

www.tehtools.com

Electric Spray Gun

TSG4005

To Be Your Exclusive Helper







# **TECHNICAL SPECIFICATION**

Model	TSG4005
Rated voltage	220V 50Hz
Rated input power	400W
Max. viscosity	60din/s
Container capacity	800ml
Sound pressure level	76.13dB(A)
Sound power level	87.13dB(A)
Vibration emission	<2.5 m/s², K=1.5 m/s²

# **COMPONENTS AND ACCESSORIES**



#### Accessories included:

- 1 instruction manual
- 1 viscosity measuring cup
- 1 Ø2.6mm nozzle



### SAFETY INSTRUCTIONS

## WARNING A

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or other serious injury. The term "power tools" in all of the warnings listed below refers to mains-operated (corded) power tool or battery operated (cordless) power tool.

#### WORK AREA

- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable
- liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

#### **ELECTRICAL SAFETY**

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock,
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tools. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increases the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.



#### PERSONAL SAFETY

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, nonskid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce the risk of personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in the power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.

#### POWER TOOL USE AND CARE

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.



- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.

#### POWER TOOL USE AND CARE

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts, breakage or parts and any other condition that may affect the power tools operations. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.



#### **SERVICE**

- a) Tool service must performed only by qualified personnel. Service or maintenance performed by unqualified personnel could result in risk of injury.
- b) When servicing a tool, use only identical replacement parts. This will ensure that the safety of the power tool is maintained.

#### ADDITIONAL SAFETY INSTRUCTIONS FOR SPRAY GUN

- a) You may only spray coating materials such as paints, varnishes, glazes, etc. with a flashpoint of 21 °C (32 °C in UK) and higher without additional warning. (German classification of coating material is hazard classes A II and A III, see material tin.)
- b) The device may not be used in workplaces covered by the explosion-protection regulations.
- c) There must be no sources of ignition such as, for example, open fires, smoke of lit cigarettes, cigars and tobacco pipes, sparks, glowing wires, hot surfaces, etc. in the vicinity during spraying.
- d) Do not spray any substances whose hazard potential is not known.
- e) Before working on the spray gun remove the power plug from the socket.
- f) Do not use the spray guns to spray flammable substances.
- g) The spray guns are not to be cleaned with flammable solvents which have a flashpoint under 21  $^{\circ}$  C.
- h) Caution against dangers that can arise from the sprayed substance and observe the text and information on the containers or the specifications given by the substance manufacturer.

Recommendation: Wear a breathing mask and safety glasses when spraying.

#### CAUTION - DANGER OF INJURY!

## WARNING A

Never point the spray gun at yourself, at other people or at animals.



- When working with the tool indoors as well as outdoors ensure that no solvent vapors are sucked in by the spray gun.
- When working outdoors, be aware of the wind direction. Wind can carry the coating substance across greater distances - thus causing damage. When working indoors, provide for adequate ventilation.
- Do not let children handle the device.
- · Never open the device yourself in order to carry out repairs in the electrical system!
- · Do not lay the spray gun.

#### RESIDUAL RISKS

### WARNING A

Even when the power tool is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the power tool's construction and design:

- 1.Damage to lungs if an effective dust mask is not worn.
- 2.Damage to hearing if effective hearing protection is not worn.
- 3.Damages to health resulting from vibration emission if the power tool is being used over longer period of time or not adequately managed and properly maintained.

### WARNING A

This power tool produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before operating this machine.



## **IMPORTANT NOTE**

#### SYMBOLS.

Read the manual

Warning

Wearing protection

Double insulation

🗓 WEEE marking

#### NOTE

1. Coating Materials Suitable for Use

Water and solvent-based paints, finishes, primers, 2-component paints, clear finishes, automotive finishes, staining sealers and wood sealer-preservatives.

2. Coating Materials Not Suitable for Use

Wall paints (emulsion paints) etc., alkali and acidic paints. Coating materials with a flash point below 21  $^{\circ}$  C.

