

# H3000 SERIES

## INSTRUCTION MANUAL

ISO9001 CE SLG GS

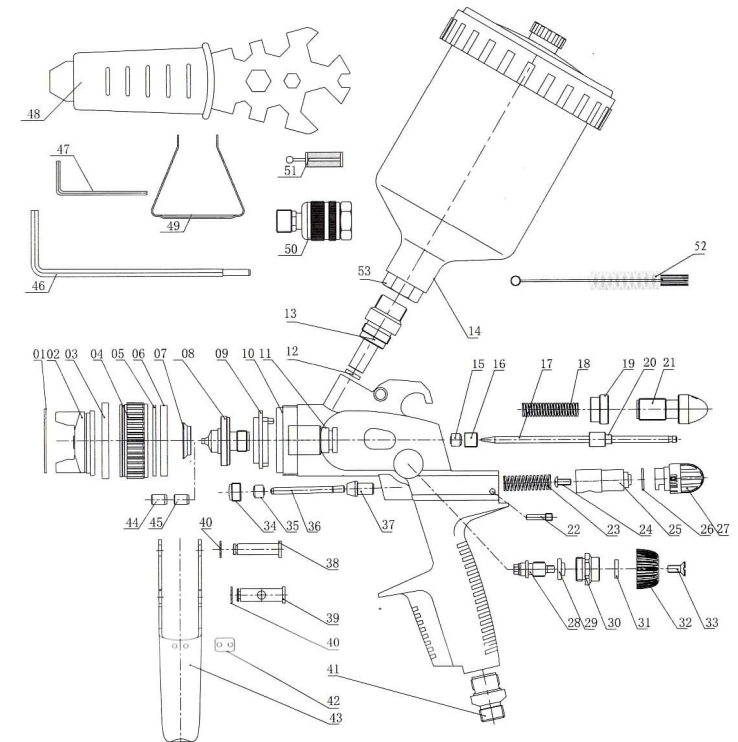
### 1. Preface

Prior to putting the paint spray gun to be operation read the operation instruction completely and thoroughly. The stipulations contained therein are to be respected in any case. After that, the operation instructions are to be stored in a safe place, accessible for every user of the equipment. The paint spray gun may only be put into operation by adequately trained operator. Inappropriate use of the paint spray gun, modification of any kind or combination with inappropriate other parts may cause material damage, serious hazard to the user's, other person's or animal's health or even death. Our company shall not take any responsibility for such damages. The applicable safety, workplace and worker health protection regulations of the respective country or area/district in which the paint spray gun is used are to be respected in any case.

### 2. Features and technical Data







H3000	H.V.L.P.	RP3000	L.V.M.P.
• Swivel joint		• Swivel joint	
• Standard nozzle: $\varnothing$ 1.6		• Standard nozzle: $\varnothing$ 1.6	
• Recommended gun inlet pressure: 2.0-3.0 bar(29-43 psi)		• Recommended gun inlet pressure: 2.5-4.0 bar(36-58 psi)	
• The best spray pressure: 2.5bar		• The best spray pressure: 3.5bar	
• Technical maximum gun inlet pressure: 10bars/145psi		• Technical maximum gun inlet pressure: 10bars/145psi	
• Spray distance: 13-18cm(5-7inch)		• Spray distance: 15-23cm(6-9inch)	
• Plastic cup: 600ml		• Plastic cup: 600ml	
• Air consumption: 5.2cfm at 36 psi		• Air consumption: 5.6cfm at 43 psi	
• Available in: $\varnothing$ 1.3- $\varnothing$ 1.4- $\varnothing$ 1.8- $\varnothing$ 2.0- $\varnothing$ 2.2- $\varnothing$ 2.5		• Available in: $\varnothing$ 1.3- $\varnothing$ 1.4- $\varnothing$ 1.8- $\varnothing$ 2.0- $\varnothing$ 2.2- $\varnothing$ 2.5	

