

# *OPT-380 Automatic Precision Grinder & Polisher*

GRINDING/POLISHING



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# OPT-380 Automatic Precision Grinder & Polisher

OPT-380 is an automatic precision grinding and polishing machine, which has strong comprehensive performance in the industry, mainly used for grinding and polishing of metal, ceramics, glass, PCB board, optical materials (such as zinc sulfide, silicon and other material), refractory materials, composite materials and other materials. It is one of the ideal grinding and polishing equipment for scientific research institutes and production enterprises. The Ø381mm disc can be used for preparing the specimen with a diameter of ≤ Ø142mm or a rectangular plane with a diagonal length of ≤ 142mm.



## Features:

- ◆ The grinding disc can be convenient to replace as the swing arm can be quickly disassembled and assembled;
- ◆ The motor adopts the stepless speed control method, and the speed in real time can display on the digital screen;
- ◆ Even longer service life as the motor adopts angular contact bearing instead of ball bearing;
- ◆ Can accurately control the working time (between 0-999H) with timing function;
- ◆ Can running long-term in low-speed with a cooling system;
- ◆ Convenient to operate on the 2.4" simple LCD screen.



## Technical Specifications:

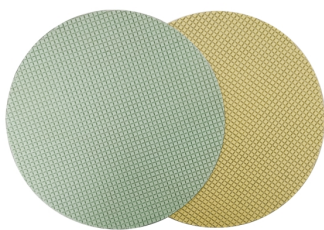
| Model                 |                     | OPT-380                       |
|-----------------------|---------------------|-------------------------------|
| Working Wheel         | Speed               | 10-200rpm                     |
|                       | Diameter            | Φ381mm                        |
|                       | Station             | Three station                 |
| Grinding Capacity     | Specimen Size       | Dia < Ø142mm                  |
|                       | Planeness           | less-than 0.002mm per 20x20mm |
| Electrica             | Voltage/Frequency   | 220V/50Hz                     |
|                       | Rated Power         | 800W                          |
|                       | Standby Power       | 15W                           |
|                       | Timer               | 0~999h59m59s                  |
| Water Supply          | Max. pressure       | 0.3MPa                        |
|                       | Dia. on inlet pipe  | Φ8mm                          |
|                       | Dia. on outlet pipe | Φ32mm                         |
| Operating Environment | Temperature         | -20°C - 60°C                  |
|                       | Humidity            | 0-95%RH                       |
| Dimension             | WxDxH               | 771x653x338mm                 |
| Weight                |                     | 150kg                         |

## Control Panel Introduction:



- ① Display screen(speed, time)
- ② Running indicator
- ③ Time setting button
- ④ Speed adjustment button
- ⑤ Cooling water rotary button
- ⑥ Start / Stop

