

# Acrylic Flame Polisher

| Models Available |      |      |
|------------------|------|------|
| H160             | H180 | H260 |

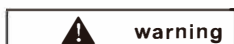
Manual Book for Operation and Maintenance

# CONTENT

|                                    |   |
|------------------------------------|---|
| 1、 attentions                      | 1 |
| 2、 inspection after arriving       | 2 |
| 3、 safety                          | 3 |
| 4、 warranty                        | 3 |
| 4.1 terms                          | 3 |
| 4.2 ranges                         | 3 |
| 5、 product information             | 4 |
| 6、 graphic illustration            | 5 |
| 6.1 main set                       | 5 |
| 6.2 packing list                   | 5 |
| 7、 installation operation          | 6 |
| 7.1 making electrolytic solution   | 6 |
| 7.2 adding electrolytic solution   | 6 |
| 7.3 adding filter solution         | 6 |
| 7.4 power on                       | 7 |
| 7.5 pressure test                  | 7 |
| 7.6 usage                          | 7 |
| 8、 equipment maintenance           | 8 |
| 9、 simple breakdowns and solutions | 8 |

# 1 ATTENTIONS

- We are engaged in product improvement, Change may occur.
- We are not responsible for occasional damage accidents under abnormal or specific working environment.
- We are not responsible for damages or losses caused by misoperation.
- No copy is allowed without permission.



: can cause human injury



: may cause product damage or property losses

- Any questions or any problems, please contact us.
- This manual book is part of machine, please take care to keep.

## 2 Goods Inspection after Arriving

- Inspection whether there is any damage, such as shell damage or inside damage, if so, please take a photo, and contact us.
- Check product model, tech data (power supply, voltage, frequency) and accessories to judge whether the machine meets your requirements.

Please operate the machine according to this manual book.

Don't use the machine under abnormal working environment.

Any questions or any needs, please contact us.

We are not responsible for the machine changed by others without our company's paper approval.

### 3. safety

#### danger

- Water is forbidden into the inside of the machine because there are many electric parts.
- Don't open shell before power off.
- Don't open upper nut if there is pressure inside machine

#### warning

- The electrolytic solution is highly corrosive.
- Flame temperature is 2800°C. Don't misplace the flame torch messily when burning
- Use plug with earth wire.
- Ignition is forbidden when there is no pressure inside the machine.

#### notice

- Clean electrolytic cells every two months.
- Release the left gas after you shut down the machine

### 4. warranty

#### 4.1 warranty terms

warranty period:

We offer 12 months free maintenance from the purchasing day, and lifetime paid maintenance.

Following terms have no free maintenance:

- Surpass warranty period-12months
- Change warranty period without authorization
- Operate or maintain the machine wrongly without manual book instruction.
- Disassemble the machine or accessories privately

#### 4.2 warranty range

| accessories        | 12 months | lifetime paid | no warranty |
|--------------------|-----------|---------------|-------------|
| cells              | ✓         | ✓             |             |
| power supply       | ✓         | ✓             |             |
| pressure switch    | ✓         | ✓             |             |
| filter             | ✓         | ✓             |             |
| manometer          | ✓         | ✓             |             |
| fan                | ✓         | ✓             |             |
| flame torch        |           |               | ✓           |
| T-junction         |           |               | ✓           |
| hose               |           |               | ✓           |
| power cord         |           |               | ✓           |
| funnel             |           |               | ✓           |
| flashback arrestor |           |               | ✓           |

note: warranty period of main set is 12 months.