### 3.H-3000 Parts list



1	Air cap ring gasket	19	Needle nut	38	Trigger pin
2	RP air cap	20	Needle seat	39	Trigger pin with hole
3	HVLP air cap	21	Needle adj. screw	40	Hatching circle
4	Air cap mark ring	22	Valve bolt	41	Air inlet
5	Air cap ring	23	Valve spring	42	Trigger washer
6	Air cap o-ring	24	Cross spiral bolt	43	Trigger
7	Air cap sealed washer	25	Valve switch	44	Master airflow bush
8	Nozzle retaining ring	26	O-ring	45	Vice airflow bush
9	Nozzle	27	Valve adjuster	46	Hex wrench
10	Atmolysis ring	28	Pattern adj. valve	47	Hex wrench
11	Gun body	29	Pattern valve	48	Spanner
12	Body brass insert	30	Pattern adj. seat	49	Atmolysis ring clamp
13	Fluid joint pad	31	Sealed washer	50	360° rotatable air connector
14	Fluid joint	32	Pattern adj. knob	51	Plastic filter
15	Cup	33	Cross bolt	52	Brush
16	Needle washer	34	Valve sealed screw	53	Cup insert
17	Needle orientation screw	35	Valve needle washer		
18	Needle spring	36	Valve needle		
		37	Valve		

## 4. Safety warnings

<p><b>⚠ FIRE OF EXPLOSION HAZARD</b></p> <p>1. Fluid and solvents can be highly flammable or combustible.</p> <ul style="list-style-type: none"> <li>– Use in well-ventilated spray booth.</li> <li>– Avoid any ignition sources such as smoking, open flames, electrical hazard, etc.</li> </ul> <p>2. NEVER use HALOGENATED HYDROCARBON SOLVENTS (1.1.1 TRICHLORINE, ETHYL CHLORIDE, etc).</p> <p>Which can chemically react with aluminium and zinc parts and cause an explosion. Be sure that all fluids and solvents used are chemically compatible with aluminium and zinc parts.</p> <p>3. To reduce the risk of static sparking, grounding continuity to the spray equipment and object being sprayed must be maintained.</p>		 
<p><b>⚠ MISUSE HAZARD</b></p> <p>1. NEVER point gun in the direction of human body.</p> <p>2. NEVER exceed the maximum safe working pressure of the equipment</p> <p>3. ALWAYS release air and fluid pressures before cleaning, disassembling or servicing.</p> <p>For emergency stop and prevention of unintended operation, a ball valve installation near the gun to stop air supply is recommended.</p>		
<p><b>⚠ HAZARD CREATED WHILE COATING MATERIALS ARE ATOMIZED AND SPRAYED</b></p> <p>1. Toxic vapours produced by spraying certain materials can create intoxication and serious damage to health.</p> <ul style="list-style-type: none"> <li>– Use the gun in well-ventilated areas.</li> <li>– Always wear protective eyewear, gloves, respirator, etc., to prevent the toxic vapour hazard, solvents and paint from coming into contact with your eyes or skin.</li> </ul> <p>2. Noise level mentioned in main specifications was measured at 1.0 m behind the tip of the gun, 1.6m height from floor.</p> <ul style="list-style-type: none"> <li>– Wear earplugs if required.</li> </ul>		  
<p><b>⚠ OTHER HAZARDS</b></p> <p>1. NEVER modify this product for any applications.</p> <p>2. NEVER enter working areas of robots, reciprocators, conveyors, etc., unless machines are switches off.</p> <p>3. NEVER spray foods or chemicals through the spray gun.</p> <p>4. If something goes wrong, immediately stop operation and find the cause. Never use till you have solved the problem.</p>		

## 5. Functional Description

H3000 series paint spray gun is designed for spraying paints and lacquers as well as other media (Nozzle size depends on spray viscosity).

Materials that are abrasive, acidic or contain benzene must not be used. The compressed air supply required for spraying is fed to the air connection screwed into the gun grip. Squeezing the trigger as far as the first pressure point opens the air valve (pre-air control). When the trigger is squeezed further, the paint needle is pulled out of the paint nozzle. The spraying medium then flows unpressurized out of the paint nozzle due to gravity and is simultaneously atomized by the compressed air that flows through the air nozzle. The cup lid is equipped with a drip stop that prevents the material from escaping from the vent hole.

## 6. Operation

### 6.1 Clean air and correct inlet pressure

Make sure feed spray guns with clean and dry air that filtered carefully. Air hose applies to dia.  $\geq 9$  mm to ensure plentiful air flow. It is better to fix an air regulator at the air inlet to get an exact and optional inlet pressure value required for this series spray gun. The optimal working pressure for H.V.L.P spray gun is 2.5 bar, but for L.V.M.P spray gun is 3.5 bar which also is the pressure when you pull the trigger.

