

**LEADING IN
PRODUCTION
EFFICIENCY**



EcoGun ACE

Manual Spray Cup Gun with exchangeable Plastic Nozzle

Operation manual

MSG00025EN, V05

N3627...

Information about the document

This document describes the correct handling of the product.

- Read the document prior to every activity.
- Prepare the document for the application.
- Pass on the product only together with the complete documentation.
- Always follow safety instructions, handling instructions and specifications of every kind.
- Illustrations can deviate from the technical construction.

Validity range of the document

This document describes the following product:

N3627...
EcoGun ACE



Hotline and Contact

If you have queries or would like technical information, please contact your dealer or sales partner.

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1 Product overview

1.1 Overview



Fig. 1: Overview

- 1 Air cap (conventional/CF or LVLP/LF)
- 2 Flat jet control
- 3 Plastic nozzle with cup connection
- 4 Air control
- 5 Locknut
- 6 Stop screw quick-clip technology ↪ 9.2.1 "Replace the needle."
- 7 Air connection
- 8 Trigger

1.2 Short description

The spray gun is intended for surface coating by means of compressed air. The spray gun is hand-held.

The following factors influence the spray jet and therefore the result:

- Alignment of the air cap
 - ↪ 6.5 "Alignment of the air cap"
- Material quantity
 - ↪ 5 "Commissioning"
- Air pressure
 - ↪ 5 "Commissioning"
- Spray width

↪ 5 "Commissioning"

The spray gun has an exchangeable plastic nozzle. The plastic nozzle and cup can be exchanged after a completed coating process.

2 Safety

2.1 Presentation of Notes

The following notes can appear in this instruction:



DANGER!

High risk situation that can lead to serious injuries or death.



WARNING!

Medium risk situation that can lead to serious injuries or death.



CAUTION!

Low risk situations that can lead to minor injuries.



NOTICE!

Situations that can lead to material damage.



ENVIRONMENT!

Situations that can lead to environmental damage.



Additional information and recommendations.

2.2 Intended Use

The spray gun **EcoGun ACE** is used exclusively for spraying flammable and non-flammable, liquid coating materials. The spray gun is hand guided and uses compressed air.

The spray gun may only be operated in EX zones 1 and 2 and within the approved technical data ☞ 11 "Technical data".

The spray gun is only intended for industrial use.

Misuse

There is a risk of death if not used properly.

Examples of wrong use are:

- Aiming the spray gun at humans or animals
- Atomization of fluid nitrogen
- Combination of the spray gun with components that are not approved by Dürr Systems for operation.
- Use of unapproved materials, see safety data sheets
- Making conversions or changes on your own
- Use of the spray guns not conforming to the device category in Ex zones.

Ex labeling

 II 2G T40 °C X

- | | |
|--------|--|
| II | - Device group II: all areas except mining |
| 2G | - Device category 2 for gas |
| T40 °C | - Surface temperature, max. 40°C |
| X | - Specific operating conditions for safe operation |

The following conditions must be observed for safe operation:

- Ground the spray gun.
Check shunting resistor upon installation:
 - Resistance $\leq 1M\Omega$
- Only use conductive hoses.
- Ensure that static electricity can be discharged.
- Use compressed air quick release couplings exclusively for non-flammable materials for which no static electricity has to be discharged.

2.3 Residual risks

Explosion

Sparks, open flames and hot surfaces can cause explosions in explosive atmospheres. Serious injury and death could be the consequence.

- Before carrying out any work, make sure that there is no explosive atmosphere.
- Do not use sources of ignition and open light.
- Do not smoke.
- Ground the spray gun.
- Ground the work piece.
- Only use conductive lines.

Flammable coating materials and their detergents and cleaning agents can cause a fire or an explosion.

- Ensure that the flashpoint of the cleaning agent is at least 15K above the ambient temperature or clean Spray gun at the cleaning areas with active technical ventilation, in painting booths, according to EN 16985.
- Note explosion group of the fluid.
- Follow the safety data sheet.
- Ensure that forced ventilation and fire protection equipment are in operation.
- Do not use sources of ignition and open light.
- Do not smoke.
- Ground the spray gun.

Danger from harmful or irritant substances

Serious injuries or death can result if you come into contact with dangerous fluids or steam.

- Spray gun Check regularly for leakage. Observe local regulations and maintenance schedule.
- Ensure that the forced ventilation is operational.
- Follow the relevant safety data sheets.
- Wear specified protective equipment.

Escaping material

Material escaping under pressure can cause serious injuries.

Before working on the product:

- Disconnect the system, in which the product is installed, from compressed air and material supply.
- Secure system personalized from being switched on again.
- Depressurize the lines.

