schweisskraft

# Operating Instructions

## Grinding Helmet

with air filter system

- VarioProtect GRIND
- VarioProtect GRIND AIR
- VarioProtect GRIND AIR without fresh air filter system

VarioProtect GRIND AIR

VarioProtect GRIND

VarioProtect

# Imprint

**Product identification**

| Grinding Helmet | Item number |
|---|---|
| VarioProtect GRIND | 1654200 |
| VarioProtect GRIND AIR | 1654205 |
| VarioProtect GRIND AIR without fresh air filter system | 1654206 |

**Manufacturer**

Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

Fax: 0049 (0) 951 96555 - 55

E-Mail: info@schweisskraft.de
Internet: www.schweisskraft.de

**Indications regarding the operating instructions**

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**Indications regarding the copyright**



# Content

# 1 Introduction

You have made a good choice by purchasing the Schweisskraft grind helmet.

**Read the operating manual thoroughly before commissioning the helmet.**

It gives you information about the proper commissioning, intended use and safe and efficient operation and maintenance of your grind helmet.

The operating manual is part of des Schleifhelms. Always keep this operating manual in the location where your grind helmet is being operated. All local accident prevention regulations and general safety instructions for the operating range of your grind helmet must also be complied with.

The Illustrations in this operating instruction serve for the general understanding and may deviate from the actual design.

## 1.1 Copyright

The contents of these instructions are protected by copyright and are the sole property of Stürmer Maschinen GmbH. Their use is permitted within the scope of use of the grinding helmet. Any other use is not permitted without the written consent of the manufacturer.

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## 1.2 Customer service

Please contact your dealer if you have questions concerning your Grinding Helmet or if you need technical advice. They will help you with specialist information and expert advice.

**Germany:**
Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

**Repair service:**
Fax: 0049 (0) 951 96555-111
Email: service@stuermer-maschinen.de

**Spare part orders:**
Fax: 0049 (0) 951 96555-119
Email: ersatzteile@stuermer-maschinen.de

We are always interested in valuable experience and knowledge gained from using the application-which then could be shared and be valuable to develop our products even further.

## 1.3 Limitation of liability

All information and notes in these operating instructions were summarised while taking applicable standards and rules, the state-of-the-art technology and our long-term knowledge and experiences into consideration.

In the following cases the manufacturer is not liable for damages:

- Non-observance of the operating instructions,
- Inappropriate use
- Use of untrained staff,
- Unauthorised modifications
- Technical changes,
- Use of not allowed spare parts.

The actual scope of delivery may deviate from the explanations and presentations described here in case of special models, when using additional ordering options or due to latest technical modifications.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations at the time of the conclusion of the contract are applicable.

# 2 Safety

This section provides an overview of all important safety packages for the protection of operating personnel as well as for safe and fault-free operation. Other task-based safety notes are included in the paragraphs of the individual phases of life.

## 2.1 Symbol explanation

**Safety instructions**

The safety notes in these operating instructions are highlighted by symbols. The safety notes are introduced by signal words which express the concern of the risk.

**DANGER!**

This combination of symbol and signal word indicates an immediately hazardous situation which, if not avoided, will result in death or serious injury:

**WARNING!**

This combination of symbol and signal term indicates potentially hazardous situations which may cause death or serious injury if not averted.

**CAUTION!**

This combination of symbol and signal term indicates a potentially dangerous situation which may cause material damage or harm the environment if it is not averted.

**ATTENTION!**

This combination of symbol and signal term indicates a potentially hazardous situation which may cause minor or light injuries if it is not averted.

**NOTE!**

This combination of symbol and signal words indicates a potentially dangerous situation which may lead to material or environmental damage if not avoided.

**Tips and recommendations**

**Tips and recommendations**

This symbol highlights useful tips and recommendations as well as information for an efficient and trouble-free operation.

It is necessary to observe the safety notes written in these operating instructions in order to reduce the risk of personal injuries and damages to property.

## 2.2 Safety regulations

**CAUTION!**

Serious injuries can occur if the user disregards the warnings and/or refuses to follow the instructions in the operating manual!

- The particle filter and the pre-filter must be used together. Only use original filters and not filters from other manufacturers.
- Before each use, check the respiratory protection system for externally visible damage and defects. Defects and damage must be repaired immediately.
- Before using the respiratory protection system, test the airflow to ensure that there is sufficient air volume.
- Never use the grinding helmet in environments,
  - which contain unknown substances,
  - which do not have a sufficient supply of fresh air
  - and therefore there is a risk of the oxygen content falling below
  - content of oxygen falls below 17%,
  - with risk of explosion or fire
  - with poor ventilation
  - with strong wind.
- If you are unsure of the concentration of airborne contaminants and whether there is sufficient oxygen in the air you are breathing, contact your safety officer.
- The respiratory protection system should only be used by well-trained and qualified personnel.
- The manufacturer is not liable for injuries due to incorrect use or incorrect selection of the equipment.
- If the respiratory protection system stops working, the grinding work must be stopped immediately, the work area must be left and the grinding helmet must be removed. Never use the grinding helmet with the respiratory protection system switched off.
- The filter may only be attached to the turbo unit and not directly to the helmet.
- Do not make any modifications to the grinding helmet.
- Do not allow water or other liquids to enter the fan housing, filter or battery compartment.