Boss on the tip

## **OPERATION INSTRUCTIONS**

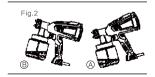
#### PREPARATION OF THE COATING MATERIAL

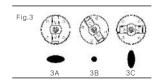
The enclosed spray attachment can be used to spray paints, varnishes and glazes that are undiluted or slightly diluted.

1. Stir the material up and put the required amount into the paint container.

Thinning recommendation		
Sprayed material		
Glazes	undiluted	
Wood preservatives, mordants, oils, disinfection	undiluted	
agents, plant protective agents		
Paints containing solvents and water-soluble	dilute by 5 - 10%	
paints, primers, vehicle coating paints,		
hick-flm glazes		

2.If the convey capacity is too low, add 5 - 10% dilution step-by-step until the convey capacity fulfills your requirements.





#### START-UP

Before connecting to the mains supply, be sure that the supply voltage is identical with the value given on the rating plate.

- 1)Unscrew the container from the spray gun.
- 2) Aligning suction tube. (Fig. 2)
- 3)If the suction tube is positioned correctly, the container contents can be sprayed without almost any residue.
- 4) When working on lying objects: Turn the suction tube forwards. (Fig. 2A)
- 5) Spraying work when working on overhead objects: Turn the suction tube rearwards. (Fig. 2B)  $\,$
- 6)Set the container on a sheet of paper, pour in the prepared coating material and screw the container tightly onto the spray gun.
- 7)Put the machine down only on a level, clean surface. Otherwise the machine could tip over! 8)Adjust the spray setting on the spray gun.

Three different spray jet settings can be chosen on the spray gun, depending on the application and target object.

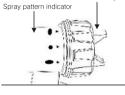
Selecting the Spray Setting

Fig. 3 A = horizontal fat iet

Fig. 3 B = vertical fat jet

Fig. 3 C = circular jet

The spray pattern indication can be found on the front part of the sprayer. With the arrowhead towards the boss on the tip.





## ADJUSTING THE DESIRED SPRAY SETTING (FIG. 4)

With the union nut (2) slightly unscrewed, turn the air cap (1) to the desired spray setting position. Then tighten the union nut.

### WARNING A

Danger of injury! Never pull the trigger guard while adjusting the air cap.

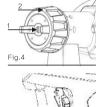
### ADJUSTING THE MATERIAL VOLUME (FIG. 5)

Set the material volume by turning the regulator on the trigger guard of the spray gun.

- turn to downside -- lower material volume
- + turn to upside --- higher material volume

### SPRAY TECHNIQUE

- The spray result depends heavily on the smoothness and cleanliness of the surface to be sprayed. Therefore the surface should be carefully prepared and kept free of dust.
- · Cover all surfaces not to be sprayed.
- · Cover screw threads or similar parts of the target object.
- · It is advisable to test the spray gun on cardboard or a similar surface to find the correct setting.









 $\ensuremath{\mathsf{IMPORTANT}}\xspace$  Begin spraying outside of the target area and avoid interruptions inside the target area.

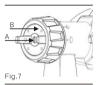


- 1) Correct (Fig. 6a). Be sure to hold the spray gun at an even distance of approx. 10 30 cm to the target object.
- 2) Incorrect (Fig. 6b) Heavy spray fog build-up, uneven surface quality.
- 3) Move the spray gun evenly cross-wise or up-and-down, depending on the spray pattern setting.
- 4) An even movement of the spray gun results in an even surface quality.
- 5) When coating material builds up on the nozzle (A) and air cap (B) (Fig. 7), clean both parts with a solvent or water.
- 6) Interruption of Work till 4 Hours.
- 7) Turn the machine off.
- 8) When processing 2-component varnishes, clean the device immediately.

#### TAKING OUT OF OPERATION AND CLEANING

Proper cleaning is the prerequisite for problem-free operation of the paint application device. No warranty claims are accepted in case of improper or no cleaning.

