



**KRAFTOOL HONG KONG LIMITED** 

**Instruction Manual** 

ELECTRIC SPRAY GUN KPE-100 | ZKPE-120

www.kraftool.hk Version: 101018



#### POSSIBLE FAULTS AND ELIMINATION METHODS

Fault	Possible cause	Trouble shooting	
Product does not switch on	No mains voltage	Check the mains voltage	
	Defective switch	Contact a service center for repair or replacement	
	Piston sticking	Clean the mechanism (see Periodic Maintenance) or contact your service center for replacement	
	Defective electromagnet	Contact a service center for repair or replacement	
Product does not provide sufficient jet power	Low mains voltage	Check the mains voltage	
	High material viscosity	Dilute the material (see Setting up Procedures)	
	Line or nozzle clogging	Clean the line or nozzle (see Recommended Practices)	
	Piston wedging	Clean the mechanism (see Periodic Maintenance) or contact your service center for replacement	
The Product stopped in the operation process	Lost mains voltage	Check the mains voltage	
	Piston sticking	Clean the mechanism (see Periodic Maintenance) or contact your service center for replacement	
	Electromagnet winding break	Contact a service center for repair or replacement	
The result of spraying is unsatisfactory	High material viscosity, clots, foreign inclusions	Dilute the material (see Setting up Procedures). Mix thoroughly	
	Insufficient / excess material consumption	Adjust the flow (see Setting up Procedures)	
	Excessive / insufficient Product moving speed	Determine the optimal speed (see Setting up Procedures)	
	Line or nozzle clogging	Clean the line or nozzle (see Recommended Practices)	
	Piston wedging	Clean the mechanism (see Periodic Maintenance) or contact your service center for replacement	

#### **Electric Spray Gun**

#### **Dear customer!**

When buying the product:

 please demand checking its serviceability by a test run, as well as completeness according to the delivery contents.

please make sure that the warranty card is duly issued and contains the serial number of the product, the date of sale, the stamp of the store and the signature of the seller.

Before running the tool for the first time, please carefully read this manual and strictly follow the requirements contained therein. This is the only way for you to learn how to properly handle the product and avoid mistakes and dangerous situations. Please keep this manual for the lifetime of your tool.

Remember! The product is a source of increased traumatic risk.

## Purpose and scope

Electric Spray Gun is designed for applying paints and varnishes of appropriate viscosity on various surfaces.

Please study the present Manual closely, including the Appendix Basic Safety Instructions. This is the only way you can learn how to properly handle the tool and avoid mistakes and dangerous situations. The product is intended for use in areas with a temperate climate with a characteristic temperature of  $+ 5 \degree C$  to  $+ 40 \degree C$ , relative air humidity no more than 80%, with no direct exposure to precipitation or excessive air dustiness.

The Product meets the following requirements:

- TP TC 010/ 2011 On the Safety of
  - Machinery and Equipment.

This Manual contains the most complete information and requirements necessary and sufficient for reliable, effective and safe operation of the Product.

In view of further works on improvement of the Product, the manufacturer reserves the right to make minor changes in its design not shown in this Manual, as they do not affect the effective and safe operation of the Product

#### **ATTENTION**

The outgoing high-pressure jet is a source of increased danger. DO NOT DIRECT it to body parts, other people, animals, plants, fragile or unstable objects, electrical sockets and appliances.

The product is intended for spraying of combustible paintwork materials (except for liquids with a flash point less than 35 ° C).

DO NOT use flammable liquids and do not work in rooms with extra-high temperature, near hot objects or sources of open fire.

DO NOT SMOKE during preparing the material, filling the container and operation.

While operating the device, ALWAYS use protective equipment (goggles, respirator, gloves, respirator, apron).

Application of the Product on industrial-scale basis, in high-intensity and high-load operation conditions reduces the service life of the Product.

### Specifications

Parameter	KPE-100	ZKPE-120
Rated supply voltage, V	220	220
Frequency Hz	50	50
Rated power consumption, W	100	120
Maximum productivity, ml / min	300	300
Maximum viscosity of consumable, DIN (s)	60	60
Container capacity, ml	800	800
Safety class according to GOST 12.2.007.0-75	Ш	Ш
Sound pressure level Lpa (k = 3), dB	90.7	91
Sound power level Lwa (k = 3), dB	101.9	102
Vibration level (k = 1.5), m / $s^2$	11.47	11,53
Weight, kg	1.3	1,8
Service life, years	1.7	5

Contents of delivery			
Spray Gun	1 pc		
Cleaning needle	1 pc		
Spare piston (complete with valve and nozzle)	1 pc.		
Viscosity measuring glass	1 pc		
Spanner	1 pc		
Lubricant	1 pc		
Safety instructions	1 сору		
Instruction Manual	1 сору		

### ATTENTION

Make sure that the Product and the accessory kit are free from damage that may have occurred during shipment.

