

Xingyi Machine USA LLC. Machine USA

# Manual for CG-580 Floor Grinder





# 1. Introduction

### 1.1 Summary

Xingyi machines are used for the floor surface. The scope of use of the machine depends on the choice of the tool. In addition to the use and general functions, this manual describes information on the use, repair and maintenance of the grinder. You can contact your local retailer for further information.

#### 1.2 Responsibility

We make every effort to make this manual as complete and accurate as possible, and we are not responsible for any errors or loss of information. Xingyi reserves the right to change the instructions in this manual without prior notice.

This manual is protected by copyright law and can not be reproduced or used in any part without the express written consent of Xingyi.

#### **1.3 Accessories**

Below accessories are included with the grinder. Contact your supplier if anything is missing.

- (1) 1 grinding machine
- (2) 1 copy of machine manual
- (3) 1 pcs of dust skirt
- (4) 1 pcs of female plug
- (5) 1 pcs of inverter box key

#### 1.4 Package acceptance

Check carefully to see if the package or the grinder has been damaged during delivery. If there is any sign of damage, contact your supplier and report it. Check that the delivery matches the order. If there are any discrepancies, contact your supplier.



#### 1.5 Machine name plate

1	2
3	4
5	6
1. Model	4. Voltage

2. Manufacturing date	5. Weight
3. Power	6. Rotating speed

#### 1.6 Handling and storage

The grinding machine should be stored in a dry place at room temperature when not in use. Otherwise it may be condensed and cold damaged. The size and weight of the grinder are given in the technical data of the Manual.

Note! Improper operation may lead to the grinding machine overturned and damaged, even endanger personal safety.

#### 1.7 Warranty items

This warranty covers only manufacturing defects. Xingyi does not assume damage in the transport, unpacking or operation. The manufacturer is not responsible for any damage or defects caused by improper use, corrosion or use of specifications beyond the noted specifications. The manufacturer shall not be responsible for any indirect damage or expense under any circumstances. For complete information on the manufacturer's warranty period,



please refer to the current warranty terms of Xingyi. Local retailer may has special warranty terms. If you have any uncertainty about the warranty terms, please contact with your retailer.

# 2. Safety Instructions

#### 2.1 Overview

This manual records the key information for machine safety operation. Read the manual carefully before your first operation.

Non-standard operation, modification or maintenance without training may cause losses, machine problems or injury. You are allowed to operate the machine after training. All maintenance must be done by qualified professional technician. Any machine parts that need to be changed must be provided by XINGYI.

XINGYI machines only can be used in the way of XINGYI recommended. And they only can be used for commercial purposes. Anyone who uses a machine should know its function, the location of the emergency stop. The operator should have to ensure the safety rules that the unauthorized person can not be stationed at work area when the machine starts.

The operator should be equipped with professional personal protective equipment when you are at work: safety goggles, protective gloves, safety shoes, breathing masks, protective earmuffs, etc. Do not wear loose clothes or anything that can grasp things such as scarves, bracelets, rings and so on.

#### Note:

1、 If the machine must be work on slopes, it should be less than 20 degrees, the company is not responsible for any accident caused by the operation when the slope is greater than 20 degrees.

2. This machine is only used for floor grinding, polishing.

 Please read and understand the safety guide totally. Different models have different accessories and operation instructions.



4. It only needs one person to operate this machine Keep children and irrelevant person away.

5. Operator who is in poor physical state or without training is not allowed to operate the machine. The operator and the repairman must be physically strong and able to withstand the weight of the whole machine and the working intensity of the motor.

6. Do not lend or rent the machine without instruction manual.

7. Helmet, safety shoes, safety glasses are necessary when operating the machine.

8. Keep body, jewelry or loose clothing away from moving machine parts. If not, may cause bodily injury.

9. Random modification of the machine is not allowed. Only XINGYI accessories can be used for maintenance and modification.

10. Do not operate the machine outside on rainy or foggy days.

11. Ensure no explosive and flammable materials and steam nearby when operate machine. Do not operate machine near the place with fuel, grain dust, solvents, dilution agent or other flammable items.