- 1) Unplug the power plug. Vent the container in case of longer breaks and after the work has been terminated. This can be done by briefly turning open and then closing the container or by pulling the trigger guard and letting the paint into the original paint container.
- 2) Divide the spray gun. Press the unlock button (Fig. 8) downwards.
- 3) Unscrew the container. Empty any remaining coating material back into the material tin.
- 4) Preclean the container and suction tube with a brush.
- 5) Pour solvent or water into the container. Screw the container back on. Use only solvents with a flashpoint over 21  $^\circ$  C .
- 6) Assemble the gun again.
- 7) Insert the power plug, turn on the machine and spray the solvent or water into a container or a cloth.





8) Repeat the above procedure until the solvent or water emerging from the nozzle is clear.

9) Turn off the machine and remove the plug.

### WARNING A

Never clean seals, diaphragm and nozzle or air holes of the spray gun with metal objects.

The ventilation hose and diaphragm are only solvent-resistant to a limited extent. Do not immerse in solvent, only wipe.

- 10) clean the outside of the spray gun and container with a cloth soaked in solvent or water.
- 11) Unscrew the union nut and remove the air cap and nozzle. Clean the air cap and nozzle with a brush and solvent or water.





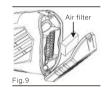
# MAINTENANCE AND TROUBLESHOOTING

#### MAINTENANCE

Change the air filter if it is soiled (Fig. 9).

## WARNING A

Never operate the machine without the air filter; dirt could be sucked in and interfere with the function of the machine.



#### TROUBLESHOOTING

Problem	Cause	Remedy
No coating material	Nozzle clogged	Clean
emerges from the nozzle	Feed tube clogged	Clean
	Material volume setting turned too	Turn to the right (+)
	far to the left (-)	
	Feed tube loose	Insert
	No pressure build-up in container	Tighten container
Coating material	Nozzle loose	Tighten
drips	Nozzle worn	Change
from the nozzle	Nozzle seal worn	Change
	Coating material assembly at air	Clean
	cap, nozzle or needle	



Problem	Cause	Remedy
Atomisation too coarse	Viscosity of coating material too	Thin
	high	
	Material volume too large	Turn material volume
	Material volume adjusting screw	adjusting
	turned	screw to the left (-)
	too far to the right (+)	Clean
	Nozzle contaminated	Change
	Air filter heavily soiled	Tighten container
	Too little pressure build-up in	
	container	
Spray jet pulsates	Coating material in container	Refill
	running out	Change
	Air filter heavily soiled	
Coating material causes	Too much coating material applied.	Turn material volume adjusting
"paint tears"		screw to the left (-)
Too much fog of	Distance to the object too large	Reduce distance Turn material
coating material	Too much coating material applied	volume adjusting screw to the
(Overspray)		left (-)
Paint in the ventilating	Diaphragm soiled	Clean the diaphragm
hose	Diaphragm defective	Replace the diaphragm



## WARRANTY CARD

Dear customers, the warranty service for purchasing TEH products is as follows:

Under normal use, the wear of the rotor steering gear is less than 0.2 mm within three months from the date of purchase. It is guaranteed that the damage is caused by the quality of the tool.

The following conditions occur during the warranty period, not covered by the warranty:

- a. Any valid legal document (single ticket) certifying the date of purchase
- b. Any damage caused by natural wear and overload
- c. Any damage caused by the use of low-priced inferior accessories
- d. Any damage caused by improper carrying, transportation or storage
- e. Any product that has been opened, repaired, replaced, or modified by itself
- f. Any damage caused by misuse, beyond the scope of use of the tool, and failure to use and maintain in accordance with the instructions

ladies/gentlemen:	employer:
contact number:	fax number:
contact address:	
warranty record:	
post code:	

#### IMPORTANT NOTE

- 1. The invoice and warranty card must be presented at the time of warranty.
- 2. The fuselage number on the invoice is the same as the fuselage number on the warranty card.
- 3. Once this warranty card is issued, if it is lost, it will not be reissued. Please keep it properly.

Note: The company reserves the right to amend the above provisions and has the final interpretation right in the case that the warranty service does not violate national laws.

16