

Drilling Machine

**PinPrecise PP100**



USER MANUAL

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## 1. INTRODUCTION

Thank you for having purchased the drilling machine PINPRECISE **PP 100** which, we are sure will all meet all your needs and will satisfy your high demands.

This device has been designed according to the requirements of latest industrial standards and we guarantee that you will use it many years as your closest assistant.

However, inappropriate use may damage the equipment and be harmful to personnel. Please observe the relevant safety instructions and read the Operating Instructions carefully.

We wish you pleasant and fruitful work with this machine.

### SYMBOLS:



This symbol indicates that there is high dangerous tension under the bonnet which it is put on.



This symbol indicates that the machine complies with the requirements of the Directives for Low Tension and Electromagnetic Compatibility as well as for the Standards harmonized with them.

## 2. SAFETY INSTRUCTIONS

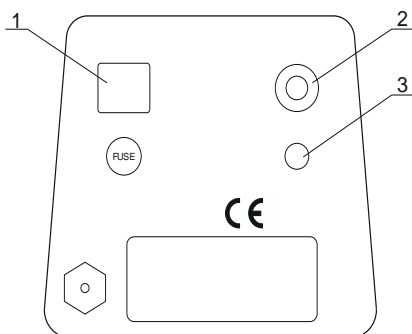
The following instructions must be observed in order to avoid personnel injury or equipment failure.

- the device must not be run by an operator who is not acquainted with these instructions;
- before turning on the plug in the net contact check if the voltage in the electrical network correspond to the working tension. In case of discrepancy, consult a specialist;
- on no account do not alter the device;
- the notices and stickers must be kept in good condition so that they are easily readable; they should not be removed!
- the machine must not function in case of being damaged and in position to injure the staff or a third person;
- keep the power cable out of heat, oil and coarse objects; do not catch the device by the cable when you move it.
- switch off the device and pull out the plug of the feeder cable from the contact before each cleaning.
- spare parts which are not specified by the manufacturer cannot be used!
- keep from falling and hitting;

**CAUTION!** If the machine is used by such means not indicated by the manufacturer, the provided protection can get worse!

### 3. DESCRIPTION OF THE UNIT

This device is used for precise drilling the pins in plaster models.  
It is designed to work in dental laboratories.



- 1. Main Switch;
- 2. Potentiometer;
- 3. Regulating Screw;



- 4. Laser Module;
- 5. Working Table;
- 6. Gap for the working instrument;
- 7. Hole for dust monitoring;

#### 4. INSTALATION AND INITIAL START-UP

- UNPACKING
- Carefully remove modules from packages;
  - Make sure that the mains voltage is ~230V and the contact is reliably grounded;
  - Place the device so that the plug is accessible.
  - Avoid positioning the apparatus near heat sources.

- CONNECTIONS
- Plug the power cord into an electrical outlet ~230V 50/60Hz.

## 5. PRACTICAL USE

### DRILLING INSTRUMENT MOUNTING

Before mounting the drilling instrument make sure that mains supply switch of apparatus (1) is switched off.

Loose the collet with the help of wrenches sizes **17** and **19** and put the drilling instrument through the hole of working table in the collet and tighten.

### DRILLING THE HOLES

Put the plaster model on the working table as holding it up with hands on the two sides.

Using the laser marker locate the position for drilling by view opposite to drilling.

Press the model to the working table till stay. The motor will switch on automatically and will stop at returning table in its initial stage.

### ADJUSTING THE DEPTH OF DRILLING HOLE

Drill a hole in waste plaster model.

Check the depth of drilled hole by test with pin from pin system of your choice.

If there is insufficient depth correct the movement of working table by turning regulating screw of anticlockwise. Repeat actions to achieve the desired result.

If the depth is deeper than the necessary one, correct the movement of working table by turning the regulating screw clockwise. Repeat actions to achieve the desired result.

### REGULATION OF DRILLING INSTRUMENT REVOLUTION

Through the potentiometer (2) revolutions of drilling instruments can be changed depending the solidity and humidity of used moulding plaster, so that the drilling to be done maximum rapidly and not to impede working motor.

## 6. TECHNICAL DATA

1. Electrical supply	~230 V, ±10%, 50/60Hz
2. Power consumption	max 40 W
3. Category of overvoltage	II
4. Adjust the working speed	2500 – 3500 rpm
5. Adjust the depth of the hole	0 – 7 mm
6. Collet diameter	3 mm
7. Laser Class	3A
8. Overall dimensions:	
8.1. Width	160 mm
8.2. Length	380 mm
8.3. Height	165 mm
9. Model Weight	5 kg
10. Working temperature	5°C - 40°C
11. Level of environment pollution	2
12. The device is designed for usage in normal dental premises up to 2000 m altitude above sea level.	
13. The maximum relative humidity of the air must be 80% for temperatures up to 31°C, decreasing lineally to 50% relative humidity for temperature 40°C.	



## 7. MAINTENANCE

- Avoid positioning of the apparatus in the immediate vicinity of heat sources (radiators);
- Do not leave objects on the body of the apparatus;
- Clean with a slightly moist cloth.
- Change the safety locks with the announced values only, namely:
  - 1A/250V, slow (class T)
  - 2A/250V, slow (class T)
- No repair activity by a service technician who is not authorized by the manufacturer is allowed!
- The lifting and carrying should be made only with the both hands from below.

## 8. DUST CONTAINER CLEANING

After work clean the dust container.

- Before container cleaning make sure that the electric supply of device is switch off. It is visible by lack of laser beam of light laser marker.
- Through the wooden peg and brush clean the hole of working table where the drilling instrument passes.
- Release the container by turning the pressing plate situated on the back of working table.
- Remove the dust container pushing it out through the hole in working table.
- Clean from dust and mount it in reverse order.

## 9. DELIVERY SCOPE

1. Device	<b>PINPRECISE PP100</b>	1 6p
2. Spare fuses		
	T 1A/250V	1 6p
	T 2A/250V	1 6p
3. Wrenches for instrument changing		2 6p
4. User manual		1 6p

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## PINPRECISE **PP100**

### WARRANTY SHEET

“VOP” Ltd. warrants the consumer for proper operation of all parts and materials in this product during a period of 12 months since the day of its purchase.

During this period VOP Ltd. or its authorized persons will repair on its own account all defects which have occur during the normal operation of the machine.

Defects caused by improper transportation, storage and manipulation of the product or due to malfunction of the electrical mains supply are repaired on the account of the customer.

This warranty shall become void if attempts are made to repair the product by persons not authorized by the producer.

Serial Number \_\_\_\_\_

Invoice number \_\_\_\_\_

Date \_\_\_\_\_



MANAGER of “VOP” Ltd

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CLIENT:

Serial Number \_\_\_\_\_

Invoice number \_\_\_\_\_

Date \_\_\_\_\_

Voucher Manufacturer