



KRAFTOOL HONG KONG LIMITED

Electric Spray Gun

KPE-350

KPE-500

www.kraftool.hk



180385
Version: 111018

Instruction manual



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 product 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 types of 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 ° C to + 40 ° 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 21 ° 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-350	KPE-500
Rated supply voltage, V	220	220
Frequency Hz	50	50
Rated power consumption, W	350	500
Maximum productivity, ml / min	700	800
Maximum viscosity of consumable, DIN (s)	60	100
Container capacity, ml	800	800
Adjustable spray pattern	yes	yes
Sound pressure level L _{pa} (k = 3), dB	–	–
Sound power level L _{wa} (k = 3), dB	–	–
Vibration level (k = 1.5), m / s ²	–	–
Safety class according to GOST 12.2.007.0-75	II	II
Weight, kg	1.3	1.5
Service life, years	5	5

Contents of delivery

Spray gun	1 pc	1 pc
Viscosity measuring glass	1 pc	1 pc
Safety instructions	1 copy	1 copy
Instruction Manual	1 copy	1 copy

⚠ ATTENTION

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

Viscosity table

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

Operation Instructions

Configuration

- 1 Paint flow control
- 2 Switch trigger
- 3 Sprayer release button
- 4 Paint container
- 5 Nozzle nut
- 6 Spray nozzle
- 7 Spray guide
- 8 Viscosity measuring glass

The HVLP system (large volume, low pressure) is the most modern, cost-effective and environmentally friendly spray coating system. Unlike high-pressure spraying systems, it provides material spraying with more volume, not pressure, of air (at lower pressure). This contributes to:

- ▶ increase in productivity;
- ▶ material savings due to a higher percentage of paint transfer to the painted surface;
- ▶ low fogging losses and a tight fit of paint to the surface;
- ▶ the capability of painting the surface of any configuration from any material;
- ▶ drying of the applied material by air falling along the wall.

A compressor is built into the product to create a large volume of air. The air generated by it is injected into the tank and squeezes paintwork through the nozzle.

Preparation to work

Prepare spray material (paint, varnish). Before filling the container 4 check the viscosity of the material, for what:

- ▶ mix the prepared spray material thoroughly;
- ▶ completely fill the glass 8 with prepared spray material;
- ▶ note the time before the breakage of the jet (full flow of material). The resulting time (in seconds) is the viscosity of the material;
- ▶ Using the viscosity table, determine the recommended viscosity of the material used.

If necessary, dilute the material to be sprayed (the diluent is in accordance with the dilution instructions for this material):

- ▶ add a diluent to the material in a ratio of 10% of the volume of the material;
- ▶ stir the solution thoroughly;
- ▶ check the viscosity again.

In case of insufficient viscosity, repeat the above operations to match the table.

⚠ 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 not subject to painting with protective material (for example, plastic wrap).

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

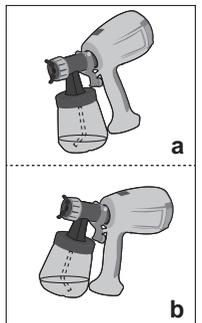
Remove all sources of heat and open flame from the work area.

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

Note! The list of recommended protective equipment can be found on page 11.

Fill the container 4 with a prepared material.

- ▶ remove the container 4 from the spray gun; fill the container 4 with spray material;
- ▶ install the suction tube depending on the treating surface: turn the tube forward for horizontal surface (fig. a), turn the tube back for vertical surface (fig. b).
- ▶ install the container 4 back on the spray gun.



Perform a test •] |æã* on any surface.

Depending on the type of moving (up-down or right-left) c) |} A@ guide 7:

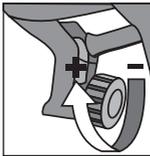
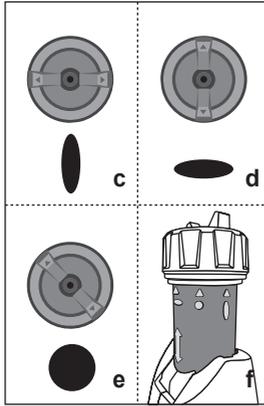
► |æã* A@ and |-c(-ã. c);

► vertically - to form a horizontal torch for spraying up and down (fig. d)

► at an angle of 45 degrees - to form a circular torch for painting of corners, edges and hard-to-reach surfaces (fig. e).

