



2022

# **Balancing Machine Brochure**



### **Belt Drive Balancer**



Belt Drive type balancing machine is widely used in small, middle and big-sized motors rotors, impeller, fans, crankshaft, turbocharger, water pump, roller, grinding wheel, main shaft of machine tool, textile machinery, tool, spindle, etc...

Model	PHQ-50	PHQ-160H PHQ-300H PHQ-500H	PHQ-1000H PHQ-2000H PHQ-3000H	PHQ-5000	PHQ-10000	PHQ-20000
Max Mass of Workpiece(kg)	50	160 300 500	1000 2000 3000	5000	10000	20000
Max Diameter of Workpiece (mm)	700	1000 1220 1500	1600 1800 2100	2400	2400	2800
Distance Between Two Support Bearings (mm)	80-700	130-1270	160-1780 160-1780 160-2280	500-2200	750-4600	750-5600
Journal Diameter Scope of Workpiece (mm)	80-75	15-75	25-120	40-380	60-400	60-400
Diameter Scope of Driving Belt (mm)	18-200	40-400 40-500 40-600	40-700 40-800 50-900	50-1000	50-1000	100-1300
Requency Conversion Motor Power (kw)	0.75	1.5 1.5 2.2	4 5 7.5	15	18.5	30
Machine Bed Length(mm)	900	1500	2000 2000 2500	2500	5000	6000











PHQ-50 Innovative Balancing Solutions.

PHQ-160H/300H/500H

PHQ-1000H/2000H/3000H

PHQ-10000H

PHQ-20000

### **Universal Joint Drive Balancer**



Universal Joint Drvive type balancing machine is widely used in balancing all kinds of light, middle and big-sized motors rotors, impeller, fans, crankshaft, turbocharger, water pump, roller, grinding wheel, screw rotor etc ...

Model	PHW-1000H PHW-2000H PHW-3000H	PHW-5000	PHW-10000H	PHW-20000	PHW-30000	PHW-40000	PHW-100000
Max Mass of Workpiece(kg)	1000 2000 3000	5000	10000	20000	30000	40000	100000
Max Diameter of Workpiece (mm)	1600 1800 2100	2400	2400	2800	3000	3400	4200
Distance Between Two Support Bearings (mm)	1600 1900 1900	2500	4000	5200	6000	7000	10000
Journal Diameter Scope of Workpiece (mm)	25-120	40-380	60-400	60-400	80-500	80-560	80-620
Universal coupling torque(N.m)	250 300 700	1250	2250	5000	7800	9000	15000
Requency Conversion Motor Power (kw)	4 7.5 7.5	15	22	55	75	90	220
Machine Bed Length(mm)	2500 3000 3000	4000	5500	7000	8000	8000	10000











PHW-100000

PHW-1000H/2000H PHW-3000H

PHW-5000 PHW-20000

# **Dual Drive Balancer**



One machine with two drive system (belt drive device & coupling drive type), more widely application range.

Model	PHWQ-1000H PHWQ-2000H PHWQ-3000H	PHWQ-5000	PHWQ-10000H	PHWQ-20000	PHWQ-30000
Max Mass of Workpiece(kg)	1000 2000 3000	5000	10000	20000	30000
Max Diameter of Workpiece (mm)	1600 1800 2100	2400	2400	2800	3000
Distance Between Two Support Bearings (mm)	1600 1900 1900	2500	4000	5200	6000
Journal Diameter Scope of Workpiece (mm)	25-120	40-380	60-400	60-400	80-500
Universal coupling torque(N.m)	250 300 700	1250	2250	5000	7800
Requency Conversion Motor Power (kw)	4 7.5 7.5	15	22	55	75
Machine Bed Length(mm)	2500 3000 3000	4000	5500	7000	8000









PHWQ-3000H PHWQ-5000 PHWQ-20000 PHWQ-30000





Vertical balance all kinds of discoid parts, such as: brake disk,brake drum, clutch, pulley, flywheel, torque converter etc...

It can add drilling or milling device to remove material.

Model	PHLD-16	PHLD-42	PHLD-65	PHLD-35H
Max Mass of Workpiece(kg)	16	42	65	35
Max Diameter of Workpiece (mm)	800	800	800	180-450
Max Height of Workpiece (mm)	160	160	160	80
Requency Conversion Motor Power (kw)	1.5	1.5	2.2	2.2











PHLD with drliing device



PHLD-35H (semi-auto milling machine)

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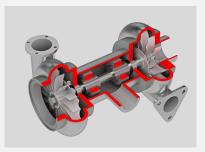
# **Turbocharger Balancer**

副軍 Balancing Machine

Specially for automotive turbocharger manufacturing & repair industry.