Noise

The sound pressure level during operation may cause severe hearing damage.

- Wear ear protection.
- Do not spend more time than necessary in the work area.

Hot surfaces

During operation, the surfaces of components can get extremely hot. Contact with it can cause burns.

- Do not touch hot surfaces.
- Before carrying out any work:
 - Let components cool down.
 - Wear protective hand gloves.

2.4 Staff qualification



WARNING!

Inadequate qualification

Wrong estimation of dangers can cause serious injury or death.

- Only sufficiently qualified persons may execute all work.
- Some work requires additional qualification. Additional qualifications of specialized personnel are marked with a “+”.

This document is intended for qualified personnel in industry and craftsmanship.

The following describes the different qualifications required for the work in this document. The required qualification is presented prior to the individual tasks in the appropriate chapters.

Operator

The operator is trained specifically for the field of work in which he works.

Furthermore, the operator possesses the following knowledge:

- Technical Measures for occupational safety and health

Transport, scope of supply and storage

The operator is responsible for the following work:

- Operate and monitor the system/ product.
- Introduce measures in the event of faults.
- Clean system/ product.

+ additional qualification explosion protection

In addition to the knowledge of the various specialist fields, the mechanic has knowledge of regulations and safety measures when working in potentially explosive areas.

Dürr Systems offers special product training for ↪ "Hotline and Contact".

2.5 Personal protective equipment

When working in explosive areas, the protective clothing, including gloves, must meet the requirements of EN 1149-5. Footwear must meet the requirements of ISO 20344 and IEC 61340-4-3. The volume resistivity must not exceed 100MΩ.

Wear the specified personal protective equipment when working. Provide the following personal protective equipment:



Eye protection

Protects eyes from dust, paint drops and particles.



Face protection

Protect the face from dust, paint drops and particles flying around, such as chips and slivers.



Protective gloves

Protect the hands from:

- mechanical forces
- Thermal forces
- Chemical effects



Protective workwear

Tight fitting workwear with low tear strength, tight sleeves and no hanging parts.



Respiratory protection device

The respiratory protection device protects from hazardous gases, vapors, dust and similar materials and media. The version of the respiratory protection device must be suitable for the media used as well as their usage.



Safety boots

Protect feet from crushing, falling items and slipping.



Use ear protection

Protects from auditory damage due to noise.

3 Transport, scope of supply and storage

3.1 Scope of delivery

The scope of supply includes the following components:

- Spray gun
 - without plastic nozzle
 - without one-way cup

Inspect delivery on receipt for completeness and integrity.

Report defects immediately ↪ "Hotline and Contact".

3.2 Handling of packaging material



ENVIRONMENT!

Incorrect disposal

Incorrectly disposed packaging material can damage environment.

- Dispose of material no longer required in an environment-friendly manner.
- Observe local disposal specifications.

3.3 Storage

Storage provisions:

- Do not store outdoors.
- Spray gun only store when in a clean and dry condition.
- Store in a dust-free place.
- Do not expose to aggressive media.
- Protect from solar radiation.
- Avoid mechanical vibrations.
- Temperature: 10°C to 40°C
- Relative humidity: 35% to 90%

4 Assembly

4.1 Requirements for the Installation point

- The compressed air supply to the spray gun must be interrupted and secured against reconnection.
- The compressed air supply must be adjustable.
- Lines, seals and screw connections must be designed to conform to the requirements of the spray gun ↪ 11 "Technical data".
- The workplace must have a mechanical ventilation.

Working environment and grounding

The flooring of the working area must be anti-static acc. to EN 50050-1, measurement after EN 1081. The antistatic flooring prevents electrostatic charges from building up. Dangerous flashovers are prevented.

4.2 Assembly

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Protective workwear

- Protective gloves


1.  **WARNING!**
Sources of ignition may cause explosions!
Ensure a non-explosive atmosphere.



Fig. 2: Assembly

2. Insert plastic nozzle (4) into the housing (8).
3. Tighten air cap (3) with cap nut (1).
⇒ The seal (2) must be in the cap nut.
4. Screw the feed cup (6) onto the thread of the cup connection (5).
5. Connect the air hose to the air supply (7).
6. Check the seat of the air hose.

5 Commissioning

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Protective gloves
- Safety boots
- Protective workwear
- Eye protection
- Respiratory protection device
- Use ear protection

Requirements:

- Plastic nozzle is assembled ↪ 4.2 “Assembly”.
- Feed cup is assembled ↪ 4.2 “Assembly”.
- Air hose is assembled ↪ 4.2 “Assembly”.