When testing color determine the correct speed and distribution of the material, in order to avoid, at high

speed and insufficient consumption, uneven coating; and at low speed and excessive consumption - material leaks. Adjusting the flow of material is carried out by rotating the controller 1.



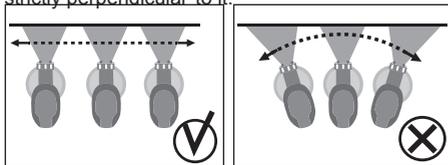
Operating procedure

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

Turn on the Product by pressing the switch 2.

Note! Adjustment of material consumption does not depend on the degree of pressure on the switch and is carried out only by the controller 1.

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 perpendicular position.

At the end of the work, turn off the product by releasing the switch button 2. Disconnect the product from the mains.

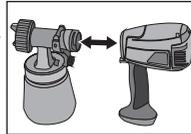
During breaks in operation for up to 4 hours, it is not necessary to rinse the product (except for the case when 2-component varnish was sprayed - in this case the product should be rinsed **IMMEDIATELY**).

⚠ 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.

To clean the product:

- 1) allow the liquid to drain back into the container, for which briefly detach the container or press the switch trigger;
- 2) press button 3 and separate the parts of the product by pulling.
- 3) remove container 4 and drain unused liquid into a suitable container;
- 4) pre-clean container 4 and suction tube from the remnants of liquid with a brush or clean dry cloth.
- 5) Pour water or the same solvent that you used to dilute the material used into container 4, install the container back to the product, assemble the product and put it into operation until the output jet is cleaned of the material being sprayed;



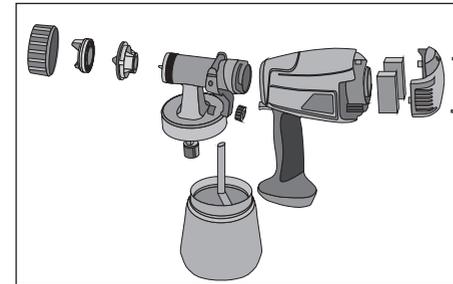
⚠ ATTENTION

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 may cause injury if inhaled).

- 6) turn off the product and unplug it;
- 7) remove container 4 and suction tube with sealing gasket;
- 8) disassemble the product and thoroughly clean all external surfaces with a damp cloth;
- 9) unscrew the nut 5, remove parts 6 and 7 and thoroughly clean them with a brush or rinse with a solvent. Dry them completely;

⚠ ATTENTION

Do not clean any parts of the product (gaskets, nozzles, membranes, etc.) with metal objects. All elements are resistant only to solvents in small quantities. DO NOT clean these parts by a LONG IMMERSION in solvent.



10) Remove the back cover and the air filters under it. Clean them with compressed air or rinse with water. Allow them to dry before installing back.

Assemble the product in a reverse order.

Note! When installing the nozzle 6 back, ensure that the protrusion in the landing slot and the counter groove in the housing matches.

Recommended Practices

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

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

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 11. 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.

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 2.

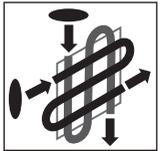
For operation, we recommend using appropriate replacement nozzles.

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

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;

► lead the product along the surface to be painted with a continuous zigzag line in the direction corresponding to the installed torch: horizontally - with a vertical torch; vertically - when horizontal;



► for uniformity of coverage, do a small overlap between adjacent lines;

► If possible, do not interrupt or start from the middle of the surface. Finish the started line to the end;

► In order to avoid sagging, take a break between repainting the surface (especially vertical), sufficient for the previous layer to dry.

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 another 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 outgoing 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 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 on the product or replace the failed parts without disconnecting it from the mains.

This product is intended to work only with the materials mentioned above in the 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 ° 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 an open fire.

DO NOT SMOKE during preparing the 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).

Warranty

We constantly care about improving the quality of service to our customers, therefore, if you have any complaints about the quality and the period of warranty repair, please, let us know in the ZUBR support service by e-mail to cs@kraftool.hk.

