

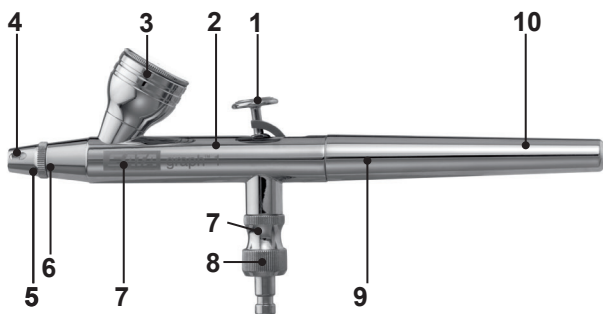
SATAgaph™ 1



Betriebsanleitung – Operating instructions
Instrucciones de servicio – Návod na obsluhu



CE





Preface

Prior to putting the unit/paint spray gun into operation, read the operating instructions completely and thoroughly. The stipulations contained therein are to be respected in any case. After that, the operating instructions are to be stored in a safe place, accessible for every user of the equipment. The unit/paint spray gun may only be put into operation by persons familiar with its use. Inappropriate use of the unit/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. SATA shall not take any responsibility for such damages (e.g. failure to respect the stipulations laid out in the operating instructions). The applicable safety, workplace and worker health protection regulations of the respective country or area/district in which the system/the paint spray gun is used are to be respected in any case (e.g. the German Rules for the Prevention of Accidents BGR 500 (BGV D25) and BGV D24 issued by the Central Office of the Professional Trade Associations, etc.).

To be noted

Never point paint spray guns at yourself, at other persons or animals. Solvents and thinners can cause burns. Only the respective quantities of solvents and paints required for work progress may be present in the direct surroundings of the unit (after work, solvents and paints are to be returned to their assigned storage rooms). Prior to any repair work the unit must be disconnected from the air supply. **Prior to putting the unit into operation, especially after each cleaning and each repair work, check all screws and nuts for tight fit, as well as the sealing performance of the spray guns and hoses.** Defective components must be replaced or repaired accordingly. To obtain best possible coating results, and for maximum safety, only use original spare parts. No sources of ignition (e.g. open flames, burning cigarettes, lamps without ex-protection etc.) may be present during painting, as easily flammable mixture are generated during the painting process. Occupational safety regulations must be applied when painting (respiratory protection, etc.). No vibration is transmitted to the upper parts of the operator's body during use of the paint spray gun. Recoil forces are negligible. **The use of this product in explosion hazard areas Zone 0 is prohibited.**

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1. Features and technical data

1.1. Gravity flow cup version

- Gun with nozzle 0.25
- 2.5 ml gravity flow cup with lid
- Replacement "O" ring for paint nozzle
- Weight: approx. 94 g
- Operating pressure between 1.0 and 3.0 bars (14 to 43 psi)
- Recommended un inlet pressure 2.5 bars (35 psi)
- Max. gun inlet pressure 4 bars (58 psi)



1.2. Siphon cup version

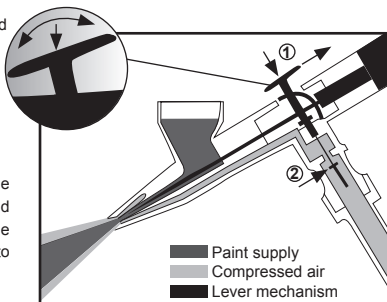
- Gun with nozzle 0.25 (0,45)
- 5 ml siphon cup with lid
- Weight: approx. 100 g
- Operating pressure between 1.0 and 3.0 bars (14 to 43 psi)
- Recommended un inlet pressure 2.5 bars (35 psi)
- Max. gun inlet pressure 4 bars (58 psi)

2. Functional Description

The SATAglyph 1 is a „Double Action“ airbrush paint spray gun allowing to control and to dose compressed air supply and material flow independently from each other. By pushing the trigger (1) the compressed air is released, and the compressed air volume is regulated. When pulling back the trigger (1), the needle is pulled out of the paint nozzle, and material flow is released. Dosage is effected by means of the trigger movement, depending on the paint needle (6) pre-setting - see chapter 4.5. Different effects may be achieved in great variations by modifying the air and paint flow.

- ① The trigger is pushed and pulled towards the back at the same time. Thus, the needle is pushed towards the back, releasing the nozzle opening for the paint flow.

- ② By pushing down the trigger, the air valve is opened. Compressed air streams through the nozzle and drags the paint along due to the vacuum thus created.



Please note: Always keep the trigger under pressure during the entire painting procedure.