Setting the spray pattern



Fig. 3: Setting the material flow

1. Set the material quantity.

- Loosen locknut (1).
- Turn set screw (2) in required direction.
 - Right turn: less material
 - Left turn: more material
- Tighten locknut (1).



Fig. 4: Setting air flow.

2. Setting air flow.
 - Set air control (A) to “minimum”.
 - Increase flow slowly.



The air flow is adjustable continuously, from “minimum” (A) to “maximum” (C).

The flow rate of air in the position “A” amounts to 5 - 20% of the maximum flow rate in the position “C”.

3. Set the spray width by turning the flat jet setting (1).
 - Right turn: Flat jet min.
 - Left turn: Flat jet max.



You can turn the flat jet continuously 200° and adjust the spray from flat to round jet.

Characteristic curves

The characteristic curves show the air flow dependent on the air pressure.

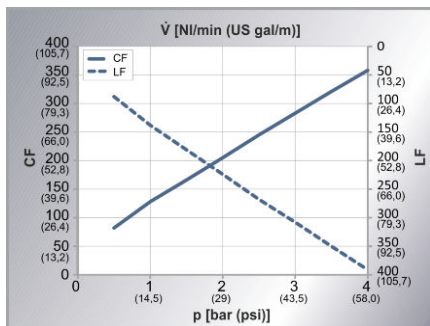


Fig. 5: Characteristic curve

CF Conventional air cap

LF Air cap LVLP

6 Operation

6.1 Safety recommendations



WARNING!

Danger of explosion due to chemical reactions

Material, halogenated hydrocarbon-based rinsing agent or cleaning agent can chemically react with aluminum components of the product. Chemical reactions can cause explosions. Serious injury and death could be the consequence.

- Only use purging agents and cleaning agents that do not contain any halogenated hydrocarbons.



CAUTION!

Contact with leaking coating material

With repeated use of the plastic nozzle, there is a danger of breakage on the shaft of the plastic nozzle. The leaking coating material can cause damage to the skin.

- Do not use the plastic nozzle continuously.
- Replace plastic nozzle after each use.



Plastic nozzle is intended for single use only
Do not re-use plastic nozzle.

6.2 General notes

- Perform the following checks during operation:
 - Check O-rings for correct seating and tightness.
 - Check air cap for cleanliness.
 - Check plastic nozzle for cleanliness.

6.3 Selecting air cap

The spray gun can be converted from a conventional spray gun to an LVLP spray gun. Also assemble the corresponding air cap.

Conventional air cap/CF

The conventional air cap is used with decorative surfaces in which the focus lies on the atomizer.

Conventional air cap features:

- Mist arm
- Fine atomization
- Transfer rate > 65%
- Air consumption: see characteristic curve Fig. 5

Air cap LVLP/LF

The air cap LVLP is used for applications requiring a good transfer rate and spray pattern.

Properties of the air cap LVLP:

- Mist arm
- Transfer rate > 75%
- Air consumption: see characteristic curve Fig. 5

6.4 Changing the air cap

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Protective workwear
- Protective gloves

Remove air cap



Fig. 6: Loosen cap nut

1. Loosen the cap nut (1) counterclockwise.



Fig. 7: Removing the air cap

2. Remove air cap (1).

Assemble air cap



Fig. 8: Placing the air cap

3. Fit air cap (1).



Fig. 9: Tighten cap nut

4. Turn cap nut (1) clockwise.
5. Align air cap as required ↪ 6.5 “Alignment of the air cap”.

6.5 Alignment of the air cap

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Protective workwear
- Protective gloves

The position of the air cap determines the alignment of the spray pattern.



Fig. 10: Align air cap

1. Turn the air cap as required for the desired spray pattern.

6.6 Guiding the spray gun

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Protective gloves
- Safety boots
- Protective workwear
- Eye protection
- Respiratory protection device
- Use ear protection

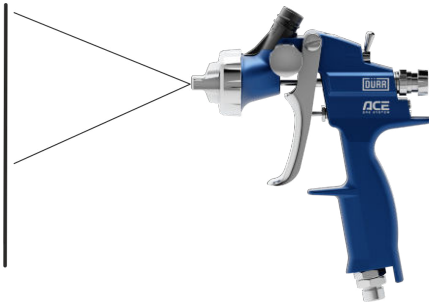


Fig. 11: Guide the spray gun

1. Guide spray gun as follows:

- Guide spray gun at 90 degrees to the surface to be painted.
- Maintain a distance of 15 to max. 25cm to the surface to be painted.



The distance can vary for effect coatings.

7 Cleaning

7.1 Safety recommendations



WARNING!

Danger of fire and explosion

Flammable coating materials and their detergents and cleaning agents can cause a fire or an explosion.