Model	PRZY-0.5	PHZY-1.6/5/16
Max Mass of Workpiece(kg)	0.5	1.6/5/16
Max Diameter of Workpiece (mm)	60	300
Distance Between Two Support Bearings (mm)	30-115	60-400
Journal Diameter Scope of Workpiece (mm)	5-15	5-40
Diameter Scope of Driving Belt (mm)	5-15	15-150
Motor Power (kw)	0.1DC	0.23DC





















# **Drive Shaft Balancer**



It can balance one piece / two pieces/ three pieces and four pieces drive shaft. Manual welders and safety cover can be attached.





Model	PHCW-100/350	PHCT-100/350	PHCF-100/350	
Max Mass of Workpiece(kg)	100/200	100/200	100/200	
Workpiece effective length(mm)	2000	4500	5500	
Max Diameter of Workpiece (mm)	130	130	130	
Max shaft diameter of the workpiece(mm)	120	120	120	
Balancing speed(rpm)	3200	3200	3200	
Universal coupling torque(N.m)	60	60	60	
Requency Conversion Motor Power (kw)	1.5	2.2	2.2	
Machine Bed Length(mm)	3300	6000	7000	













### **Portable Balancer**



Mainly application for on-site balancing works for fan blower, motor, cooling tower, CNC spindle etc...



#### **DM-3 portable balancer parameters**

1.7-inch touch screen

2.Win CE operation system

3.Measuring speed 180-10000r/min

4. The resolution of unbalance amount: 0-3

5. Waveform display

6.Indexing function

7.Sensor Detect

8. Harmonic analysis

9. Vector decomposition and composition.

10.100 sets of scaling data storage.

11. Electronic compensation

12. Single/Double plane balance.

13.Data can be exported.

14. The Battery cruise time: 2.5h.

15.Machine weight: 6.78kg

16.Machine size: 450\*260\*145mm









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### **Automatic Balancing Drilling Machine**



Vertical automatic balancing machine, specificaly designed for the balancing of pulley, flywheel, brake drum, assembled clutch etc.





**Customized Fixture** 



#### **Features:**

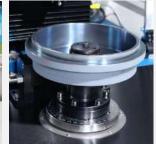
- Single-sided balance, axial drilling.
- Quick model change, parameterized adjustment, simple operation and strong compatibility.
- It can be single machine automatic balance, online automatic line for automatic production,
- Can be equipped with MES system to realize data traceability.
- · Avoidance function for drill holes.
- · Industrial vacuum cleaner for removing dilling chips.
- · Operator interface by Siemens PLC.
- Modular Constructed concept.

















### **Automatic Balancing Milling Machine**



Widely used for balancing of assembled brake disc, brake drum, Differential, Clutch etc.....



Fixture customization



Three-jaw chuck



Elastic sleeve

Cutter tool customization



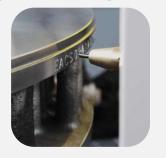




After Milling

### Features:

- Machine parameters are customized according to product parameters
- Vertical automatic balancing machine, specificaly developed for the
- The unbalance is automatically corrected by milling.
- · High level of flexbity and quick production change over
- Low failure rate, Reduction in machine "down time"



Option: ① Intergarte converyor, ② Marking device, ③ Scanner, ④ Deburring





Application for all of disc-shape, such as: Brake disc, Brake drum, Clutch, Differential case.











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### **Electric Vehicle Motor Automatic Balancing Machine**











Semi-Automatic

Single-station Automatic

#### **Features:**

• Balancing machine unit:

The part above the rigid plate (except the roller) adopts anti-magnetic design.

• Rotary transport unit:

The gripper is made of antimagnetic material.