#### 2.2 Electrical safety guidance

1. All circuit repairs can only be operated by professionals;

2. Note: after the machine is stopped that the cables are still powered, so cut off all power before servicing the machine.

3. The machine is equipped with an overload protection device and will automatically jump off when the machine is overloaded, prohibiting the machine from running, (re-adjust this overload button in case of safety).

4. Continue using the machine under overload conditions will cause other losses and the machine may not working properly. The manufacturer does not give a warranty.

5. The purpose of installing the inverter in the machine is to speed up and protect the user and the machine. It is forbidden to modify or adjust the inverter and modify the inverter parameters without the manufacturer's consent. If the unit fails, it is only allowed to replace the defective parts with the accessories provided by the manufacturer, (Other changes caused by changing, adjusting or modifying the inverter parameters without the manufacturer's consent, and the machine is not



working properly, the manufacturer does not horror the warranty).

6. Never modify the parts or circuits inside the inverter by yourself.

7. Do not operate the machine when the distribution box is not closed.

8. If the machine current is overloaded, we should pay special attention.

9. When the cables is energized or loaded, do not connect or disconnect the wires.

10. Using a damaged power cord may result in electric shock. Do not use a damaged power cord.

11. Wires should be kept away from hot floor surfaces.

12. The dryness of all electrical parts of the machine should be maintained and the machine should be stored in a dry place.

13. After the power is turned off and the panel indicator light is still on, it indicates that there is still high voltage inside the inverter, which is very dangerous. Do not touch the uninsulated electrical machine parts.

14. The machine motor and the frequency conversion box are prohibited from entering the water; (the other damage caused by the water inflow then the machine is not working properly, the manufacturer does not honor the warranty).

15. The machine must be connected to the required wire and voltage, specifications is noted by the manufacturer. (The label on machine indicates the power supply specifications).

### 3. Machine Description

#### 3.1 Overview

CG580 is used to grind (rough grind, fine grind and polish) concrete, natural stone and terrazzo floors or other materials specified in this manual or recommend by XINGYI.

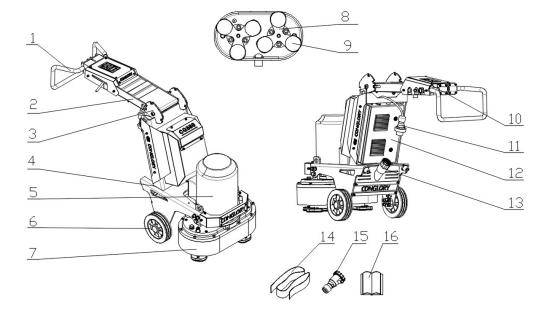
The swing lever and handle can be set in many different tilted positions. The grinding head of the machine can be used with different grinding plate for operation.

When dry grinding, to prevent dust from being exposed to air, posing a threat to the health of the operator and nearby people, make sure that the vacuum cleaner is connected to grinder (preferably equipped with a vacuum cleaner manufactured by Xingyi) Due to inhalation of dust



is harmful during operation, even there is a vacuum cleaner protective mask may also be necessary to protect health.

The machine can use different Xingyi abrasive. Due to the different concrete materials, the abrasive discs used in grinding are also different.



# 3.2 Parts description

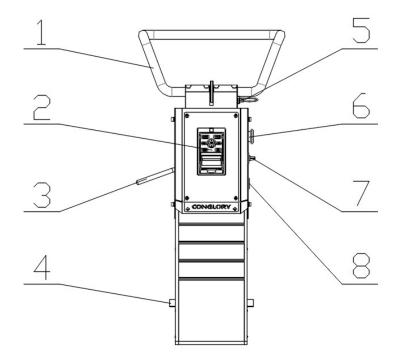
- 1. Handle
- 2. Swing lever
- 3. Sector plate
- 4. Frame
- 5. Motor
- 6. Wheel
- 7. Gear box
- 8. Grinding disc

- 9. Velcro-iron accessories
- 10. Swing lever pin
- 11. Plug
- 12. Floating dust cover
- 13. Vacuum hose interface
- 14. Dust-skirt
- 15. Female plug
- 16. Manual



## 3.3 Swing lever assembly

#### 3.3.1 Overview



1. Operation handle: Where people put their hands when operating the machine.

2. Display screen: display some parameters, such as voltage, current, motor speed, overload fault prompt, etc.

3. Swing part adjusting handle: use the handle to adjust the angle of the swing part, and there will be a corresponding position in the corresponding working state.