- Ensure that the flashpoint of the cleaning agent is at least 15K above the ambient temperature or clean product at the cleaning areas with active technical ventilation, in painting booths, according to EN 16985.
- Note explosion group of the fluid.
- Observe the security data sheets of the media being used.
- Ensure that forced ventilation and fire protection equipment are in operation.
- Do not use sources of ignition and open light.
- Do not smoke.
- Check grounding.



WARNING!

Danger from harmful or irritant substances

Serious injuries or death can result if you come into contact with dangerous fluids or steam.

- Spray gun Check regularly for leakage. Observe local regulations and maintenance schedule.
- Ensure that the forced ventilation is operational.
- Follow the relevant safety data sheets.
- Wear specified protective equipment.
- Avoid contact (e.g. with eyes, skin).

**WARNING!****Escaping material and compressed air**

Escaping material under pressure can cause serious injuries.

Before carrying out any work:

- Disconnect the system, in which the spray gun is installed, from compressed air and material supply.
- Secure system personalized from being switched on again.
- Depressurize the lines.

**WARNING!****Danger of explosion due to chemical reactions**

Material, halogenated hydrocarbon-based rinsing agent or cleaning agent can chemically react with aluminum components of the product. Chemical reactions can cause explosions. Serious injury and death could be the consequence.

- Only use purging agents and cleaning agents that do not contain any halogenated hydrocarbons.

**NOTICE!****Unsuitable cleaning agents**

Unsuitable cleaning agents can damage the spray gun.

- Only use cleaning agents approved by the material manufacturer.
- Observe the security data sheets of the media being used.
- Place heavily soiled components in a cleaning bath.
 - Only place those parts in the cleaning bath, which are suitable for the cleaning bath.
 - Never place the entire spray gun in the cleaning bath.
 - Use only electrically conductive containers.
 - Ground the container.
 - Do not use ultrasound baths.

- Use alcohols (isopropanol, butanol) for non-flammable coating materials.
- Remove dried non-flammable coating materials using a material manufacturer-approved organic thinner.

**NOTICE!****Damage due to unsuitable cleaning tools**

Unsuitable cleaning tools can damage the product.

- Only use cloths, soft brushes and paintbrushes.
- Do not use abrasive cleaning tools.
- Do not poke blocked nozzles with metallic objects.
- Do not use compressed air for cleaning.
- Do not use any thinner spray guns.
- Do not use high pressure for cleaning agents.

7.2 Cleaning

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Protective gloves
- Safety boots
- Protective workwear
- Eye protection
- Respiratory protection device
- Use ear protection

1. Disconnect the air hose from the spray gun.
2. Ensure the ambient temperature is at least 15K below the flashpoint of the cleaning agent.
3. Remove material residue with cloth or soft brushes.
4. Clean the spray gun carefully and dry it with a soft cloth.

8 Maintenance

8.1 Safety notes



WARNING!

Unsuitable spare parts in explosive areas

Spare parts not compliant with the specifications of the ATEX directives can cause explosions in an explosive atmosphere. Serious injury and death could be the consequence.

- Use exclusively original spare parts.



WARNING!

Escaping material and compressed air

Escaping material under pressure can cause serious injuries.

Before carrying out any work:

- Disconnect the system, in which the spray gun is installed, from compressed air and material supply.
- Secure system personalized from being switched on again.
- Depressurize the lines.

8.2 Maintenance schedule






The maintenance intervals given below are based on experiential values. Adjust maintenance intervals individually if necessary.


Interval	Maintenance work
after each use	Clean ↪ 7.2 "Cleaning".
monthly	Lubricate lever bearing ↪ 11.8 "Operating and auxiliary materials".

9 Faults

9.1 Defects table

Visualizer of typical spray pattern problems

Spray pattern	Fault identification
	Spray jet is not circular.
	Spray jet is bent or tapered.
	Spray jet is too thick in the middle.
	Spray jet is split.
	Spray jet is uneven.

Fault description	Cause	Remedy
Round spray jet is not developing in spite of concluded flat jet control.	Cap nut is not correctly tightened.	Tighten cap nut.
	Plastic nozzle is dirty.	Clean nozzle seat.
Spray jet is bent or tapered.	Bores in the air cap are soiled or damaged.	Clean and check air cap. Replace air cap if defective  7.2 "Cleaning".
	Dried material residue on the plastic nozzle	Clean plastic nozzle.