## 2.3 Safety data sheets

Safety data sheets for hazardous materials can be obtained from your specialist dealer or by phone: +49 (0)951/ 96555-0. Specialist dealers can find safety data sheets in the download area of the partner portal.

# 3 Intended use

The grinding helmet serves only as face protection when grinding workpieces. The respiratory protection system is designed to filter out grinding dust and chips from the user's breathing air and to provide a sufficient supply of fresh air.

The grinding helmet may only be used in areas with sufficient fresh air supply.

Intended use also includes compliance with all the information in these instructions.

## 3.1 Reasonably foreseeable misuse

Any use beyond or different from the intended use is considered misuse.

**Possible misuses can be:**

- Do not use the grinding helmet for welding.
- Do not use the grinding helmet in areas with insufficient fresh air supply or with an oxygen content below 17%.
- Do not use the grinding helmet in areas with hazardous substances, explosion risk or fire hazard.
- Do not use the grinding helmet as a safety helmet on the road, in industrial areas or in the home.
- Install spare parts and use accessories and equipment not approved by the manufacturer.
- Do not use the grinding helmet as a respirator when handling hazardous materials.
- Do not use the grinding helmet with the air supply system switched off for grinding.

Incorrect use of the Grinding Helmet can lead to dangerous situations.

Stürmer Maschinen GmbH accepts no liability for design and technical modifications to the Grinding Helmet.

Claims of any kind for damage due to improper use are excluded..

## 3.2 Residual risks

Even if all safety regulations are observed and the machine is used in accordance with the regulations, there are still residual risks, which are listed below.

- Damage to the respiratory tract if the air filter is clogged or defective.
- Eye damage when used as sunscreen.

# 4 Technical Data

| Technical Data | VarioProtect GRIND | VarioProtect GRIND AIR |
|---|---|---|
| Length (product) approx. | 350 | 460 |
| Width/depth (product) approx. [mm] | 250 | 250 |
| Height (product) approx. | 190 | 250 |
| Weight (net) approx. | 385 | 735 |
| Material visor | Nylon | Nylon |
| Working temperature [°C] | -5 - +55 | -5 - +55 |
| Storage temperature [°C] | -10 - +55 | -10 - +55 |
| Standards | CE,ANSI,CSA,AS/NZS | CE,ANSI,CSA,AS/NZS |
| Glass thickness [mm] | 1 | 1 |
| Breathing protection level 1 of the air flow blower [l/min]. | | 170 |
| Breathing protection level 2 of the air flow blower [l/min]. | | 200 |
| Breathing protection level 3 of the air flow blower [l/min]. | | 230 |
| Hose length of the breathing protection system [mm] | | 1000 |
| Operating time 1 of the filter battery [h] | | 10 |
| Operating time 2 of the filter battery [h] | | 8 |
| Operating time 3 of the filter battery [h] | | 6 |
| Recharging time of the battery of the respiratory protection system [h]. | | 3,5 |
| Battery type of the breathe protection | | Li-on 12V 4400mAh |
| Weight of the battery [g] | | 350 |
| Noise level [dB] | | <73 |
| High filter efficiency [%] | | 99,996 (0.3$\mu$m) |
| Filtration stage | | TH3 P R SL |

| Technical Data | VarioProtect GRIND AIR without fresh air filter system |
|---|---|
| Length (product) approx. | 460 |
| Width/depth (product) approx. [mm] | 250 |
| Height (product) approx. | 250 |
| Weight (net) approx. | 550 |
| Material visor | Nylon |
| Working temperature [°C] | -5 - +54 |
| Storage temperature [°C] | -10 - +54 |
| Standards | CE,ANSI,CSA, AS/NZS |
| Glass thickness [mm] | 1 |

# 5 Description

### VarioProtect GRIND

The VarioProtect GRIND grinding helmet protects the user's face from flying grinding chips and grinding dust during grinding.


Fig. 1: Description VarioProtect GRIND

### VarioProtect GRIND AIR without fresh air filter system

The VarioProtect GRIND AIR grinding helmet without fresh air filter system offers protection against flying grinding chips and grinding dust, and also the option of connecting a fresh air filter system.


Fig. 2: Unit description VarioProtect GRIND AIR without fresh air filter system

1 Helmet shell (SWM 175 B CE)

2 Harness adjustment

3 Connection fresh air filter system

4 Retaining mechanism viewing window glass

5 Sight window with protective screen (SWM 1 B CE)

### VarioProtect GRIND AIR

The VarioProtect GRIND AIR grinding helmet is a combined face and respiratory protection device that provides the user with great safety and comfort during grinding.The respiratory protection system cleans the contaminated air with the help of the built-in filter. Fresh air is fed into the hard hat through the breathing hose, allowing the user to work in the contaminated ambient air. The respiratory protection system protects against particle contamination in accordance with the requirements of EN 12941, equipment class TH3P.