## 5 equipment data

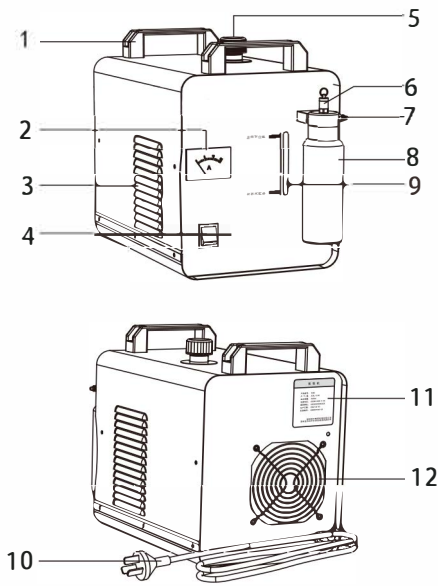
| model             | H160           | H180           | H260           |
|-------------------|----------------|----------------|----------------|
| max. gas product  | 75 L/H         | 95L/H          | 150L/H         |
| voltage           | AC220V 1. 2A   | AC220V 1. 5A   | AC220V 2. 5A   |
|                   | AC110V 2. 5A   | AC110V 3. 1A   | AC110V 5. 5A   |
| water consumes    | 25 mL/H        | 30 mL/H        | 50 mL/H        |
| max. water adding | 1. 0 L         | 1. 0 L         | 4. 2 L         |
| solution density  | 15%            | 15%            | 15%            |
| pressure range    | 0. 13-0. 15Mpa | 0. 13-0. 15Mpa | 0. 13-0. 15Mpa |
| weight            | 7 Kg           | 8 Kg           | 14 Kg          |
| size              | 450*280*360mm  | 480*280*360mm  | 520*300*540mm  |

| model             | H160 | H180 | H260 |
|-------------------|------|------|------|
| flashback arresor | —    | —    | ●    |
| T-junction        | —    | —    | ●    |
| cell QUA          | 1    | 1    | 2    |
| flame torch       | 1    | 1    | 2    |
| hose              | 1    | 1    | 4    |

note: “●” has, “—” has not

# 6 graphic illustration

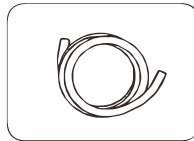
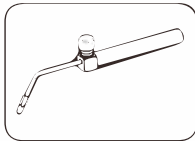
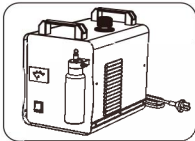
## 6.1 main set



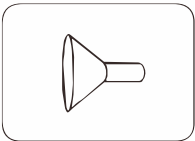
- 1、lifting
- 2、current
- 3、fans
- 4、on/off
- 5、feeding inlet
- 6、pressure valve
- pressure gauge
- 7、gas output
- 8、filter cup
- 9、waterline
- 10、power cord
- 11、data sticker
- 12、fans

note: H160 has pressure releasing valve, and H180 has pressure gauge.

## 6.2 packing list



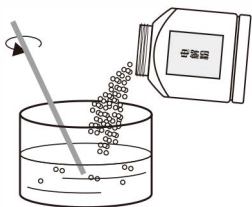
- 1、main set
- 2、flame torch
- 3、hose
- 4、manual book
- 5、funnel



note: Only H260 has T-junction and flashback arrestor.

# 7 installation operation

## 7.1 make electrolytic solution



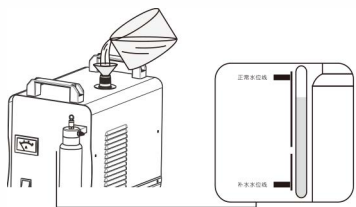
Add electrolytic powder(sodium hydroxide or NaOH) and water in a plastic basin or glass and ceramic basin, stir them, and then cool for 10 minutes.

electrolytic solution ratio: 15%

**⚠ notice**: metal basin is forbidden.

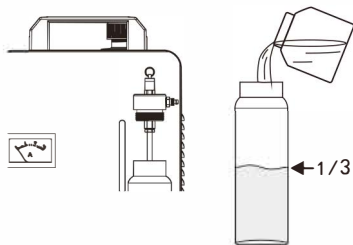
**⚠ warning**: Sodium hydroxide belongs to strong alkali, so its solution is very corrosive once the solution touches clothes or skin, please clean it using water repeatedly.