Fault description	Cause	Remedy
	Plastic nozzle is damaged.	Replace plastic nozzle.
Spray jet is too thick in the middle.	Material too viscous	Change material consistency.
	Air pressure too low	Increase the air pressure via the air control.
Spray jet is split.	Material too thin	Change material consistency.
	Air pressure too high	Decrease the air pressure via the air control.
Spray jet is uneven. The spray pattern quality is bad.	There is not enough material in the cup.	Top up material.
	Cap nut is not correctly tightened.	Tighten cap nut.
	The ventilation bore in the cup is closed.	Open the ventilation bore in the cup.
Leakage on the needle seal or in front on the nozzle	Needle is soiled, worn, or damaged.	Clean needle and replace if necessary ↻ 9.2.1 "Replace the needle.".
Spray gun is losing air with non-actuated trigger.	Valve is defective.	Replace valve ↻ 9.2.2 "Replacing valve seal".
	Valve seal is worn out.	Replace valve seal ↻ 9.2.2 "Replacing valve seal".
Air escapes at the air control.	O-ring is worn out.	Replace O-ring ↻ 9.2.3 "Replace O-ring on the air control".
Air escapes on the flat jet control.	O-ring is worn out.	Replace O-ring ↻ 9.2.4 "Replace O-ring on the circular jet control .".
Air escapes at the air connection.	O-ring is worn out.	Replace air connection ↻ 9.2.5 "Replace air connection".
Quick Clip technology cannot be used as required.	Locknut and stop screw are not tightened together.	Tighten locknut and stop screw together.

Fault description	Cause	Remedy
	Material has leaked into Quick Clip closure and dried out.	Clean Quick Clip closure ↪ 7.2 "Cleaning".

9.2 Troubleshooting

9.2.1 Replace the needle.

The integrated Quick Clip technology allows for removal and installation of the needle without changing the preset needle stop.

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Protective gloves
- Safety boots
- Protective workwear
- Eye protection
- Respiratory protection device
- Use ear protection

Remove needle



Fig. 12: Replace needle

1. **! NOTICE!**
The stop screw is spring pretensioned. When you loosen the stop screw it might fall off.
Hold onto stop screw (6) while removing it.
2. Counter the locknut (5) on the clip (4).
3. Press stop screw (6) into the spray gun.
4. Turn stop screw (6) ¼ turn counter clockwise.
⇒ The spring on the needle (2) pushes the stop screw (6) out.
5. Pull out the stop screw (6).
6. Remove compression spring (3).

7. Pull back the trigger (1).
8. Pull out the needle (2) towards the back.

Inserting the needle



Fig. 13: Inserting the needle

1. Insert needle (1).
2. Fit compression spring (2).
3. Press stop screw (5) against the compression spring back into the body of the spray gun. One of the nibs (6) of the clip (3) must be in the 11 o'clock position.
4. Turn stop screw (5) clockwise until fastened.
⇒ Stop screw (5) is pushed back into its initial position.
5. Set the material quantity ↪ 5 "Commissioning".

9.2.2 Replacing valve seal

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Protective workwear
- Protective gloves

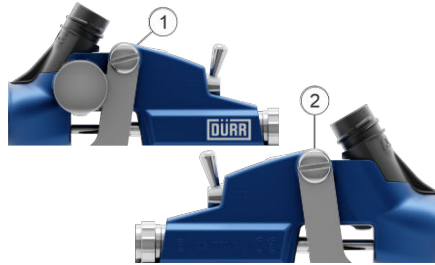


Fig. 14: Removing the lever screw and lever axle

1. Loosen and remove the lever screw (1).
2. Remove the lever axle (2).

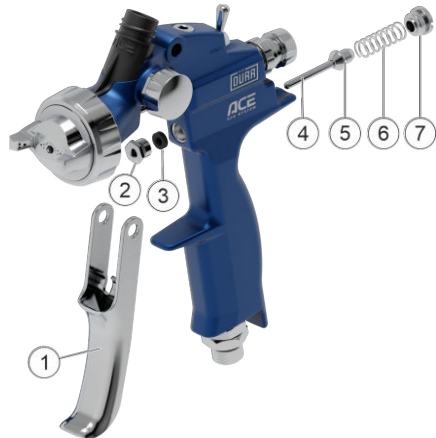


Fig. 15: Replacing the valve gland seal

3. Pull off the trigger (1).
4. Unscrew the valve gland (2) to the front.

5. Loosen the sealing screw (7).
6. Pull out the compression spring (6) towards the back.
7. Pull out valve pin (4) and seal (5) towards the back.
8. Pull out the valve gland (3) to the front.
9. Insert the valve pin (4) and seal (5).
10. Insert compression spring (6).
11. Clean locking screw (7).
12. Wet locking screw (7) with thread sealant. Use LABS-free and low-grade thread sealant ↪ 11.8 "Operating and auxiliary materials".
13. Tighten locking screw (7).
14. Insert a new valve gland seal (3).
15. Screw-in the valve gland (2).
16. Push the trigger (1) over the spray gun.