4. Swing lever locking rod: lock the rotation of swing lever.

5. Handle angle adjustment bolt: pull out the bolt and the handle can be rotated freely to the proper position to operate the device.

6. Emergency stop switch: When the device is in a dangerous state or needs to stop working, press the emergency stop switch to cut off the power and stop the operation of the device to achieve the protection of personal and equipment safety.

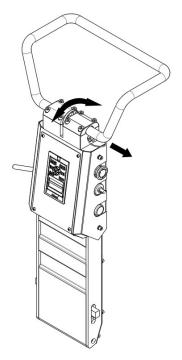
7. Potentiometer: adjust the rotation speed of motor.

8. Start button: press the switch, the motor starts to run.



#### 3.3.2 Handle

The adjusting pin on the handle adjusts the handle in different positions by locating different round hole positions to meet the different needs of the user. Hold the armrest in one hand, pull out the adjusting pin in the other hand, rotate to the right position, then release the adjusting pin.



#### Note:

1. When plugging out the pin, sometimes it will be caught, and the pin can be pulled out by shaking the support wheel.

2. When the handle adjustment bolt is automatically reset, the hole may not be aligned, just rotate up and down

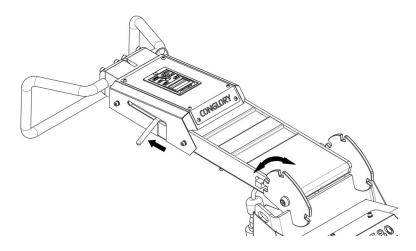
3. When adjusting the position of the handle, please check whether the handle adjustment pin has been automatically reset before operating the machine.

#### 3.3.3 The angle adjustment of swing lever

Use the swing lever position adjusting handle to adjust the position of swing lever to



realize conversion of the machine placement mode in different states. Hold the handle tightly with one hand to support the swing lever, the other hand tightens the swing level adjusting handle and press down the adjustment handle, rotate according to the hole location on sector plate, and release the adjusting handle when it reaches required position.



#### Note:

1. After adjusting the position of the swing rod, it is necessary to check whether the

swing rod has been limited before operating the machine.

2. The swing rod is heavy, please hold it firmly!

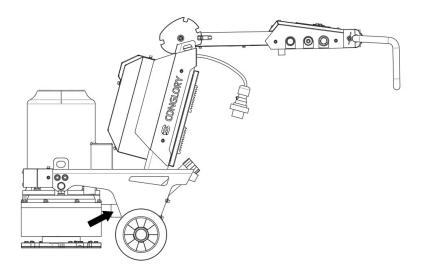
#### 3.4 Vacuum hose connection

The machine is a dry grinder. During dry grinding, connect one end of the 50mm suction

hose to the vacuum connector and the other end to the vacuum. The suction hose connection

should be tight. when using, and the suction hose should be kept away from the wheel.





# 4. Machine operating

#### 4.1 Overview

The following part mainly describes the grinder in different positions, the main operation of the grinder and how to install grinding abrasive.

#### Note:

1. Grinders can only be used or repaired by personnel who have received the necessary theoretical and practical training and have carefully read the user manual.

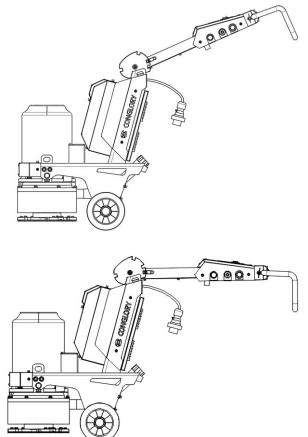
2. Wear protective equipment such as protective gloves, protective masks, overalls, helmets, insulated shoes, etc. when operating the grinder.