## Related Consumables & Accessories:



DiaRe Diamond Disc



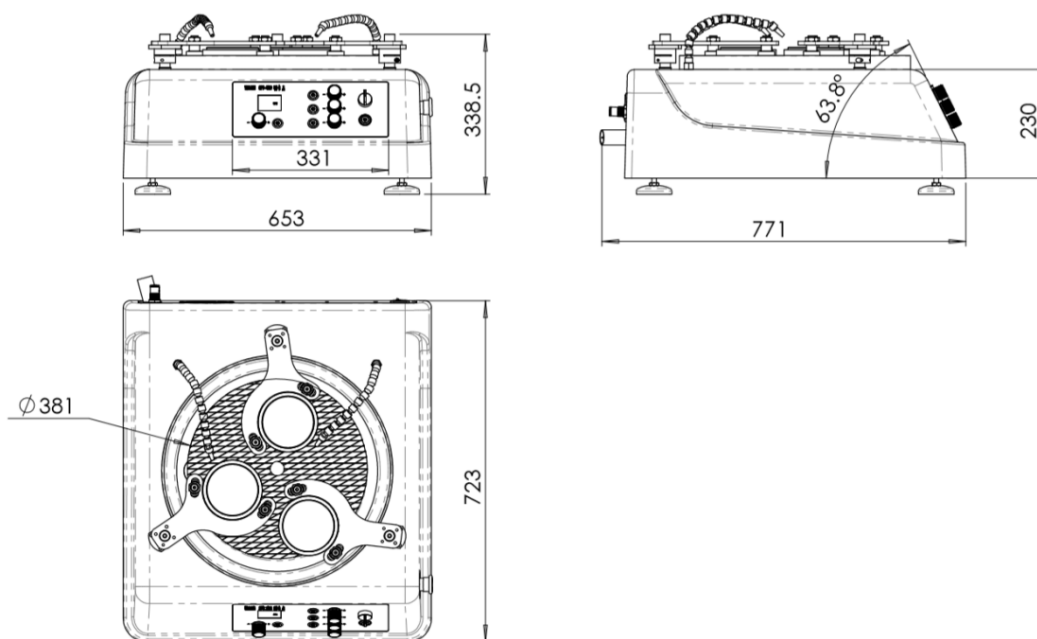
Abrasive Paper



Alumina/Silica Suspension

## Dimension Figure

Unite: mm



## Purchase list:

### Silicon Carbide Disc:

|           |                                     |             |       |
|-----------|-------------------------------------|-------------|-------|
| 03.04.845 | Silicon Carbide Disc ( PSA )        | 380mm,120#  | 50PCS |
| 03.04.846 | Silicon Carbide Disc ( PSA )        | 380mm,180#  | 50PCS |
| 03.04.848 | Silicon Carbide Disc ( PSA )        | 380mm,400#  | 50PCS |
| 03.04.850 | Silicon Carbide Disc ( PSA )        | 380mm,800#  | 50PCS |
| 03.04.851 | Silicon Carbide Disc ( PSA )        | 380mm,1000# | 50PCS |
| 03.04.853 | Silicon Carbide Disc ( PSA )        | 380mm,1200# | 50PCS |
| 03.04.860 | Silicon Carbide Disc ( PSA )        | 380mm,2500# | 50PCS |
| 03.03.720 | Silicon Carbide Disc ( Plain Back ) | 380mm,120#  | 50PCS |

### Adapter Plate System:

|             |   |       |     |
|-------------|---|-------|-----|
| 04.08.420-1 | AD-PSA Plate  | 380mm | 1PC |
| 04.08.031   | Magnetic Plate                                      | 380mm | 1PC |
| 04.08.060   | Magnetic Plate(without notch or PSA, 3mm thickness) | 380mm | 1PC |

### Polishing Cloth:

|           |  |       |       |
|-----------|--|-------|-------|
| 05.07.740 | YS-JP White Fiber Polishing Cloth(PSA)           | 380mm | 10PCS |
| 05.10.040 | GF-JP White Synthetin Silk Polishing Cloth (PSA) | 380mm | 10PCS |
| 05.02.380 | SR-ZP Red Synthetic Fabric Polishing Cloth (PSA) | 380mm | 10PCS |
| 05.12.150 | SC-JP White Natural Silk Polishing Cloth (PSA)   | 380mm | 10PCS |
| 05.01.135 | ZN-ZP Black Polyurethane Polishing Cloth (PSA)   | 380mm | 10PCS |

### Diamond polishing suspension and paste:

| Diamond Suspension      |                         | Micrometer | Diamond Paste        |                       | Diamond Spray           |
|-------------------------|-------------------------|------------|----------------------|-----------------------|-------------------------|
| Monocrystalline (500ml) | Polycrystalline (500ml) |            | Monocrystalline (5g) | Polycrystalline (10g) | Monocrystalline (350ml) |
| 06.01.110               | 06.02.210               | 0.25um     | -                    | -                     | -                       |
| 06.01.120               | 06.02.220               | 0.5um      | -                    | -                     | 06.03.115               |
| 06.01.130               | 06.02.230               | 1um        | 06.10.030(Blue)      | 06.10.110(Black)      | 06.03.320               |
| -                       | -                       | 2.5um      | -                    | -                     | 06.03.325               |
| 06.01.140               | 06.02.240               | 3um        | 06.10.040(Green)     | 06.10.130(Black)      | -                       |
| -                       | -                       | 3.5um      | -                    | -                     | 06.03.330               |
| -                       | -                       | 5um        | -                    | -                     | 06.03.335               |
| 06.01.150               | 06.02.250               | 6um        | 06.10.050(Yellow)    | 06.10.160(Black)      | -                       |
| 06.01.160               | 06.02.260               | 9um        | 06.10.060(Red)       | 06.10.190(Black)      | -                       |
| -                       | -                       | 10um       | -                    | -                     | 06.03.340               |

## Purchase list:

### Precision polishing suspension and polishing powder:

|  |           |           |           |
|--|-----------|-----------|-----------|
|  | 0.05μm    | 0.3μm     | 1μm       |
| Alumina Suspension(500ml)              | 06.04.210 | 06.04.220 | 06.04.230 |
| Alumina Polishing Powder(500ml)        | 06.13.011 | 06.13.021 | 06.13.031 |
|  | 500ml     | 1000ml    | 5000ml    |
| SO T401 Non-Crystallizing Silica(50nm) | 06.05.310 | 06.05.320 | 06.05.330 |
| SO T439 Non-Crystallizing Silica(50nm) | 06.07.310 | 06.07.320 | 06.07.330 |

### Polishing lubricants:

|                           |           |           |              |
|---------------------------|-----------|-----------|--------------|
| PL-W Polishing Lubricants | 06.09.510 | 06.09.520 | 500ml/1000ml |
|---------------------------|-----------|-----------|--------------|



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