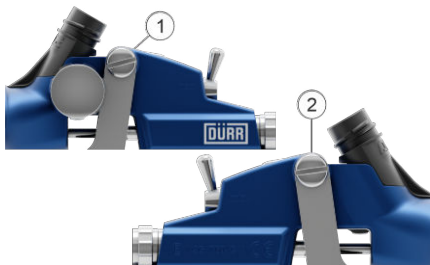


Fig. 16: Installing the lever screw and lever axle

17. Insert lever axle (2).
18. Tighten the lever screw (1).

9.2.3 Replace O-ring on the air control

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Face protection
- Protective workwear
- Protective gloves



Fig. 17: Replace O-ring on the air control

1. Unscrew sealing screw (1).
2. Pull out the air control (3).
3. Pull off O-ring (4).
4. Pull up new O-ring (4).
5. Wet new O-ring (4) with lubricant ↪ 11.8 "Operating and auxiliary materials".
6. Insert air control (3) into the housing (2).
7. Clean sealing screw (1) ↪ 7.1 "Safety recommendations".

8. Moisten sealing screw (1) with thread sealant.
 ⇒ Use LABS-free and low-grade thread sealant ↘ 11.8 “Operating and auxiliary materials”.
9. Screw in sealing screw (1).

9.2.4 Replace O-ring on the circular jet control .

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Face protection
- Protective workwear
- Protective gloves

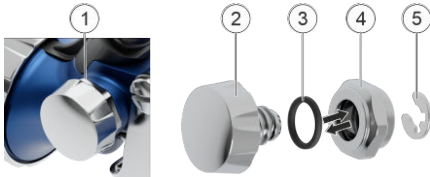


Fig. 18: Flat jet control

1. Unscrew flat jet control (1) with an open-end wrench.
2. Pull out safety washer (5).
3. Unscrew adjusting screw (2) from the regulator insert (4).
4. Remove O-ring (3) from the regulator insert (4).
5. Clean regulator insert (4).

6. Wet new O-ring (3) with lubricant ↘ 11.8 “Operating and auxiliary materials”.
7. Insert small O-ring (3) into the regulator insert (4).
8. Screw in adjusting screw (2) into the regulator insert (4).
9. Clip on safety washer (5).

! NOTICE!

Damage of sealing surface

When the flat jet control is screwed in, the adjusting screw can press against the sealing surface and damage the sealing surface.

- Always install flat jet control with opened adjusting screw.

10. Open adjusting screw (2).
 ⇒ Turn the adjusting screw counter-clockwise.
11. Moisten the flat jet control (1) on the thread with thread sealant.
 ⇒ Use LABS-free and low-grade thread sealant ↘ 11.8 “Operating and auxiliary materials”.
12. Screw in flat jet control (1).

9.2.5 Replace air connection

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Face protection
- Protective workwear
- Protective gloves

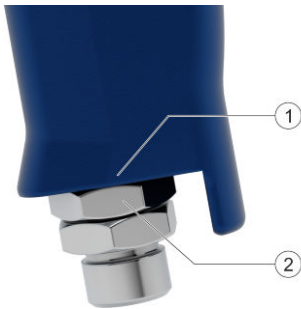


Fig. 19: Air connection on the housing

1. Unscrew flat jet control (2) with an open-end wrench.



Fig. 20: Air connection details

2. Moisten the air connection (2) on the thread (4) with thread sealant.
 - ⇒ Use LABS-free and low-grade thread sealant ↘ 11.8 “Operating and auxiliary materials”.

The side of the air connection with the hexagon socket (3) is screwed into the gun housing (1).

3. Screw in air connection (2).

10 Disassembly and Disposal

10.1 Safety recommendations



WARNING!

Escaping material and compressed air

Escaping material under pressure can cause serious injuries.

Before carrying out any work:

- Disconnect the system, in which the spray gun is installed, from compressed air and material supply.
- Secure system personalized from being switched on again.
- Depressurize the lines.

10.2 Disassembly

Personnel:

- Operator
- + additional qualification explosion protection

Protective equipment:

- Use ear protection
- Eye protection
- Respiratory protection device
- Protective workwear
- Protective gloves

1. Disconnect compressed air supply.
2. Unscrew feed cup.
3. Unscrew cap nut.
4. Remove the air cap.
5. Pull out plastic nozzle.
6. Avoid contact with material. Dispose of the exiting material professionally.
7. Clean the spray gun.

10.3 Disposal



ENVIRONMENT!

Improper waste disposal

Improper waste disposal threatens the environment and prevents re-use and recycling.