## 7.2 add electrolytic solution



- 1、unscrew the inlet nut.
- 2、put the funnel to avoid spattering.
- 3、add electrolytic solution into the electrolytic cells.
- 4、electrolytic solution must be lower than "normal waterline", and must be higher than "feeding waterline".
- 5、tighten the inlet nut.

## 7.3 add filter solution



- 1、Disassemble the filter cup anticlockwisely.
- 2、Add alcohol to the cup lower than 1/3 of the cup.
- 3、Assemble the filter cup to the machine and tighten it.

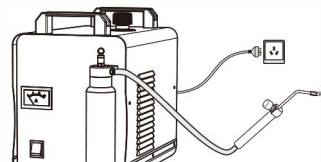
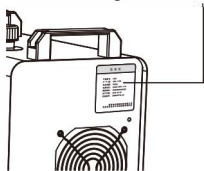
note: the filter solution is distilled water or alcohol which adjusts flame pureness and temperature.



# 7 installation operation

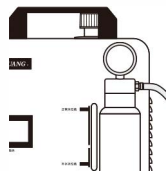
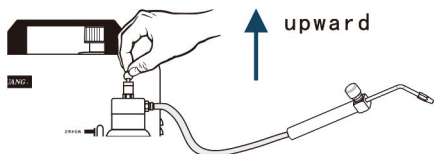
## 7.4 power on test

voltage: AC200-240V  
voltage: AC100-120V



- 1、 Check techdata label on the back of machine shell. We produce acrylic flame polisher with 110V and 220V power supply voltage. Power supply voltage and the voltage machine needs must be matchable to avoid damage to the machine.
- 2、 The plug must have the earth wire to avoid electric shock.
- 3、 The hose connects flame torch and gas output. Choose suitable copper nozzles according to your requirements.
- 4、 Power on, if both light and fan works, the machine is working well.

## 7.5 pressure test



Close the flame torch, and gas pressure will become higher and higher. When it reaches its limit, current value will become zero, and machine will stop work. Then lift the pressure-releasing valve, there will be gas releasing. In that case, the machine works well.

Working pressure range is from 0.13Mpa to 0.15Mpa. If pressure reaches to 0.15 Mpa, machine will stop working, while if pressure becomes 0.13 Mpa, machine will work again automatically. In that case, machine works well.

## 7.6 usage

Ignite in the copper nozzle, then let the flame burn the acrylic sheets or signs equably in suitable distance, not too near and not too far. Only burn one time equably.

note: For first-time use or exchange electrolytic solution, when the machine produces gases, open the flame torch to release the left gas inside the machine, and then ignite the flame. (It needs only 20 seconds)

## 8 equipment maintenance

- 1、 Add water timely: if waterline reaches the feeding waterline, add water into the machine to make waterline back to the normal waterline.( no need of electrolytic solution)
- 2、 Exchange electroytic solution each month or when the solution becomes dark and dirty, or useless because mixed with alcohol. Clean the electrolytic cell With water several times before adding new electrolytic solution.
- 3、 When add water, exchange solution or add alcohol, your must shut down the machine and turn off flame torch. If all is done, release the left gases before igniting the flame torch.

## 9 simple breakdowns and solutions

| breakdowns          | reasons  | solutions   |
|---------------------|--|---|
| red or yellow flame | new machine  | let machine works for a while   |
|                     | too much filter solution                               | pour out additional filter solution   |
|                     | dirty copper nozzles                                   | clean copper nozzles  |
| less pressure       | low current value                                      | exchange electrolytic solution  |
|                     | gas leakage  | turn off flame torch and power on the machine, using soap water to find the leakage place and mend it.          |
| flameback           | gas leakage  | check leakage place   |
|                     | anti-flameback device damage                           | exchange flameback arrestor device  |
| no pressure         | gas leakage  | check leakage place   |
|                     | pressure gauge damage                                  | exchange pressure gauge   |
| no current          | power supply, current gauge,<br>pressure device damage | exchange damaged parts<br>output of power supply is DC24V and DC10A<br>pressure range is from 0.13Mpa to0.15Mpa |
|                     | electricity wire damage                                | check electricity wire breakdowns.  |