	Table 1
Sprayed material	Recommended viscosity
Lamellar and latex paints	24–28 s
Varnish, linseed oil	20 –25 s
Oil paints	18–22 s
Enamel paint	18–22 s

### List of Recommended Protection Means

Protection means	Picture	Code	Name	Notes
Respirator		11127-H2	Respirator with 1 replaceable filter	A1 filter (from organic gases and vapors)
		11129-H3	Respirator with 2 replaceable filters	A1 filter (from organic gases and vapors)
		11162	Anti-aerosol respirator , conic shape, with a valve	FFP2 protection class (protection against fine aerosols)
		110235	Closed type goggles	Acetate chemical resistant lens. Protection classes 3, 4, 5(see on the product)
Coggles		110237		Polycarbonate lens. Protection classes 3, 4, 5(see on the product)
Goggles		110242		PVC lens. Protection classes 3, 4, 5(see on the product)
		110244		Polycarbonate lens. Protection class 3, 4, 5 (see on the product)
Gloves	MM	11250-xx	deter	Protection against detergents, alcohol-
	MM	11260-xx	Latex coated gloves	containing liquids, oils and fats

#### Operation Manual

**DO NOT USE** the product for spraying other liquids (detergents, technical liquids, flammable compounds, aggressive solutions, etc.), including flammable materials with an ignition temperature less than 35  $^{\circ}$  C, as well as liquids whose properties are unknown to you.

**DO NOT LEAVE** flammable materials unclosed after use (dilution, refueling, at the end of the work) - this may cause self-ignition.

**DO NOT OPERATE** in rooms with high temperature, near hot objects and sources of open fire.

**DO NOT SMOKE** during preparing their materials, filling the container and operation.

**ALWAYS** use the protection equipment specified at page 9. The materials sprayed by the Product form a cloud around the operator and can cause damage to open parts of the body and respiratory organs.

Ensure your safety when spraying pure solvent (it can be combustible, corrosive to open body parts or its vapors are not safe for breathing).

When storing, diluting and applying the material used, please strictly follow the recommendations of the manufacturer.

## Operation Instructions

#### Configuration

- 1 Paint container
- 2 Spray cap
- 3 Switch4 Paint flow control
- 5 Viscosity measurment glass
- 6 Nozzle
- 7 Grating
- 8 Valve
- 9 Drum
- 10 Spring
- 11 Piston

#### Подготовка к работе

Prepare the material to be sprayed (paint, varnish).

Before filling the supply container, check the viscosity of the material, as follows:

- mix the prepared material thoroughly
- fill up the glass 5 with the material

 note the time before the breakage of the jet (til the material flows out completely). The time obtained (in seconds) is the material viscosity;

Use Table 1 to determine the recommended viscosity of the material applied.

If necessary, dilute the material being sprayed (choose the diluent in accordance with the dilution instructions for this material): add a diluent in the volume of the material (the volume you have; the volume corresponding to the area to be covered; the volume of the container) in proportion of 10% of the material.

- mix the solution thoroughly;
- · check the viscosity once more.

In case of insufficient viscosity, repeat the above procedures to obtain the appropriate table data.

#### **ATTENTION**

Mix the materials thoroughly before use. In order to avoid unsatisfactory results and the possibility of damage to the Product, DO NOT USE materials containing extraneous inclusions, as well as unmixed bunches.

Prepare the surface / object to be painted:

clean it from dust, dirt and other substances
carefully cover surfaces and objects that are no subject to painting with protective material (for example, plastic wrap).

Provide adequate ventilation to the working space. Vapors of the sprayed materials may be dangerous to the respiratory systems and open body parts .

Remove all sources of heat and open flame from the work area.

Prepare and put on protective equipment (goggles, respirator, gloves, apron).

**Note!** The list of recommended protective equipment can be found on page 9.

Fill Container 1 with the prepared material.

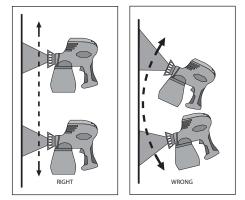
Test to paint on the waste surface.

During the test painting, please determine the required speed of moving the gun for uniform spray and the material consumption, to avoid uneven coating at high speed and insufficient consumption and material drips at low speed and excessive consumption. The material consumption is adjusted by turning the control 4.

#### **Operating procedure**

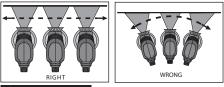
Place sprayer at the distance of 25 to 30cm from the surface to be painted. STRICTLY vertically.

Turn on the Product by pressing the switch 3.



**Note!** Adjustment of material consumption does not depend on the degree of pressure on the switch and is carried out only by the control **4**.

Start moving the product evenly along the painted surface, keeping the sprayer strictly perpendicular to it.



#### ATTENTION

In the process of operation DO NOT DECLINE and DO NOT INCLINE the Product from the vertical and perpendicular position.