#### 4.2 Machine position description

#### 4.2.1 Machine working position

During grinding, adjust the position of handle and swing lever to achieve the most proper working position.

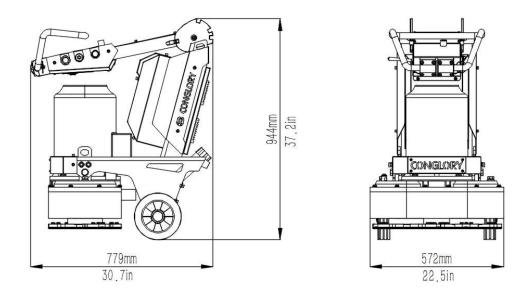




## 4.2.2 Machine package position

Adjust the position of handle and swing lever to the most suitable packaging position. The minimum package size is as follows and the machine can be packaged according to its size.





# 4.2.3 Machine tilting position

Adjust the handle and swing lever to the tilting position.

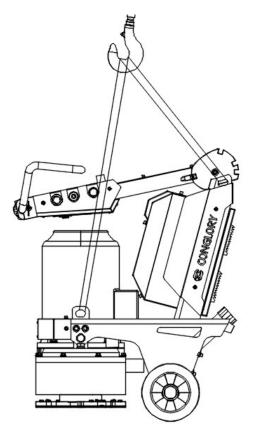




To put the machine down, you need to hold the handles tightly with both hands. Place your feet on the weighting iron lever handle, balance the machine with your own gravity, and slowly lower it to protect the grinding head. When you put down the machine, pay attention to your own strength, and do your best to ensure the safety of the machine and person. The supplier does not assume any responsibility for machine damage and personal injury caused by improper operation.

#### 4.2.4 Lift the machine

Tie the lifting strap tightly to both the two lugs, one is next to the motor and the other one next to the anti-dust shroud. (Note: you need to use two straps that can withstand 500 kg to bind the machine).



#### Note:

1. When lifting the machine, it may cause personal injury or damage to the machine and surrounding objects. Make sure that no one is present in the danger zone



during the lift.

2. After the strap is fixed to the lifting hole, you should also check whether it is secure.

3. The two straps need to be diagonally connected to the lifting points.

#### 4.2.5 Precautions

1. Improper operation may lead to the grinding machine overturned and damaged, even endanger personal safety.

2. When the handle adjustment pin is pulled out, sometimes it will be stuck, and the handle needs to be pulled out while shaking the handle.

3. During adjustment, it is necessary to confirm the reset of the locking device before operating the machine.

4. Be careful when the grinder is adjusted to the position of transportation or packaging and there is a risk of crushing injury.

5. Dust inhalation is harmful. Please bring a professional mask during operation to ensure physical safety.

6. In the process of lifting and downing the machine, pay special attention to your safety and avoid damage to the machine.

### 4.3 Start and stop the grinder

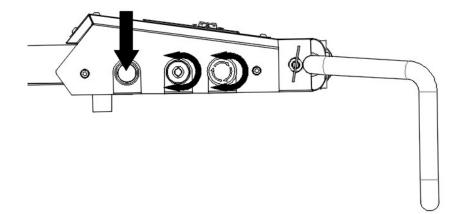
1. Start the grinder:

(1) Plug in the power cord (before this, make sure the emergency stop switch is pressed and all switches have been reset); When doing dry grinding, connect a vacuum cleaner (vacuum cleaners manufactured by Xingyi are equipped with camlocks, they can be quickly connected to the vacuum cleaner).

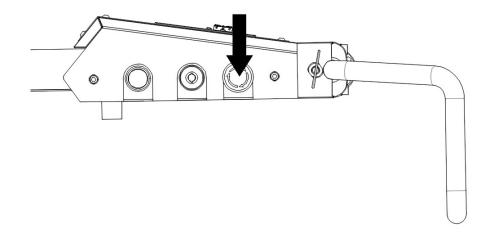
(2) Adjust the swing lever and handle to the corresponding working position.