### 6.2 Air adjustment

For maximum air flow, fully open integrated Micrometer, i.e. put into vertical position.

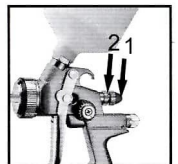
Pressure can be adjusted directly at the spray gun. By means of the variable adjustable air micrometer the spray gun internal pressure can be set.

Connect the spray gun to the air supply, pull the trigger and adjust the requested spray gun internal pressure.



### 6.3 Material flow control

in accordance with material viscosity and required flow rate (arrow 1) and fix by means of the counter nut (arrow 2). Under normal circumstances, the material flow control is fully open.

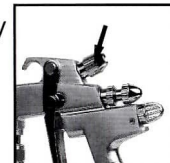


### 6.4 Round / flat spray control

for infinitely variable adaptation of the spray fan to the object:

Turn to the left - flat spray

Turn to the right - round spray



## 6.5 Correct spray and spray distance

Correct spray:

the gun should be held so that it is perpendicular to the surface of the work piece at all times. Then, the gun should move in a straight and horizontal line. Arcing the gun causes uneven painting.

Spray distance:

In order to avoid overspray and surface problems, we recommend a spray distance: H.V.L.P 5-7 inches on 29-43 psi; L.V.M.P 6-9 inches on 36-58 psi between air cap and object should be maintained in accordance with the chart below, depending on spray gun type and material.

## 6.6 Nozzle set

Complete, hand-checked nozzle-set, consisting of paint needle, paint nozzle and air cap. Mount the nozzle set tightly (use universal wrench for the paint nozzle). Insert paint nozzle before putting in paint needle. The air cap should be placed in a position in which the marking is on top. Use punched hexagon socket (wrench size 12) of universal wrench for paint nozzle. Only original parts guarantee highest quality and lifetime.



Fluid nozzle Orifice	Air cap set Mark	Fluid Needle Set Mark	Air cap set Mark	Fluid Needle Set Mark
∅ 1.3	H3000S/RP3000S 1.3	H3013S	H3000/RP3000 1.3	H3013
∅ 1.4	H3000S/RP3000S 1.4	H3014S	H3000/RP3000 1.4	H3014
∅ 1.6	H3000S/RP3000S 1.6	H3016S	H3000/RP3000 1.6	H3016
∅ 1.8	H3000S/RP3000S 1.8	H3018S	H3000/RP3000 1.8	H3018
∅ 2.0	H3000S/RP3000S 2.0	H3020S	H3000/RP3000 2.0	H3020
∅ 2.2	H3000S/RP3000S 2.2	H3022S	H3000/RP3000 2.2	H3022
∅ 2.5	H3000S/RP3000S 2.5	H3025S	H3000/RP3000 2.5	H3025

## 7. Cleaning and Maintenance

- Flush out the gun thoroughly with thinner or cleaning fluid.
- Clean the air nozzle with a paint brush or brush. Do not immerse the nozzle in thinner or cleaning fluid.
- Under no circumstances try to clean clogged drillings using an unsuitable tool, since the slightest amount of damage adversely affects the spray pattern. Use nozzle cleaning needles.

- Only remove the black air distribution ring in the gun head in case it is damaged (no sealing performance at the paint nozzle). In case of removal, always insert a new air distribution ring to ensure flawless function. Insert new air distribution ring in its correct position and tighten paint nozzle again.
- Clean paint passages fully before disassembly. Use ring spanner, box wrench or optional exclusive spanner to remove fluid nozzle.
- Remove fluid nozzle after removing fluid needle set or while keeping fluid needle pulled, in order to protect seat section.
- While keeping fluid needle set inserted, tighten fluid needle packing set by hand. Then tighten gradually by spanner. Adjust packing set while pulling trigger and watching movement of fluid needle set since too much tightening will show down movement of fluid needle and result in leakage from tip of nozzle. If tightened too much, turn counterclockwise to the sufficient position without stuck needle and fluid leakage.
- Slightly oil movable parts with grease.




## 8. Important Notice:

Gun may be cleaned with solvent or cleaning agents manually or in a conventional gun washing machine.

