EN

Contents

1. About this document

– Under copyright. Reproduction either in whole or in part only with our consent.
– Subject to change in the interest of technical progress.

Hazard warning!

Warning of hazards due to environmental influences!

Beware of toxic gases and fire hazards!

Warning of hazards from electricity!

2. General safety precautions

Failure to observe these operating instructions presents hazards!

These instructions contain important information on the safe use of this product. Particular attention is drawn to potential hazards. Failure to observe this information may lead to death or serious injuries.

- Read instructions carefully.
- Follow safety advice.
- Keep instructions within easy reach.

When using power tools, the following basic safety measures must be observed to protect against electric shock, risk of injury and fire. If the appliance is not handled with care, a fire may break out or people may be injured. Check the appliance for any damage (mains connection cable, housing, etc.) before commissioning and do not operate the appliance if it is damaged.

Do not operate the appliance unsupervised. Children should be supervised to ensure that they do not play with the appliance.

Initial commissioning

Some smoke may be emitted on first use. The smoke is caused by binding agents that are released from the insulating foil of the heater by the heat during the first use. The appliance should be placed on its base to ensure that smoke is emitted quickly. The working area should be well ventilated during the first use. The smoke emitted is not harmful!

Warning of hazards due to environmental influences!

- Do not expose power tools to rain. Do not use power tools when damp or in a damp or wet environment.
- Take care when using the appliances in the vicinity of flammable materials.
- Do not aim at the same spot for long periods of time.
- Do not use in the presence of an explosive atmosphere.
- Heat can be conducted to combustible materials that are covered.

Warning of hazards from electricity!

- Avoid coming into contact with earthed objects, such as pipes, radiators, cookers or refrigerators.
- Do not leave the tool unattended while it is in operation.

Store your tools in a safe place.

- After use, set the tool down on its standing surface and let it cool before putting it away.
- When not in use, tools must be stored in a dry, locked room out of children’s reach.

- This tool may be used by children aged 8 or above and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they are supervised or have been given instructions on how to use the tool safely and understand the hazards involved.
- Do not allow children to play with the tool.
- Children are not allowed to clean or carry out maintenance work on the tool without supervision.

Do not overload your tools!

- You work better and more safely in the specified power range.
- Do not carry the tool by the cable and do not use it to pull the plug out of the socket.
- Protect the cable from heat, oil and sharp edges.
- Always ensure that the discharge pipe is never completely covered or closed, even when the nozzle is fitted.
- Otherwise damage to the heater or motor may result.

Beware of toxic gases and fire hazards!

- For your own safety, only use accessories and attachments that are specified in the operating instructions or recommended or specified by the tool manufacturer.
- The use of tools or accessories other than those recommended in the operating instructions or in the catalog may pose a risk of personal injury to you.

Repairs only by a qualified electrician

- This power tool complies with the relevant safety regulations.
- Repairs should only be performed by a qualified electrician. Otherwise the user may run the risk of accidents.

3. Device elements

3.1 HM 1620 S

1 Stainless steel outlet nozzle
2 Air inlet with lattice guard keeps out foreign matter
6 Heavy-duty rubber-insulated power cord
7 Multiple-stage switch for adjusting airflow (2-stage / 3-stage)

3.2 HM 1820 E

1 Stainless steel outlet nozzle
2 Air inlet with lattice guard keeps out foreign matter
3 Removable guard sleeve (for places that are hard to reach)
4 Soft stand
5 Soft end cap for firm standing and non-slip stationary use
6 Heavy-duty rubber-insulated power cord
7 Multiple-stage switch for adjusting airflow (2-stage / 3-stage)
11 Soft grip handle for comfortable operation
12 Hanging capability

3.3 HM 1920 E

1 Stainless steel outlet nozzle
2 Air inlet with lattice guard keeps out foreign matter
3 Removable guard sleeve (for places that are hard to reach)
4 Soft stand
5 Soft end cap for firm standing and non-slip stationary use
6 Heavy-duty rubber-insulated power cord
7 Multiple-stage switch for adjusting airflow (2-sta ge / 3-stage)
8 Thumbwheel for setting temperature
11 Soft grip handle for comfortable operation
12 Hanging capability

