. Automatic spray gun: 22 pieces, nozzle diameter Ø8mm, air nozzle diameter Ø4mm. The spray guns of this machine are arranged in a group: the entire workpiece

The sandblasting process is done in one go.



- 2. Manual dust blowing gun: 1 piece.
- 3. Cyclone separator: 1 set.
- 4. Dust removal unit: 1 set. (Width: 1400mm; Length: 1400mm; Height: 2000mm;)
- 5. Turntable set: 1 set.
- 6. Dust removal fan motor: 7.5KW, 50Hz, 380V.
- 7. Lighting device: 30W energy-saving lamp + 60W.
- 8. Solenoid valve: 22N~, 220V.
- 9. Control electrical appliance voltage: 24V.
- 10. Total power: no more than 13KW.
- 11. It is recommended to use brown corundum abrasives, and other non-metallic abrasives are also allowed;
- 12. Granularity: 46#~150#.
- 13. Abrasive consumption: 80-100kg (8-10 hour)
- 14. Working air pressure of spray gun (compressed air gauge pressure after starting):
- 0.4~0.7Mpa;
- 15. Air consumption of a single gun: about 0.8m³/min.
- 16. Air consumption of the whole machine: about 10m<sup>3</sup> (16 guns)-16m<sup>3</sup> (22 guns).
- 17. Recommended parameters of compressed air source: air source pressure is 0.4-0.8Mpa, exhaust volume is not less than 15³/min (18 spray guns
- Use) refers to the air volume flow rate under the standard state (20°C, 101.325Kpa)].
- 18. Inner diameter of compressed air intake pipe: 50MM. 4. Place and method of delivery (lifting):