**The following actions damage the gun/system, may lead to the loss of the explosion-proofness approval and entirely annul any warranty claims:**

- Immersing the gun in solvent or cleaning agents, or for a period longer than required for the cleaning process as such
- Storing the gun inside the gun washing machine
- Cleaning the gun by means of ultrasound cleaning systems
- Opening of the display glass on the front
- Opening of the battery compartment without inserting an original battery, a new original sealing and a new original lid
- Cleaning of the display glass with pointed, sharp-edged or abrasive objects
- Exerting violent, inappropriate treatment

## 9. Possible failures in operation

	Trouble	Cause	Repair
1	Gun leaks from fluid tip	Foreign substances between fluid tip and needle prevent sealing	Clean fluid needle and fluid nozzle in thinner or use new set nozzle
2	Paint emerges from fluid needle-needle sealing	Self tensioning needle sealing damaged or lost	Replace needle sealing
3	Spray pattern in sickle shape 	Hom air holes or air circuit clogged.	Soak in thinner, afterwards clean with nozzle-cleaning needle
4	Drop-like or oval shaped pattern 	Dirt on fluid pin tip or air outlet	Turn air nozzle by 180 degrees, If defective pattern remains, clean fluid tip pin and air circuit
5	Paint spray flutters 	-Too little material in cup -Fluid nozzle not tight self-adjusting -Needle sealing damaged, nozzle set dirty or damaged	-Refill maerial -Tighten parts -If necessary clean or replace parts
6	Material bubbles or "boils" in paint cup	-Atomization air flows through the paint channel to the cup. The paint nozzle is not sufficiently tightened -Air nozzle is not completely screwed on, the air net clogged -Seat is defective or nozzle insert is damaged	-Tighten parts accordingly -Clean parts -Replace parts

## 10. Features and technical Data

### H3000S H.V.L.P.

- Swivel joint
- Standard nozzle:  $\varnothing$  1.6
- Recommended gun inlet pressure: 2.0-3.0 bar(29-43 psi)
- The best spray pressure: 2.5bar
- Technical maximum gun inlet pressure: 10bars/145psi
- Spray distance: 13-18cm(5-7inch)
- Aluminum cup: 1000ml
- Air consumption: 5 cfm at 36 psi
- Available in:  $\varnothing$ 1.3- $\varnothing$ 1.4-  $\varnothing$ 1.8- $\varnothing$ 2.0- $\varnothing$ 2.2- $\varnothing$ 2.5

### RP3000S L.V.M.P.

- Swivel joint
- Standard nozzle:  $\varnothing$  1.6
- Recommended gun inlet pressure: 2.5-4.0 bar(36-58 psi)
- The best spray pressure: 3.5bar
- Technical maximum gun inlet pressure: 10bars/145psi
- Spray distance: 15-23cm(6-9inch)
- Aluminum cup: 1000ml
- Air consumption: 5.5 cfm at 43 psi
- Available in:  $\varnothing$ 1.3- $\varnothing$ 1.4-  $\varnothing$ 1.8- $\varnothing$ 2.0- $\varnothing$ 2.2- $\varnothing$ 2.5

## 11. Parts list

1 Air cap ring gasket	23 Needle spring	45 Trigger
2 RP air cap	24 Needle nut	46 Paint inlet
3 HVLP air cap	25 Needle adj. screw	47 Hex-nut
4 Air cap mark ring	26 Needle seat	48 Cup connector
5 Air cap ring	27 O-ring	49 Pipe connector
6 Air cap o-ring	28 Needle bushing	50 Cover bridge
7 Air cap sealed washer	29 Valve sealed screw	51 Lock wrench
8 Nozzle	30 Valve needle washer	52 Cup cover
9 Atmolysis ring	31 Valve needle	53 Cover gasket
10 Gun body	32 Valve	54 Plastic gasket
11 Body brass insert	33 Valve bolt	55 Fluid pipe
12 Master airflow bush	34 Valve spring	56 Rivet
13 Vice airflow bush	35 Cross spiral bolt	57 Rivet sheath
14 Plug	36 Valve switch	58 Cup
15 Pattern adj. valve	37 O-ring	59 Fluid filter
16 Sealed washer	38 Valve adjuster	60 Cup seat
17 Pattern adj. seat	39 Air inlet	61 Hex wrench
18 Pattern adj. knob	40 Trigger pin	62 Hex wrench
19 Cross bolt	41 Saddle-backed, flexible gasket	63 Spanner
20 Needle washer	42 Trigger pin with hole	64 Atmolysis ring clamp
21 Needle orientation screw	43 Hatching circle	65 360° rotatable air connector
22 Needle	44 Trigger washer	66 Brush