Heed the rule: „Start with compressed air, finish with compressed air !“

3. Construction

- | | | | |
|---|----------------------------|----|---|
| 1 | Trigger | 6 | Paint needle (not visible) |
| 2 | Gun body | 7 | Air piston unit (not visible) |
| 3 | Gravity flow cup | 8 | Air connection |
| 4 | Air cap | 9 | Paint needle quick tightening (not visible) |
| 5 | Paint nozzle (not visible) | 10 | End piece |



4. Putting into Operation

Before putting into operation, and especially after each cleaning and any repair work, check to see that all screws and nuts are tight. The paint spray gun has been treated with an anticorrosive agent before leaving the factory and must therefore be flushed out thoroughly with thinner before. For servicing/repair work of any kind, the system must be devoid of pressure, i.e. disconnected from the air supply. Failure to respect this safety warning may result in damage and injuries, even death at worst. SATA does not take any responsibility for possible results of such failure.

4.1 Air pressure

The operating pressure is approx. 1 - 3 bars. The higher the gun inlet pressure, the better the atomization and the more difficult the handling. When the pressure is too low, no optimum paint atomization is achieved, depending on the paint material. If the compressor allows adjustment of the output pressure, different pressures may be tried until the desired results are achieved.

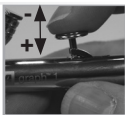
4.2 Paint material

When using solvent-based paints and lacquers it must be ensured to thin them down until they reach the consistency of milk. Otherwise the paints and lacquers are too thick to be „brushed“, and it is not possible to achieve a fine atomization with sufficient material flow. Waterborne paints and lacquers, too, must be thinned sufficiently.

Modern airbrush colors and lacquers are offered ready for spraying. Please respect the material manufacturers' stipulations.

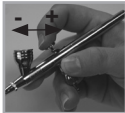
4.3 Correct adjustment of the gun inlet pressure

Adjust required operating pressure (1 - 3 bars) at the pressure regulation unit of the compressor, as far as available. This unit is integrated directly at the compressor air outlet, or into an air supply pipe. The pressure regulator can also be a compressed air filter unit with pressure regulator, e.g. „SATA 0/444“, connected in between. By pushing down the trigger (1) the compressed air volume can be adjusted.



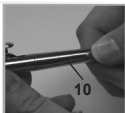
4.4 Material volume

By pulling the trigger (1), the material flow can be adjusted. **Adjusting the needle stroke defined by the user:** Unscrew end piece (10), loosen paint needle quick tension (9). Adjust trigger (1) bedstop according to requirements (hold in position), push paint needle under slight pressure towards the front into the paint nozzle (5) until bedstop and then fix paint needle by means of the paint needle tension (9). Connect end piece (10).



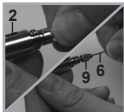
4.5 Nozzle set replacement (without tool)

The nozzle set consists of air cap (4), paint nozzle with „O“ ring (5) and paint needle (6). For dismantling the nozzle set the end piece (10) must be unscrewed completely from the gun body (2).





After loosening the paint needle quick tension (9) the paint needle (6) can be pulled backwards out of the gun body (2).



The paint nozzle (5) is removed from the gun body (2) after screwing off the air cap (4).

Please note:

The paint nozzle (6) is inserted only loosely into the air cap (5) - danger of damage by dropping.

Assembly in the opposite sense:

After tightening the air cap (4) and the paint needle (6) is carefully pushed into the gun body (2) towards the paint nozzle (5) at the front until bedstop and fixed by tightening the paint needle quick tightening (10). Do neither cant the paint nozzle (6) nor damage paint needle tip.



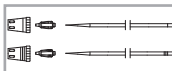
Attention:

Danger of hurting at the needle tip. **When foreign parts are integrated the quality level may decline and the SATA warranty expires.**

Nozzle sets:

134619 0,25 for SATAglyph 1 (1 groove on paint needle, paint nozzle/air cap)

134635 0,45 for SATAglyph 1 (3 grooves on paint needle, paint nozzle/air cap)



5. Cleaning and Maintenance

Never use force. Using improper tools such as pipe wrench, gas torch, etc. will void any warranty. In many cases proper repairs can only be carried out with the aid of special tools. In such cases, limit yourself to establishing the cause of the problem and leave the repairs to the service department. We refuse to accept liability for perfect functioning of the spray gun if it is disassembled by the customer.

- Clean airbrush paint spray gun during every color change.
- Flush paint spray gun with water, airbrush cleaner or corresponding solvent. With paints and lacquers having a high pigment content paint and lacquer remainders quickly deposit on the needle and around the needle cap.
- After finishing the work, thorough cleaning of the parts in contact with lacquer and paint is required.
- If possible, the integrated air piston unit (7) should not be dismantled. Occasionally grease lever mechanism and needle in the area of the lever mechanism with a thin layer of silicone-free gun grease (Order No. 48173).

Do not grease the needle tip and the area of air cap and paint nozzle!