At the end of the work, turn off the product by releasing the switch button **3**. Disconnect the product from the mains.

### **ATTENTION**

Always rinse the Product DIRECTLY AFTER EACH use. Failure to comply with this requirement can result in blockage of the channels and nozzle, as well as jamming of the stem.

Remove container **1** and drain the unused material into a suitable vessel. Thoroughly wash the container with the same solvent you had used to dilute the material applied.

Pour the same solvent into container **1** and put the product into operation until the discharge jet is completely cleaned from the material being sprayed.

### **ATTENTION**

Do not direct the Product to a painted surface or to easily damaged materials. Ensure your safety when spraying clean solvent (it can be combustible, corrosive for exposed parts of the body or its vapors are not safe for breathing).

Remove the tank 1, the suction tube and carefully rinse the tube and filter with the same solvent. Turn the product upside down and drip 2 or 3 drops of the lubricant supplied (or ZMPM oil) into the inlet opening of the tube to the mechanism.

# Periodic Maintenance

In case if more thorough cleaning of the Product is needed, disassemble it as follows:

#### **Operation Manual**

remove Container 1 and the delivery tube according to the Operating Procedures;
use the span to unscrew the nozzle 6 from the drum;

remove the spray valve 8 from the drum;
unscrew grating 7 of the nozzle from the flange;
remove drum 9 and piston 11 from the flange;
remove the flange from the spray gun.

Rinse all parts thoroughly with the solvent and allow to dry. Lubricate the moving parts (valve, piston, cylinder) with the lubricant supplied.

Reassemble the product in the reverse order.

**Note!** Do not use the Product without the grating **7** installed.

## Recommended Practices

Before starting work, examine and visually inspect the Product, cable and nozzle for visible mechanical damage.

Make sure your mains voltage matches the rated voltage of the Product.

Only turn on the Product when you are ready to operate it.

Before first use or after a long break, turn on the Product without filling in the material and let it work for 5 to 10 seconds. If you hear extraneous noise in the process, or feel increased vibration or the smell of burning, please turn off the Product, unplug the power cord from the mains and determine the cause of this phenomenon. Do not turn on the product before the cause of the fault is found and corrected.

**ALWAYS** use the protection equipment specified at page 9. The materials sprayed by the Product form a cloud around the operator and can cause damage to open parts of the body and respiratory organs.

Please strictly follow the recommendations of the manufacturer when storing, diluting and applying the material used.

#### **Electric Spray Gun**

In order to avoid damage to the product or the workpiece being processed, each time before connecting the Product in the network, check the off position of the switch **3**.

For operation, we recommend using appropriate replacement nozzles.

Please follow these guidelines when operating the Product:

• try to maintain a constant moving speed, do not linger long on one place of the painted surface;

• move the Product along the

surface being painted in a continuous zigzag line:

for a uniform coating do not overlap much between adjacent lines:

• wherever possible, do not interrupt

or start work from the middle of the surface. Bring the started line to the end:

• in order to avoid sags, take a break between repainting a surface (especially a vertical one), sufficient for drying the previous layer.

Regularly check the condition of the power cable. See to it that the insulation is not damaged, no excessive dirtiness, no excessive pulling or bending loads.

### ATTENTION

Damaged cable must be replaced immediately at a service center.

Unplug the product immediately on finishing the operation.

Turn off the product only with the switch **3**. Do not stop it, by simply disconnecting the cable from the mains (by removing the plug from the outlet).

After each use, **PLEASE RINSE** the product according to the Operating Procedure.

Periodically clean dirt and dust from the case and cable, and ventilation openings.

All maintenance work must be carried out with the cable disconnected from the network.

The product does not require other special service.

All repair work should be carried out only by specialists of service centers.

Keep the Product in good condition. In the event of suspicious odors, smoke, fire, sparks, turn off the device, disconnect it from the power supply and contact a specialized service center.

If something seems to you abnormal in the operation of the Product, immediately stop the operation.

Due to the technical complexity of the product, the criteria for limit states cannot be determined by the users on their own. In case of obvious or suspected malfunction, refer to the section "Possible faults and elimination methods". If you do not find the fault in the list or cannot eliminate it, contact a specialized service center. The service center issues a conclusion on the limiting condition of the Product or its parts in the form of the relevant Act.

# Safety Instructions

The outcoming jet is a source of potential danger.

To avoid accidents:

- do not direct the stream at people, animals or at your own body;
- do not direct the jet to electrical outlets, cables, any electrical and electronic devices;
- do not direct the jet at plants, fragile or unstable objects, loose materials (sand, crushed stone, gravel) or easily damaged surfaces;
- do not put your hands under the nozzle in order to check the presence or pressure of the jet;
- do not use damaged nozzles that allow material to leak;
- do not perform any maintenance operations on the Product or replace the failed parts without disconnecting it from the mains.

This product is intended to work only with the above materials.