- Clean components before their disposal.
- Always dispose of components in accordance with their characteristics.
↳ 11.7 "Materials used"
- Collect leaked out utilities and auxiliaries completely.
- Dispose of work equipment soaked in coating materials or operating substances according to the disposal provisions in force.
- Dispose of utilities and auxiliaries according to the disposal provisions in force.
- In case of doubt, refer to the local disposal authorities.

11 Technical data

11.1 Weight

Detail	Value
Weight with plastic nozzle, without bucket	418 g

11.2 Connections

- ↳ 12.1 "Spare parts list"

11.3 Operating conditions

Detail	Value
Maximum allowable material temperature when operating with protective gloves	40 °C
Operating temperature, min.	10 °C
Operating temperature, max.	40 °C

11.4 Emissions

Work environment sound pressure level

- Test: according to EN 14462
- Conventional air cap (CF)
- Material: Water
- Air control: maximum
- Air pressure: 2.5bar

Circular jet	
Detail	Value
A-weighted emission sound pressure level LpA	74 dB(A)
Uncertainty KpA	5dB

Flat jet	
Detail	Value
A-weighted emission sound pressure level LpA	77 dB(A)
Uncertainty KpA	5dB

11.5 Operating values

Detail	Value
Max. air pressure	7 bar
Recommended air pressure	2.0 - 3.0bar

Quality of compressed air

- Purity classes in accordance with ISO 8573-1: 1:4:2
- Limitations for purity class 4 (pressure dew point max.):
 - ≤ -3°C at 7bar absolute
 - ≤ +1°C at 9bar absolute
 - ≤ +3°C at 11bar absolute

11.6 Type plate

The type plate is placed on the housing and features the following details:

- Product name
- Year of manufacture
- Serial number
- Ex labeling
- Manufacturer
- CE labeling

11.7 Materials used

Component	Material
Housing	Anodised aluminium
Compression springs	Stainless steel
Materials in contact with material	Stainless steel, PP
Seals in contact with material	PP
Seals without material contact	FEPM, PE, POM, FKM

11.8 Operating and auxiliary materials

Material	Material number
Syntheso GLEP 1, 100 g (lubricant for seals and threads)	W32020010
Loctite 577 (Thread sealant)	W31010005

11.9 Material specification

Suitable Material:

- Flammable and non-flammable paints



Do not use materials containing organochlorine compounds (e.g. trichloroethane, chloromethane).

12 Spare parts and accessories

12.1 Spare parts list



Fig. 21: Exploded view

Item	Denomination	Quantity	Material number
1	Cap nut with seal (2 - 3)	1	M30010416
2	Cap nut	1	-
3	Seal	1	M08280030
4	Air cap with seal	1	↳ "Air cap overview"
5	Seal	1	M08280029
6	Complete plastic nozzle (SPE SYSTEM)	1	↳ "Nozzle and bucket overview"
7	Single-use cup (SPA SYSTEM EASY LINE & SPA SYSTEM EASY LINE MIX)	1	↳ "Nozzle and bucket overview"
8	Sealing screw	1	M41090173
9	Complete air control (9 - 10)	1	M21200001
10	O-Ring 7.0 x 1.5	1	M08030024
11	Needle	1	↳ "Needle overview"
12	Distance bolts with compression spring	1	M06070170
13	Clip	1	M62060001
14	Locknut	1	M30160001
15	Set screw	1	M41260001
16	Valve pin set (17 - 21)	1	N36960026
17	Sealing screw	1	-
18	Compression spring	1	-
19	Valve with pin	1	N32320001
20	Seal	1	M08280028
21	Valve gland	1	-
22	Flat jet control (23 - 26)	1	M21210001
23	Safety washer	1	-
24	O-ring 9.5 x 1.5	1	M08030772
25	Regulator insert	1	-
26	Adjusting screw	1	-
27	Lever axle	1	M04290001
28	Lever screw	1	M41250001
29	Trigger	1	M69040001
30	Air connection	1	M01200001

Spray guns

The spray guns can be ordered in different variants.



Nozzles and buckets must be ordered separately.