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

6. Possible failures in operation

	Trouble	Cause	Repair
1.	Gun leaks	Foreign substances between fluid tip and needle prevent sealing	Remove and clean fluid needle and fluid nozzle or install new nozzle set. Correct paint needle adjustment.
2.	Spritzbild ist schlecht	Soiling and wear of parts	Clean paint nozzle, paint needle or air cap. Replace parts.
3.	Paint spray flutters	<ul style="list-style-type: none"> - Too little material in cup - Fluid nozzle not tight self-adjusting 	<ul style="list-style-type: none"> - Refill material - Tighten parts
4.	Material bubbles or „boils“ in paint cup	Leakage at the nozzle sealing	<ul style="list-style-type: none"> - Clean sealing surface at sealing and body - Tighten air cap a little more strongly - Replace parts

7. Spare parts (see spare part drawing at the end of this booklet)

Pos. No. Art. No. Description

■		Nozzle set SATAglyph 1
1	134809	Trigger
3	134767	Gravity flow cup 2.5 ml with lid
	134775	Gravity flow cup 5 ml with lid
9	32615	Pack with 3 coupling nipples and sealings
11	134825	End piece
	32987	PVC hose, cpl. 3 m
	134791	Tissue hose, cpl. 2.5 m
●	134841	Repair kit SATAglyph 1
*	138909	O-ring kit for paint nozzle (5 pieces)
**	142638	O-Ring kit for gravity flow cups (5 pcs.)



8. Guarantee conditions

During the period of twelve (12) months from the date of original purchase, SATA will repair or replace the product without charge for parts or labour subject to the following conditions. The warranty covers the value for production parts or defects in material during the warranty period. The warranty does not include damages caused by improper handling, normal wear and tear, mechanical damages, faulty assembly, improper maintenance, unusual spray materials substitute materials, chemicals such as alkaline solutions and acids, electro-chemical or electric influences, as far as this damage is not the result of any error committed by us. Abrasive spray material such as red lead and liquid grinding material etc. reduce the lifetime of valves, packings, guns and nozzles. Wear and tear damage caused by this are not covered in this warranty. Units should be inspected upon delivery by the consumer. Obvious damage must be reported within 14 days of receipt of the unit to the supplier to avoid loss of the right to claim notice of defects.

Additional claims such as compensation are excluded. This refers as well to damages caused during meetings, training sessions, or demonstrations. Should the consumer require immediate repair or replacement before a determination of whether the affected unit is covered by the warranty, the repair or the replacement will be made and charged at the current prices. If it is determined that the item is covered by the warranty, a credit will be issued for the repair or replacement. Replaced parts become the property of SATA or their distributor. Notice of defects or other claims do not entitle the consumer to delay or refuse payment. Returned merchandise to SATA must be sent prepaid. All service charges, freight and handling charges are to be paid by the consumer. The charges made will be in accordance with the currently existing pricing. Suretyships may not prolong the warranty period. This warranty terminates upon unauthorized inference.

Caution! When using solvents and cleaning agents based on halogenated hydrocarbons e.g. 1.1.1-trichlorethylene and methylene chloride, chemical reactions can occur on the aluminium cup, gun and galvanized components (small quantities of water added to 1.1.1-trichlorethylene produce hydrochloric acid). This can cause oxidation of the components; in extreme cases, the reaction can be explosive. Therefore, only use solvents and cleaning agents for your paint gun which do not contain the substances named above. You must never use acid, alkaline solutions/lye or stripping agents for cleaning.



9. EC Declaration of Conformity

Manufacturer:

SATA GmbH & Co. KG
Domertalstrasse 20
D-70806 Kornwestheim

We hereby declare that the product named in the following, on the basis of its conception, construction and type of construction in the model we have brought on the market, corresponds to the fundamental safety requirements of the 94/9/EC guideline, EC Directive 2014/34/EC including the changes applicable at the time of this declaration and can be used according to EC-Directive 94/9/EC, EC Directive 2014/34/EC in explosion hazard areas (ATEX), appendix X, B.

Product description:	spray gun
Type description:	SATAglyph 1
ATEX classification:	II 2G T4

Corresponding EU directive

- EC machinery directive 2006/42/EC
- EC Directive 94/9/EC Devices and protection systems for intended use in explosion hazard areas, valid until 19.04.2016
- EC Directive 2014/34/EC Devices and protection systems for intended use in explosion hazard areas, valid from 20.04.2016

Applied harmonised norms:

- DIN EN 1127-1:2011 „Explosion protection Part 1: Basics and methodology“
- DIN EN 13463-1:2009 „Non-electronic devices for the use in explosive areas - Part 1: Basics and Requirements“
- DIN EN ISO 12100:2011; „Machine safety, general requirements“
- DIN EN 1953:2013 „Spray application devices for coating materials - safety requirements“

Applied national norms:

- DIN 31000:2011 „General guidelines for the safety-compliant design of technical products“

The documents required according to guideline 2014/34/EC appendix VIII are filed for 10 years in the named location number 0123 with the document number 70023722.

70806 Kornwestheim, 18.01.2016

SATA GmbH & Co. KG

President