(3) Turn on the emergency stop switch, rotate the potentiometer to adjust the rotation speed of the motor, and press the start button to start the grinder.





2. Stop the grinder: Press the emergency stop switch (remember to reset the potentiometer and forward and reverse switch, unplug the power plug).





**Note:** When stopping the device, it is recommended to unplug the power supply for safety reasons. The emergency stop switch can only be rotated and pressed down according to the direction of rotation above the emergency stop switch, NEVER PULL THE STOP BUTTON UPWARD.

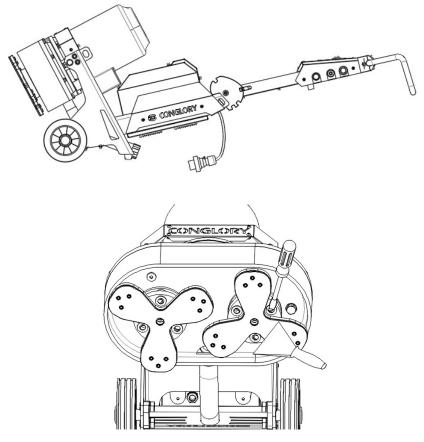
When starting the machine, it is recommended to press the handle to lift the machine slightly, reduce the pressure of the grinding disc, and reduce the friction between the grinding disc and the ground to avoid motor overloading when starting the machine.

#### 4.4 Replace abrasives

When changing the abrasives, adjust machine to lifting position, then tip the machine carefully and lay it flat. After leveling the machine, stand next to the machine and check whether the machine is stable. Change the abrasives with a flat-blade screwdriver or scraper.







#### Note:

1. Please ensure that the machine won't tip forward before replacing the abrasive;

2. After the machine has been running for a period of time, the abrasive, grinding disc and the gear box will generate high temperature. Be careful to be burn when you replace the abrasive.

3. Replace the abrasive only when the power is unplugged and the emergency stop is pressed.

#### 4.5 The wire winding

During machine working process, the wire wind method is particularly important, you can greatly improve your work efficiency and improve your safety. The specific operation is as follows.

- 1. Plug in an external power supply.
- 2. Turn the power cord through the swing lever handle.



3. The power cord wrapped around the handle at least two laps.

4. Slightly hard to pull the power cord to ensure that the power cord has enough

friction so that the power cord firmly fixed on the handle.

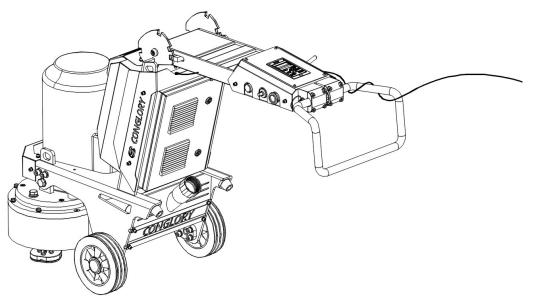
#### Note:

1. Make sure the power plug and socket are securely connected.

2. Please make sure the emergency stop has been pressed before connecting the power supply.

3. Power supply line, please use (please find in Manual) wire minimum wire size.

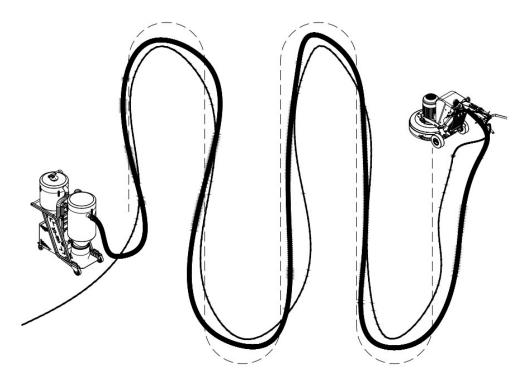
4. Please use the correct power supply.



#### 4.6 Grinding route (for reference)

When grinding the ground, it should be in accordance with the # method to grind the ground to get better effect. And according to # to grind ground, the machine grinding direction makes the wire more and more farther away, so that you can further avoid the interference of the wire to the normal work of the grinding machine.