Fig. 3: Description of the VarioProtect GRIND AIR

1 Grinding helmet
2 Breathing protection system
3 Carrying bag
4 Battery charger
5 Air flow meter

# 6 Scope of Delivery

**Scope of delivery VarioProtect GRIND**

- Grinding helmet

**Scope of delivery VarioProtect GRIND AIR without fresh air filter system**

- Grinding helmet with connection for air filter system

**Scope of delivery VarioProtect GRIND AIR**

- Grinding helmet with air filter system
- Fabric guard
- Battery charger
- Breathing hose with cover 1 m
- Air flow tester
- Padded waist belt with shoulder strap
- Black carrying bag

# 7 Accessories

**Accessoires VarioProtect GRIND**

- Fabric protection
  **Item number:** 1662230
- Clear view pane
  **Item number:** 1662232
- Gasket transparent pane
  **Item number:** 1662233
- Side lens buckles for transparent pane
  **Item number:** 1662239
- Fastening to safety helmet
  **Item number:** 1662240

**Accessories VarioProtect GRIND AIR and VarioProtect GRIND AIR without fresh air filter system**

- Filter cover
  **Item number: 1662206**
- Front filter
  **Item number: 1662208**
- Spark barrier
  **Item number: 1662209**
- Li-ION-battery
  **Item number: 1662211**
- Air hose
  **Item number: 1662212**
- Harness
  **Item number: 1662213**
- Battery charger
  **Item number: 1662214**
- Air flow tester
  **Item number: 1662215**
- Protective material
  **Item number: 1662230**
- Air filter system
  **Item number: 1662231**
- Transparent pane
  **Item number: 1662232**
- Sealing strip for transparent pane
  **Item number: 1662233**
- Filter TH3
  **Item number: 1662234**
- Complete headband
  **Item number: 1662237**
- Forehead sweatband
  **Item number: 1662238**
- Side lens buckles for transparent pane
  **Item number: 1662239**

# 8 Transport, Packaging, Storage

## 8.1 Delivery and transport

**Delivery**

Check the grinding helmet for visible transport damage after delivery. Should the grinding helmet show signs of damage, this must be reported immediately to the transport company or the dealer.

**Transport**

Transport the grinding helmet with the original bag and keep it away from direct sunlight.

## 8.2 Packaging

All used packaging materials and packaging aids are recyclable and should be taken to a materials recycling depot to be disposed of. The delivery packaging is made of cardboard, so please dispose carefully by having it chopped up and given to the recycling collection.The film is made of polyethylene (PE) and the cushioned parts of polystyrene (PS). Deliver these substances to a collection point for recyclable materials or to the waste disposal company which looks after your region.

## 8.3 Storage

The respiratory protection system must be thoroughly cleaned and stored in a dry, clean environment at temperatures between -10 ° C and +55 ° C and a relative humidity below 90%.

The helmet must be protected from dust, particles and other contaminants. If the device is stored at a temperature below 0 ° C, the battery must have the opportunity to warm up in order to achieve the full battery capacity.

If the device is not used for a long period of time, the battery must be removed and charged. The battery must then be stored separately.

# 9 Mounting the Grinding Helmet

**Checking for completeness**

After unpacking, check the scope of delivery for completeness. For the VarioProtect GRIND AIR, the components shown in Figure 4 must be present.


Fig. 4: Scope of delivery VarioProtect GRIND AIR

1 Grinding helmet

2 Breathing protection system

3 Lithium-ion battery

4 Hose (heat resistant with mounting options at both ends)

5 Harness for the shoulder

6 Air flow tester

7 Battery charger

8 Carrying bag

## 9.1 Attaching the breathing protection system to the strap

Step 1: Remove the snap lock of the strap (Fig 5).

Fig. 5: Snap lock

Step 2: Remove the fastening strap from the 2 belt loops of the waist connector (Fig. 6).

Fig. 6: Removal from the loops

Step 3: Thread the fastening strap through the two strap loops of the breathing protection system (Fig. 7).

Fig. 7: Loops on the breathing protection system

Step 4: Position the velcro between the two loops (Fig. 8).

Fig. 8: Positioning between the loops

Step 5: Fold the filter system over and attach the velcro fastener to the belt (Fig. 9).

Fig. 9: Turn the filter system

Step 6: Thread the fastening strap through the two belt loops again (Fig.10).

Fig. 10: Passing through the loops

Step 7: Reattach the snap lock to the belt (Fig. 11).

Fig. 11: Fastening the snap lock

Step 8: Attach the harness to the plastic rings of the harness (Fig. 12).

Fig. 12: Harness

Step 9: Make sure that the belt is securely fastened.

## 9.2 Connection of the hose

Step 1: Connect the air hose to the breathing protection system and turn it clockwise to lock its position (Fig. 13).

Fig. 13: Connecting the hose to the FIlter system

Step 2: Connect the other end of the hose to the grinding helmet in the same way (Fig. 14).

Fig. 14: Connecting the hose to the grinding helmet

**ATTENTION!**

Check that the breathing protection hose is firmly connected. If the hose is damaged, replace it..

All components must be installed / used according to this manual if the unit is to provide the specified protection. If a component is missing or if something is unclear, contact the dealer.

## 9.3 Before commissioning

### 9.3.1 Air flow test

Step 1: Connect the breathing protection hose to the turbo unit and turn it clockwise to lock it (Fig. 15).

Fig. 15: Connecting the hose to the turbo unit

Step 2: Place the flow meter on the upper side of the hose (Fig. 16).

Fig. 16: Inserting the flow meter

Step 3: Press the power button and hold the hose in a vertical position at eye level (Fig. 17).

Fig. 17: Vertical position of the flow meter

Step 4: The air flow is adequate when the marble reaches the minimum flow O (Fig. 18).

Fig. 18: MInimum air flow O

**ATTENTION!**

The air flow must be tested before each use.