• Weight removal unit:

The tooling fixture and the force offset chuck adopt anti-magnetic material

- 1. It is videly used for high, medium and low production lines
- 2. The robot or pick and place gantry can be integrated
- 3. We'll supply an automated guard for protection
- 4. Fast changover
- 5. Advanced measure system can do MES, suitable for mass production
- 6. JP Can provide single-station/two-station/four stations erotor balancer models







### **Armature Balancing Machine**













#### **Advantages:**

- Wide range of application, quick changeover of small batches and multiple varieties.
- Fully automatic measurement and weight removal, simple training can be on duty operation.
- Fault alarm prompt, easy maintenance.
- It can be equipped with a separate automatic assembly line or a fully automatic rotor production line.
- According to the rotor characteristics, there are multiple deduplication methods such as R/V/T milling.
- Fully independent intellectual property rights, special products can support highly customized solutions.
- The main electrical components adopt brand components, machine performance is stable and reliable.
- Sound and light prompt for qualified judgment, one person can operate two machines at the same time.

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### **Engine Cooling Fan Balancing Machine**

#### **Functions:**

Single-plane / Double Plane dynamic balance

Current test

Voltage test

power test

Indexing algorithm

500 sets of workpiece parameters

1 million Measurement record

Display unit customization

Supported several languages

Date count

Data output

Permission function

Programmed power supply

Scanner

Pneumatic fixture

Bracket quick stop

Tricolor warning light

Overcurrent protection

Overvoltage protection

Short circuit protection

Air pressure protection (equipment)

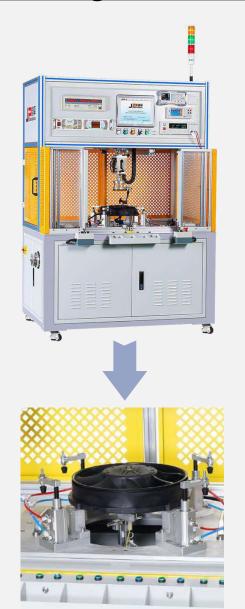
Start with both hands

Dual power protection

Automatic security door/Safety grating

Counterweight box indicator light

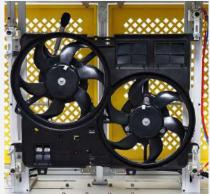
Maintenance lighting











### **Fan and Motor Assembly Balancing Machine**







#### **Software function:**

- Man-machine transation 12" touch screen
- Account management
- Supporting 8 different language
- Siemens PLC
- Clamp compensation
- Indexing function
- ISO accuracy calculation

- Sensor detection
- Data save & record
- Trouble shooting
- Remote monitor
- USB data can be exported
- Data printing
- Automaticly guide operation step

#### **Machine function:**

- Chips sorting box
- Safety guarding, safety light curtain
- Human machine interface control
- Detachable mesh protection
- Tricolor alarm light sound and light tips
- · Electrical cabinet file placement bag
- · Automatic color marking
- · Equipment integration design
- Print label
- · With or Without workpiece testing
- · CW or CCW detection











#### **Features:**

- CCD image can automatic identify incoming material model
- End surface and radial runout measurement first harmonic second harmonic
- · Automatic centering dynamic unbalance measurement and marking/coding
- High-precision expansion sleeve fixture / multi-jaw fixture that can clamp a wide range
- Gantry loader assembly line automatic conveying automatic sorting
- The measurement and unbalance data can be exported which is convenient for users to do data statistics
- Short production cycle time suitable for mass production
- Mainly used in automatic balancing detection and sorting of wheel hubs can also detect the unbalance amount and angle of wheel hubs



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# **Tire Automatic Balancing and Testing Machine**





#### **Features:**

- Applied to the balance correction of automobile tire wheels
- Using the Shanghai Jianping dynamic balance algorithm, the workpiece is automated from loading, balance detection, automatic marking, auxiliary manual trimming and unloading. It can be applied to mass continuous production.
- Adopt the measurement control system developed by Shanghai Jianping, which integrates measurement, control and calculation functions
- The interface is clear and intuitive, easy to operate and use
- It can be connected with unmanned automatic line and other equipment





# **Crankshaft Dynamic Balancing Machine**

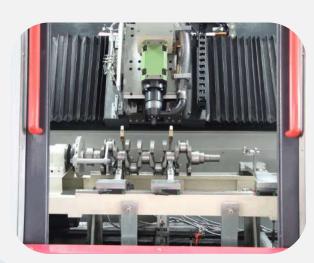


This machine is dedicated to balancing and correction for 4 cylinder/ 6 Cylinder car crankshaft.



#### **Features:**

- Can do twice and more weight removing correction for workpieces
- Automatic measurement automatic drilling correction and retest
- · Manual loading and unloading
- 15" touch screen
- · Advanced balancing machine measuring software
- Rigid structual design, longer service life









## **Co-branding**





