We provide a warranty for the ZUBR tools under the following conditions:

- 1) The warranty is provided in accordance with the conditions listed below by free of charge troubleshooting the instrument during the prescribed warranty period, which is proved due to defects in material or workmanship.
- 2) The warranty period starts from the date of purchase of the instrument by the first owner.
- 3) The terms and conditions of the warranty depend on the series and article number of the instrument, we ask you to carefully read the warranty terms at the time of purchase.
- 4) Warranty does not cover:

a) Parts subject to working and other types of normal wear and tear, as well as an equipment malfunction caused by these types of wear, and the product, which has the full development of the resource, strong external or internal pollution.

b) Tool malfunctions caused by non-compliance with the Operating Instructions or occurring due to misuse of the tool, during use in environmental conditions beyond the specified operating instructions, inadequate working conditions, due to overloading or insufficient, inadequate maintenance or care. The unconditional signs of product overload include, among others, the appearance of colors of tinge, simultaneous failure of the rotor and stator, deformation or melting of parts and components of the product, darkening or charring of the electric motor wires under the action of high temperature.

c) When using the product in conditions of high intensity work and super heavy loads.

d) For preventive and maintenance works, for example: lubrication, flushing.

e) Tool malfunctions due to the use of accessories, associated and spare parts that are not original accessories/parts of the ZUBR.

f) Mechanical damage (cracks, chips, etc.) and damage caused by exposure to corrosive environments, high temperature and high humidity, the ingress of foreign objects into the ventilation opening tool and also damage caused by improper storage and corrosion of metal parts.

g) Accessories, wear parts and consumables that failed due to normal wear, such as drive belts, battery packs, barrels, guide rollers, protective covers, collets, cartridges, soles, saw chains, saw tires, sprockets, tires, carbon brushes, knives, sawing, abrasives, drills, trimmer line, etc.

h) The tool, the design of which has been amended or supplemented.

i) Insignificant deviation from the declared properties of the instrument, which does not affect its value and the possibility of its intended use.

j) For a tool that has been opened or revised during the warranty period outside of authorized service centers.

5) The elimination of faults recognized by us as a warranty case is carried out at the choice of the ZUBR company by repairing or replacing the product with a new one (possibly with a next-generation model). Replaced product and its parts become the property of the company.

6) Warranty claims are accepted within the warranty period. To do this, submit or send the defective instrument to the service center, enclosing the completed warranty certificate confirming the date of purchase of the goods and its name. A product transferred to a dealer or service center in a partially or fully disassembled form is not covered by the warranty. All risks of transferring and shipping the product to the dealer or service center are borne by the product owner.

7) Other claims, other than the said right to a free repair of the defects of the instrument, are not covered by the warranty.

8) All power tools require regular maintenance. The maintenance interval is equal to the service life of the carbon brush set.

9) The service life of the product is 5 years.

The warranty period is 6 months from the date of sale.

POSSIBLE FAULTS AND ELIMINATION METHODS

Fault	Possible cause	Trouble shooting
The product does not switch on	No mains voltage	Check the mains voltage
	Full wear of brushes	Contact a service center for replacement
	Defective switch	Contact a service center for repair or replacement
	Defective engine	Contact a service center for repair or replacement
The 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)
	Brush wear	Contact a service center for replacement
The product stopped in operation process	Lost mains voltage	Check the mains voltage
	Full wear of brushes	Contact a 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)
	Insufficient performance	See "Product does not provide sufficient performance (material consumption)"
	Leakage: ▶ container 4 is not installed tight; ▶ gasket is damaged; ▶ crack in the nozzle, suction socket, tank.	Eliminate the leakage by replacing the damaged part

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)
Goggles		110235	Closed type goggles	Acetate chemical resistant lens. Protection classes 3, 4, 5(see on the product)
		110237		Polycarbonate lens. Protection classes 3, 4, 5(see on the product)
		110242		PVC lens. Protection classes 3, 4, 5(see on the product)
		110244		Polycarbonate lens. Protection class 3, 4, 5 (see on the product)
		11270-xx		latex gloves
	11275-xx	working gloves coated with latex		