Do not use the protection system if the minimum flow level is not reached by the marble.

In this case, change the filter or the battery and test the air flow again.

## 9.4 Airflow alarm test

Step 1: Remove the hose from the helmet and press the ON button (Fig. 19).

Fig. 19: Dismantling the hose on the helmet side

Step 2: Cover the air outlet with your hand and wait approx. 15 seconds (Fig. 20).

Fig. 20: Covering the air outlet

**ATTENTION!**

If the alarm does not work, the breathing protection system should must be repaired or replaced.

## 9.5 Helmet adjustment

Step 1: Adjust the tightness of the face seal and place the helmet on the head (Fig. 20).

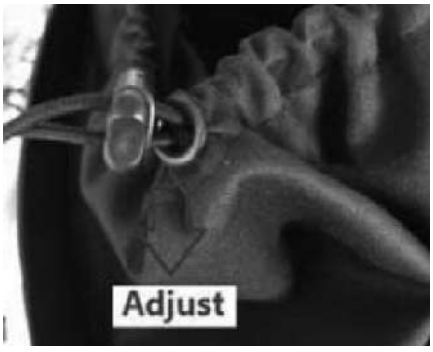


Fig. 21: Face seal adjustment

Step 2: Adjust the headgear (Fig. 22) to the correct tightness (To loosen, press and turn to the left. To tighten, press and turn to the right).

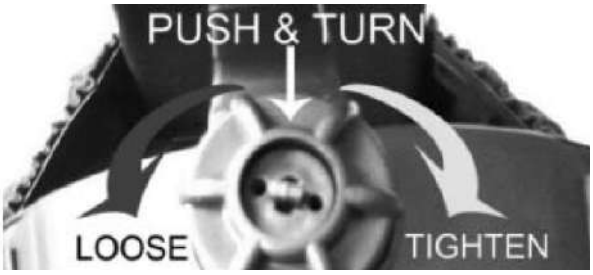


Fig. 22: Adjusting the headband

**ATTENTION!**

Make sure that the face cover is properly positioned. Otherwise, the necessary seal with the correct protection factor cannot be achieved.

# 10 Operation of the Grinding Helmet

**ATTENTION!**

Never use the VarioProtect GRIND AIR grinding helmet with the air supply system switched off.

The grinding helmet does not replace an extraction system!

## 10.1 LCD Display

There is an LCD display on the breathing protection system for indicating the working conditions (Fig. 22).

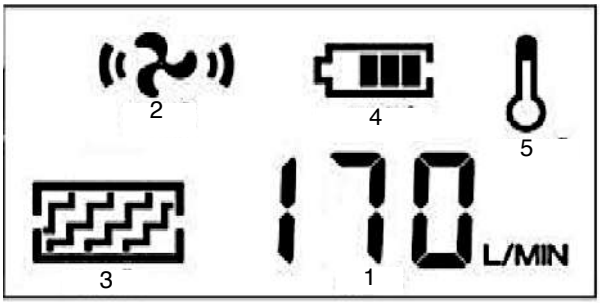


Fig. 23: LCD indication

1 Current airflow indication (l/min)

2 Airflow level

3 Filter conditions

4 Battery indication

5 Battery temperature

In the case of a malfunction, the individual displays are flashing.

## 10.2 Application

Switch ON the unit by pressing the ON key once. The symbol (Pos 1, Fig. 23) lights up.

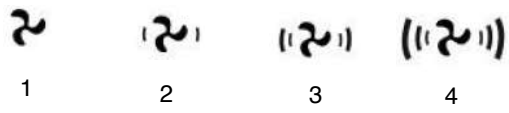


Fig. 24: Air flow stages

Press the ON button a second time to reach airflow level 1. It provides an airflow of approx. 170 L/min. Figure 24 Pos. 2 lights up.

Press the ON key a third time to reach airflow level 2, which provides an airflow of approx. 200 l/min. The symbol on Figure 24 Pos. 3 lights up.

Press the ON key a fourth time to reach airflow level 3, which provides an airflow of approx. 230 l/min. The symbol on Figure 24 Pos. 4 lights up.

Press the button a second time to return to airflow level 1.

The breathing system will switch off the turbo unit if the OFF button is pressed for more than 3 seconds.

The respiratory protection system will stop the complete circuit and go into sleep mode if the turbo unit is switched off for more than 30 minutes. The system can be activated by pressing the ON button.

The respiratory protection system may only be used in a temperature range of -5°C to +55°C. Furthermore, it may only be used at a relative humidity of less than 90 %.

# 11 Meaning of the Marking

The safety helmet and the protective pane are marked with code letters indicating the protection class against impact energy (flying parts).

**Helmet: SWM 175 B CE**

SWM: Identification of the manufacturer
175: Standard
B: Protection against high velocity particles, medium impact energy
CE: CE-marking

**Protective pane: SWM 1 B CE**

1: Optical class
B: Protection against high velocity particles, medium impact energy

# 12 Care, Maintenance and Repair

**WARNING!**
**Danger in case of insufficient qualification of persons!**

Insufficiently qualified persons cannot evaluate the risks to the user resulting from improper repair work on the welding helmet and expose themselves and others to the risk of serious injury.

All maintenance work must only be carried out by qualified persons.

**NOTE!**

After care, maintenance and repair work, check that all coverings and protective devices are properly refitted to the Automatic Welding Helmet.