#### Note:

The above picture for machine model can be ignored. The grinding route and winding method are for reference only.

# 5. Equipment maintenance

#### 5.1 Overview

We recommend that the grinding machine be checked regularly to extend the service life.

## Note:

During the maintenance and repair process, the power of the grinder must be disconnected.

Wear protective equipment such as safety shoes, protective gloves, protective masks,

etc.



#### 5.2 Daily check

#### 5.2.1 Check the switches

Turn on the display screen and check the function of each button.

Connect the power supply and detect the functions of the control panel such as emergency stop, machine startup, speed regulation, etc.

#### Note:

For safety reasons, it is strongly recommended to press the emergency stop switch when stopping the device, which would be safer.

#### 5.2.2 Check the disc cover

When there is a large amount of dust, it is easy to cause dust nozzle of grinding disc cover clogged by dust, use flashlight to see if there is dust clogged, clean up if necessary.

#### 5.2.3 Check the disc

In the case of long hours of work or a large amount of dust, the grinding plate of grinding head may be stained with dust. It will lead lack of connection between grinding head and plate, which will affect grinding efficiency even lead to abrasive drop and cause accident. In view of this situation, please remember to clean up in time.

#### 5.2.4 Note:

Be sure to wear protective equipment for maintenance checking such as protective gloves, protective masks, insulated shoes, and safety glasses.

The maintenance operation must be done when the emergency stop is down and the power is unplugged.

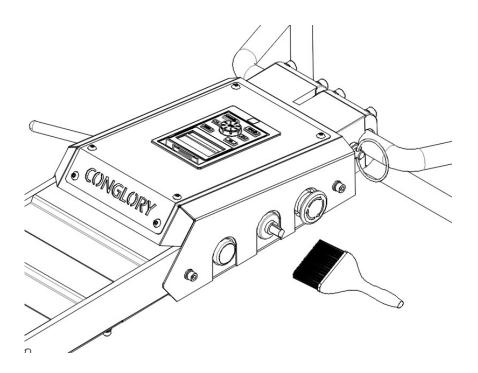
When the machine is tilted, make sure that the machine is flat and then check the operation of the grinding disc.



# 5.3 Cleaning

#### 5.3.1 Clean switches

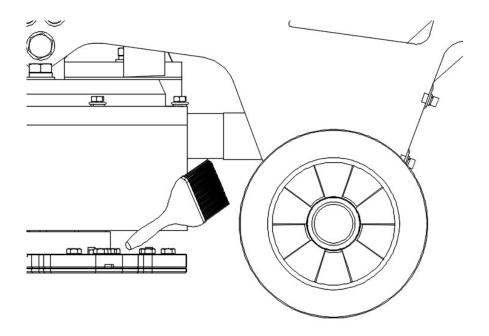
Grinding machine works on site for a long time, and the switch will inevitably run into the dust. For this reason, please check switch after grinding, to see whether the part is clogged by dust. Otherwise, it may cause the switch failure.



#### 5.3.2 Clean the grinding disc cover

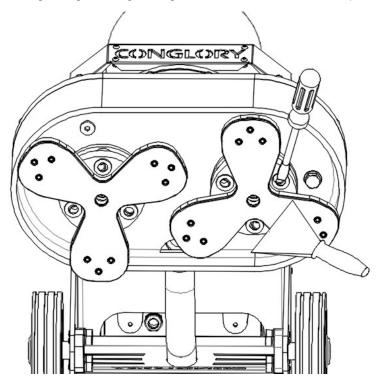
Remove the vacuum hose connector, use a flashlight to illuminate, and use a brush to clean the dust of the vacuum hose. Makes dust from blocking the the vacuum hose, affecting the efficiency.





## 5.3.3 Clean the grinding plate

Tilt the machine and use a cross screwdriver to remove the pads, and use shovel to remove dust. If you do not clean up in time, it is possible to make the pads disconnected, and pads fly out when grinding, causing damage to the machine and threaten personal safety.