Each set contains:

- Spray gun
- Needle
- Air cap

Spray gun - set with needle and air cap

Description	Material number
EcoGun ACE CF-1.2	N36270002
EcoGun ACE CF-1.3	N36270003
EcoGun ACE CF-1.4	N36270004
EcoGun ACE CF-1.6	N36270005
EcoGun ACE CF-1.8	N36270006
EcoGun ACE CF-2.0	N36270007
EcoGun ACE CF-2.5	N36270008
EcoGun ACE LF/LVLP-1.2	N36270009
EcoGun ACE LF/LVLP-1.3	N36270010
EcoGun ACE LF/LVLP-1.4	N36270011
EcoGun ACE LF/LVLP-1.6	N36270012
EcoGun ACE LF/LVLP-1.8	N36270013
EcoGun ACE LF/LVLP-2.0	N36270014
EcoGun ACE LF/LVLP-2.5	N36270015

Needle overview

Designation	Material number
NEEDLE COMPL. 1.2mm ACE	M32020674
NEEDLE COMPL. 1.3mm ACE	M32020675
NEEDLE COMPL. 1.4mm ACE	M32020676
NEEDLE COMPL. 1.6mm ACE	M32020677
NEEDLE COMPL. 1.8mm ACE	M32020678

Designation	Material number
NEEDLE COMPL. 2.0mm ACE	M32020679
NEEDLE COMPL. 2.5mm ACE	M32020680

Air cap overview

Conventional air cap/CF	
Description	Material number
AIR CAP CF (A) 0.5-1.2 mm	M35030296
AIR CAP CF (B) 1.3-1.6 mm	M35030298
AIR CAP CF (C) 1.8-2.5 mm	M35030300

Air cap LVLP/LF	
Description	Material number
AIR CAP LF/LVLP (A) 0.5-1.2mm	M35030297
AIR CAP LF/LVLP (B) 1.3-1.6mm	M35030299
AIR CAP LF/LVLP (C) 1.8-2.5mm	M35030301

Nozzle and bucket overview

Nozzles and buckets			
Description	Material number*	Material number Dürr	Note
Single-use buckets SPA-System easy line mix small (300ml)	67300	N08010103	60 buckets with lid in a carton
Single-use buckets SPA-System easy line mix medium (500ml)	67500	N08010104	60 buckets with lid in a carton
Single-use buckets SPA-System easy line mix large (800ml)	67800	N08010105	60 buckets with lid in a carton
Single-use buckets SPA-System easy line (550ml)	68000	N08010102	60 buckets with lid in a carton
ACE-SPE system nozzle insert 1.2mm	46012	M09140050	20 pcs in a bag
ACE-SPE system nozzle insert 1.3mm	46013	M09140051	20 pcs in a bag
ACE-SPE system nozzle insert 1.4mm	46014	M09140052	20 pcs in a bag

Description	Material number*	Material number Dürr	Note
ACE-SPE system nozzle insert 1.6mm	46016	M09140053	20 pcs in a bag
ACE-SPE system nozzle insert 1.8mm	46018	M09140054	20 pcs in a bag
ACE-SPE system nozzle insert 2.0mm	46020	M09140055	20 pcs in a bag
ACE-SPE system nozzle insert 2.5mm	46025	M09140056	20 pcs in a bag
SIEVE INSERT 195µm BLUE	70195	M13060025	60 pcs in a bag
SIEVE INSERT 125µm GREEN	70125	M13060026	60 pcs in a bag
SIEVE INSERT 105µm RED	70105	M13060027	60 pcs in a bag
LID FOR BUCKET EASY LINE MIX 300ml	67002	M63011665	20 lids in a carton
LID FOR BUCKET EASY LINE MIX 500/800ml	67001	M63011667	20 lids in a carton
LID FOR BUCKET EASY LINE 550ml	68001	M63011666	30 lids in a carton

* - Order nozzles and buckets at:
 ACE Lackiersysteme GmbH
 Braike 77
 73230 Kirchheim unter Teck
 Germany

12.2 Accessories



For an overview of the accessory, see the price list available at Dürr webshop or on request, ☎ "Hotline and Contact".

Description	Material number
Cleaning set (21 parts)	N36960038
Quick change coupling for air G1/4" - external threads	N40030046
Cleaning set 17 parts	N36960037
Push-on nipple for quick change coupling, firm DR,2 d10/12 (EU)	M01010185

Description	Material number
Regulator, compressed air 0-7bar 1/4"o - 1/4"i	N26050282
DIN FLOW CUP 2mm	N08010053
DIN FLOW CUP 4mm	N08010047
DIN FLOW CUP 6mm	N08010054

12.3 Order



WARNING!

Unsuitable spare parts in explosive areas

Spare parts not compliant with the specifications of the ATEX directives can cause explosions in an explosive atmosphere. Serious injury and death could be the consequence.

- Use exclusively original spare parts.



WARNING!

Unsuitable spare parts

Spare parts of third-party suppliers may possibly not be able to hold the loads. Serious injury and death could be the consequence.

- Use exclusively original spare parts.

Ordering spare parts, tools and accessories as well as information on products that are listed without order number ↗ "Hotline and Contact".



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