Damaged guards and equipment parts must be repaired or replaced by the customer service.

## 12.1 Filter replacement on the breathing protection device

Step 1: Remove the filter cover by pressing the filter-cover latch (Fig. 25).

Fig. 25: Removing the filter cover

The filter cover is now fully visible.

Fig. 26: Visible filter cover

Step 2: Remove the used filter by taking it out of the filter cover.

Fig. 27: Removing the filter

Fig. 28: Removed filter

Step 3: Remove the front filter (Fig. 29).

Fig. 29: Removing the front filter

Step 4: Clean the spark arrester if it is necessary.

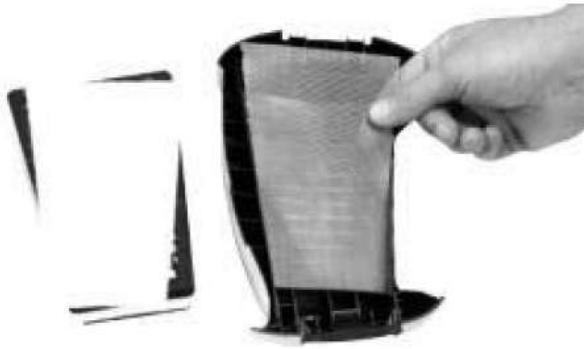

Fig. 30: Spark arrestor

The service life of the front filter and the filter is 12 months. In case of intensive use, check the filter cleanliness regularly and change it more frequently than every 12 months if necessary.

## 12.2 Installing and charging the battery of the breathing protection system

### 12.2.1 Installation of the breathing protection system battery

Step 1:Slide the battery to the back of the filter unit.

Fig. 31: Insert the battery

Step 2: Make sure that the battery is locked in the correct position (Fig. 32).

Fig. 32: Correct battery position

### 12.2.2 Charging the battery of the breathing protection system

The battery can be charged whether it is fitted or removed.

Fig. 33: Charging the battery when it is fitted

Fig. 34: Charging the battery when it is removed

The battery is only partially charged when delivered. It must be charged to 100% (until 4 bars are shown on the display) before first use.

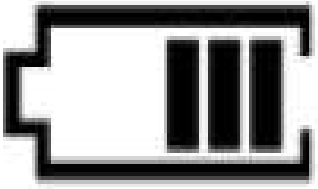

Fig. 35: Battery charging indication

It is recommended to charge the battery to 100% before each use.

Fig. 36: Power supply unit

The charger must only be used for its intended purpose. Do not charge the battery in a potentially explosive environment. The charger must not be used outdoors.

The charger regulates charging automatically. Once the battery is fully charged, the charger ensures that the battery remains at 100%.

The charging time is 3 to 4 hours.

The battery will discharge itself after a long period of storage. Always charge the battery if it has been stored for more than 15 days.

Fig. 37: Battery storage

If the battery is new or has been stored for more than three months, charge and discharge it at least two times in a row to reach the nominal/rated charge capacity.

**Charge battery**

Connect the charger to the power supply.

The charging status is indicated by a red LED on the main charger.

As soon as charging is finished, wave charging becomes active. The red LED goes out and the green LED starts to light up.

Disconnect the charger from the mains (do not leave the charger plugged in when not in use).

## 12.3 Care after cleaning

Clean the outside of the grinding helmet with a damp cloth.

Clean the viewing window regularly and do not use strong cleaning agents. Clean the air supply system, the air hose and the hard hat with a clean cloth moistened with soapy water.

Allow the unit to dry at room temperature. Do not use strong cleaning agents, solvents, alcohol or cleaning agents containing abrasives.

**WARNING!**

Never use aggressive solvents such as acetone.

## 12.4 Maintenance/Repair

**WARNING!**

Repairs or maintenance work may only be carried out by qualified and trained personnel.

- Only use original spare parts.

Check the equipment daily for signs of malfunction.

The filter must be changed if it is damaged or blocked and does not provide enough airflow.

The respiratory system unit must be checked regularly and replaced if it is damaged and leaking.

The breathing tube must be replaced if it is defective or cracked.

The battery must be charged when the low battery alarm sounds.

Use a soft cloth to wipe the outer surfaces. Do not use water.

The filter should be changed together with the front filter.

If the grinding helmet does not work properly, contact a specialist dealer or our customer service. You will find the contact details in chapter 1.2 Customer service.

## 13 Warning Sound Indication

The helmet is equipped with a sound and vibration alarm function. Each grid represents a period of 100 ms. Grey is the beep. The empty grid is a quiet period. When several continued grids are grey, a continuous beep sounds. For example, when the power is overloaded, the system sounds like beep ~ beep~.beep~~~~~~.

| 100ms per grid | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Install the battery | ■ | | | | | | | | | | |
| Turn on the system | ■ | | | | | | | | | | |
| Change the air flow speed | ■ | | | | | | | | | | |
| Turn off the system | ■ | ■ | ■ | ■ | ■ | | | | | | |
| Current overload | ■ | | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| Air outlet jam | ■ | | ■ | ■ | ■ | ■ | ■ | | | | |
| Over heat | ■ | | ■ | | ■ | | ■ | ■ | ■ | ■ | ■ |
| Low battery | ■ | | ■ | | | | | | | | |
| Filter jam | ■ | | ■ | | ■ | | | | | | |