#### 5.3.4 Note

1. Be sure to disconnect the plug from the socket before cleaning, maintenance or assembly.

2. Be sure to clean the whole grinder after each day's working. Do not use a pressure washer to clean the machine directly.

### 5.4 Overload protection

The machine is equipped with an overload protection function on the inverter. When the machine is overloaded, the overload error will be showed on the display of the control panel. In this case, it is necessary to cut off the power, reduce the load, stop the machine for 10-30 minutes (depending on the motor temperature), and then restart the machine.

#### 5.5 Maintenance

Any repairs must be performed by Xingyi Service Center training service personnel and use original Xingyi accessories. If your machine needs repair, please contact with your retailer.



# 6. Frequently Asked Questions and Solutions

This chapter describes some of the possible failures and how to handle them. If you still cannot resolve or have an error, please contact your nearest retailer.

Problem	Potential cause	Solution	
	Emergency stop switch is pressed	Turn on the emergency stop switch	
The machine can't run.	Overload	Reduce the load and try to restart	
	Power and power cable damage	Contact a licensed electrician	
	Problem with the motor start switch	Change the switch	
The machine stops		Reduce the load and try to restart	
immediately after starting	Overload protection		
The machine is difficult to	There are not enough diamonds	Use the number of diamonds	
control or the motor current	pads under the device or using	recommended by Xingyi to reduce	
is consumed	wrong diamonds	workforce on the grinder and operator	
	Diamond pads may not be	Properly install diamonds with the same	
Machine beating	properly installed or heights are	height	
	different		
	The grinding disk is not flat	Adjust and install the disks	

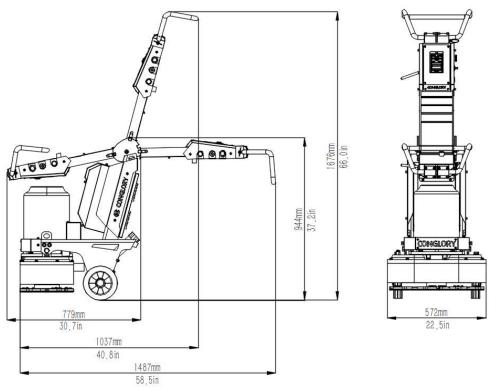


# 7.Technical Data

The table and picture show the technical data and dimensions of the grinder.

		CO	5580	
Engine power		5.5 <i>KW</i> /7.5 <i>HP</i>		
Rated voltage	1Ph 220V	3Ph 220V	3Ph 240V	
Rated current	25 <i>A</i>	20.6 <i>A</i>	11.9A	
Input hertz	50 <i>HZ</i> /60 <i>HZ</i>			
Inverter power		5.5 <i>KW</i> /7.5 <i>HP</i>		
Working width		580mm/22.84in		
Diameter of grinding disk	Φ310 <i>mm</i> /Φ12.20 <i>in</i>			
Grinding speed	450–1680 <i>r</i> /min			
Dimension(rear position)L*W*H	1037×572×1676mm/40.8×22.5×66.0in			
Dimension(worki ng position)L*W*H	$1487 \times 572 \times 944$ mm/ $58.5 \times 22.5 \times 37.2$ in			
Dimension(packi ng position)L*W*H	779×572×944mm/30.7×22.5×37.2in			
Max.Length*widt h*height L*W*H	148	$1487 \times 572 \times 1676 mm/48.5 \times 22.5 \times 66.0 in$		
Grinding presure		103.5 <i>KG</i>		
Total weight		200.5KG		
Cable model	$6mm^2$		4 <i>mm</i> <sup>2</sup>	
Storage temperature		$-20 \sim +60^{\circ} C/-4 \sim +140^{\circ} F$		
Working temperature	$-10 \sim +40^{\circ} C/+14 \sim +104^{\circ} F$			
Humidity	Below 95% (no condensation)			





# 8. Warranty

Xingyi does not bear the cost of machine damage caused by improper transportation, unpacking and improper use. Local distributors may be subject to specific warranty terms, please contact with your local distributor for specific warranty terms.