Fig. 38: Table warning sound

# 14 Troubleshooting

| Fault | Possible Cause | Solution |
|---|---|---|
| Error code <<E01>> + blinks | 1. Motor is stuck<br>2. Motor is damaged<br>3. Fan structure failure<br>4. Circuit failure | Check and correct physical errors and restart the system. Contact your dealer if E01 is still displayed on the LCD. |
| Error code <<E02>> + blinks | 1. Motor is damaged<br>2. Motor impeller rubs against the fan shell<br>3. Circuit with excessive current | Check and correct physical errors and restart the system. Contact your dealer if E02 is still displayed on the LCD. |
| blinks + blinks+ Alarm sounds | Low battery level | Charge battery |
| blinks + blinkt+ Alarm signal sound | 1. FIlter is blocked<br>2. Hose is blocked | 1. Make sure nothing is blocking/ Change filter<br>2. Clean hose |
| blinks + Alarm signal sound | High battery temperature | Stop operation and let the device cool down. |
| No airflow, no alarm | 1. No power supply<br>2. Battery contacts are damaged | 1. Charge the battery<br>2. Check battery contacts |
| Battery life is too short | 1. Battery is not fully charged<br>2. Filter is blocked<br>3. Battery is damaged | 1. Charge the battery<br>2. Make sure nothing is blocking/ Change Filter<br>3. Replace the battery. |
| The air supply to the cover smells unusually | 1. Damaged Filter<br>2. Damaged hose<br>3. Damaged helmet | Leave the work area immediately<br>1. Change the filter<br>2. Change the hose<br>3. Change the helmet |
| Insufficient air supply to the helmet | 1. Breathing tube broken<br>2. Breathing tube damaged<br>3. Filter is blocked | 1. Check the hose connection to the cover and to the unit of the breathing protection system<br>2. Change the breathing hose<br>3. Make sure nothing is blocking/ Change the filter |

# 15 Disposal, Recycling of used Device

Please take care in your own interest and in the interest of the environment that all component parts of the machine are only disposed of in the intended and permitted way.

## 15.1 Decommissioning

Discarded devices must be taken out of service immediately in a professional manner in order to avoid later misuse and danger to the environment or persons.

- Remove batteries and accumulators, if available.
- If necessary, dismantle the welding helmet into manageable and recyclable assemblies and components.
- Dispose of the components in the designated disposal channels.

## 15.2 Disposal of the new equipment packaging

All packaging materials and packaging aids used are recyclable and must always be sent for material recycling.

These components are to be disposed of separately and in a professional manner. In case of doubt, contact the municipal waste disposal service.

If necessary, use the services of a specialised waste disposal company for processing.

# 16 Spare Parts

**DANGER!**
**Danger of injury by the use of wrong spare parts!**

Dangers may result for the user and damages as well as malfunctions may be caused by using wrong or damaged spare parts.

- Only use original spare parts of the manufacturer or spare parts admitted by the manufacturer.
- Always contact the manufacturer in case of uncertainties.

**Tips and recommendations**

The manufacturer's warranty will become null and void if non-permissible spare parts are used.

## 16.1 Ordering spare parts

The spare parts may be purchased with the authorised dealer .

Indicate the following basic information for requests or orders of spare parts:

- Type of device
- Item number
- Position number
- Year of construction:
- Quantity
- Required mode of dispatch (mail, freight, sea, air, express)
- Address of dispatch

Spare part orders which do not include the above indications may not be taken into consideration. If the indications regarding the mode of dispatch are missing, the product is dispatched at the discretion of the supplier.

You will find information regarding the device type, item No. and year of manufacture on the type plate fixed to the grind helmet.

**Example**

The protection pane for the VarioProtect GRIND grinding helmet must be ordered. The protection pane has the position number 4 in the spare parts drawing 1.

When ordering spare parts, send a copy of the spare parts drawing (1) with the marked spare part (protection pane) and the marked position number (4) to the authorised dealer or to the spare parts department and provide the following information:

- Type of device **VarioProtect GRIND**
- Item number: **1654200**
- Position number: **4**
- Spare parts drawing: **1**

| Type of device: | Item number: |
|---|---|
| VarioProtect GRIND | 1654200 |
| VarioProtect GRIND AIR | 1654205 |
| VarioProtect GRIND AIR without fresh air filter system | 1654206 |

## 16.2 Spare parts drawings

The following drawing should help you to identify necessary spare parts in case of service. If necessary, send a copy of the parts drawing with the marked components to your dealer.

### 16.2.1 Spare parts drawing VarioProtect Grind

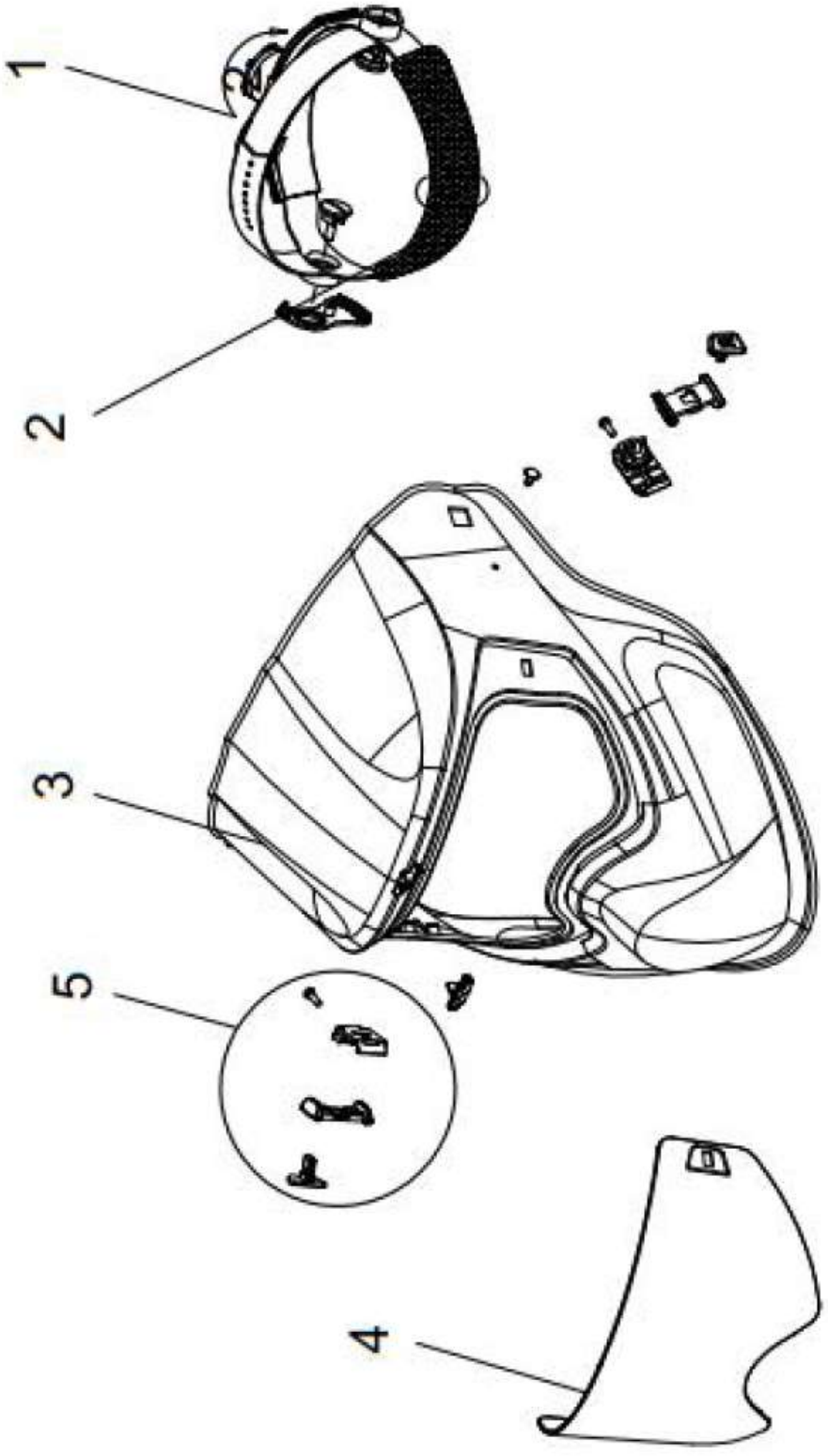


Fig. 39: Spare parts drawing VarioProtect GRIND

**Spare parts drawing VarioProtect GRIND AIR without fresh air filter system**


Fig. 40: Spare parts drawing VarioProtect GRIND AIR without fresh air filter system

### 16.2.2 Spare parts drawing VarioProtect Grind Air

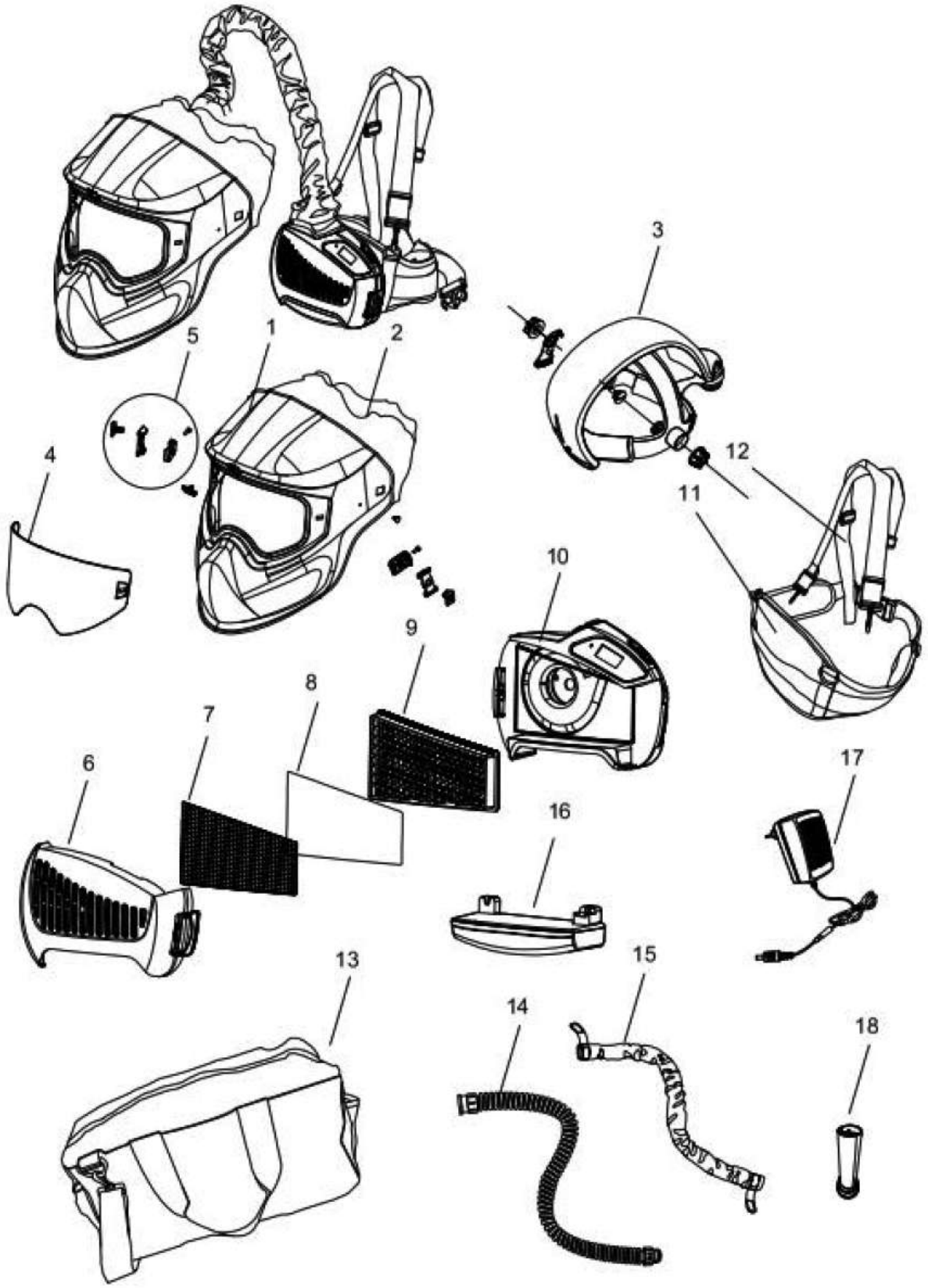


Fig. 41: Spare parts drawing VarioProtect GRIND AIR

### 16.2.3 Parts list for spare parts drawing VarioProtect GRIND AIR

| Pos. | Description |
|---|---|
| 1 | Helmet shell |
| 2 | Face seal |
| 3 | Air duct with head cover |
| 4 | Outer protection pane |
| 5 | Snap-on mechanism for viewing glass |
| 6 | Filter cover |
| 7 | Spark arrestor |
| 8 | Front filter |
| 9 | Filter |
| 10 | Turbo unit |
| 11 | Hip belt |
| 12 | Shoulder harness |
| 13 | Carrying bag |
| 14 | Breathing tube |
| 15 | Fireproof protection cover of breathing tube |
| 16 | Battery |
| 17 | Battery charger |
| 18 | Air flow tester |

| Pos. | Description |
|---|---|
| 1 | Headbands |
| 2 | Sweatband |
| 3 | Helmet shell /<br>Helmet shell with connection fresh air filter system |
| 4 | Outer protective glass |
| 5 | Snap mechanism sight glass |

# 17 EC - Declaration of Conformity

**Manufacturer/ Distributor:** Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Straße 26
D-96103 Hallstadt

hereby declares that the Personal Protective Equipment (PPE) described below complies with the provisions of Annex II of the PPE Regulation (EU) 2016/425, and is identical to the PPE that is the subject of the tests conducted by the accredited testing institutes

| Helmet for grinding work, face protection shield | TH3 P R SL Air filter unit |
|---|---|
| Certification authority | Certification authority |
| ECS GmbH<br>Hüttfeldstraße 50<br>73430 Aalen<br><br>Identification number: 1883 | Occupational Safety Research Institute, v.v.i.<br>Jeruzalémska 1283/9, Praha 1, Czech Republic<br><br>Identification number: 1024 |
| issued EU type examination certificate was.. | |
| C3081.1SWM | 1024/E-070/2020 |

**Product group:** Schweisskraft®

**Designation*:**
- ☐ VarioProtect GRIND Grinding Helmet 1654200
- ☐ VarioProtect GRIND AIR Grinding Helmet with air filter system 1654205
- ☐ VarioProtect GRIND AIR Grinding Helmet without air filter system 1654206

**Serial number*:** _____

**Year of manufacture*:** 20____

* please fill in these fields according to the information on the type plate

**Relevant EU-Directives:**

| | |
|---|---|
| 2001/95/EG | General Product Safety Directive |
| 2015/863/EU | RoHS III-Directive |

**The following harmonized standards were applied:**

| | |
|---|---|
| DIN EN 12941:2009-02 | Respiratory protective devices - Powered filtering devices incorporating a helmet or a hood - Requirements, testing, marking |
| DIN EN 175: 1997-08 | Personal protection - Equipment for eye and face protection during welding and allied processes |
| DIN EN 166:2002-04 | Personal eye-protection - Specifications |

**Responsible for documentation:** Kilian Stürmer, Stürmer Maschinen GmbH,
Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 19.10.2022

_____
Kilian Stürmer
Managing Director

CE

# 18 Notes





stürmer
WELT DER MASCHINEN

**Stürmer Maschinen GmbH**

Dr.-Robert-Pfleger-Straße 26
D-96103 Hallstadt

+49 951 96 555 - 0

info@stuermer-maschinen.de
www.stuermer-maschinen.de