3.4 HM 2020 E

1 Stainless steel outlet nozzle
2 Air inlet with lattice guard keeps out foreign matter
3 Removable guard sleeve (for places that are hard to reach)
4 Soft stand
5 Soft end cap for firm standing and non-slip stationary use
6 Heavy-duty rubber-insulated power cord
7 Multiple-stage switch for adjusting airflow (2-sta ge / 3-stage)
9 Button for setting temperature
10 LED indicator for monitoring temperature
11 Soft grip handle for comfortable operation
12 Hanging capability
13 Residual heat indicator (HM 2020 E only)
14 Replaceable mains power cord (HM 2020 E only)

Accessories

1 Surface nozzle 50 mm
2 Surface nozzle 75 mm
3 Window nozzle 50 mm
4 Window nozzle 75 mm
5 Paint scraper kit
6 Reflector nozzle
7 Crimp connectors Ø 0.5 – 1.5, Ø 1.5 – 2.5, Ø 0.1 – 0.5, Ø 4.0 – 6.0
8 Shrink tubings 4.8 – 9.5 mm, 1.6 – 4.8 mm, 4.0 – 12.0 mm, Shrink tubing set, 3-piece
9 Soldering reflector nozzle*
10 Reduction nozzle 14 mm*
11 Reduction nozzle 9 mm*
12 Fine dust filter
13 HL-Scan
14 Wide slot nozzle*
15 Pressure roller
16 Plastic welding rod*
Rigid PVC, HDPE, PP, ABS
17 Welding shoe*

* only for HM 1920 E und HM 2020 E

For your safety:

These hot air tools are doubly protected from overheating:
1. A thermostat switches the heater off if too much of the air outlet nozzle is obstructed (heat build-up). However, the blower continues to run. A warning triangle on the display tells you that the heater is switched off. Once the air delivery nozzle is clear again, the heater automatically switches back on again after a few moments. The warning triangle then goes out. The thermostat may also respond after switching the hot air tool off, taking it longer than usual to reach temperature at the air delivery nozzle when it is switched on again. (for HM 2020 E only)
2. The thermal cut-out completely shuts down the tool if it is overloaded.

Residual heat indicator (HM 2020 E only)

The residual heat indicator serves as a visual warning to prevent injury from direct contact with the hot nozzle outlet. The residual heat indicator also works when the tool is unplugged. The indicator starts working after the tool has been in use for 90 seconds and keeps flashing until the temperature at the nozzle outlet has fallen below 60 °C at room temperature. The residual heat indicator does not show if the tool has been in operation for less than 90 seconds. Responsibility always rests with the user as care must be taken at all times when handling hot air tools.

4. Commissioning

Please note: The distance from the object you are working on depends on material and intended method of working. Always try out the airflow and temperature on a test piece first. Using the attachable accessory nozzles (see accessories page on the cover) the flow of hot air can be controlled with maximum precision.
Take care when changing hot nozzles! When using the hot air tool in the self-resting position, make sure it is standing on a stable, non-slip and clean surface.

HM 1620 S
The tool is switched on and off at the two-stage switch on the back of the grip handle. Airflow and temperature can be adjusted to 2 settings. Stage 1 reaches 300 °C at an airflow of 240 l/min, stage 2 reaches 500 °C at 450 l/min. This tool is intended for home use only.

HM 1820 E
The tool is switched on and off via the three-stage switch on the back of the grip handle. Airflow and temperature can be adjusted to 3 settings. Stage 1 (cool air stage) reaches 50 °C at an airflow rate of 100 l/min, stage 2 reaches 400 °C at 300 l/min and stage 3 reaches 600 °C at 500 l/min. The guard sleeve detaches by means of a bayonet catch.

HM 1920 E
The tool is switched on and off at the two-stage switch on the back of the grip handle. In addition to three-stage speed / airflow control (stage 1 is a cold-air stage at 80 °C), temperature can be continuously adjusted over a range of 80 °C – 600 °C in settings 2 and 3 at the thumbwheel. The numbers 1 – 9 on the thumbwheel serve as a guide only. Whereas "1" means 80 °C, the maximum temperature of 600 °C is attained at "9". Airflow can be adjusted to the three stages of 150 / 150-300 / 300-500 l/min.

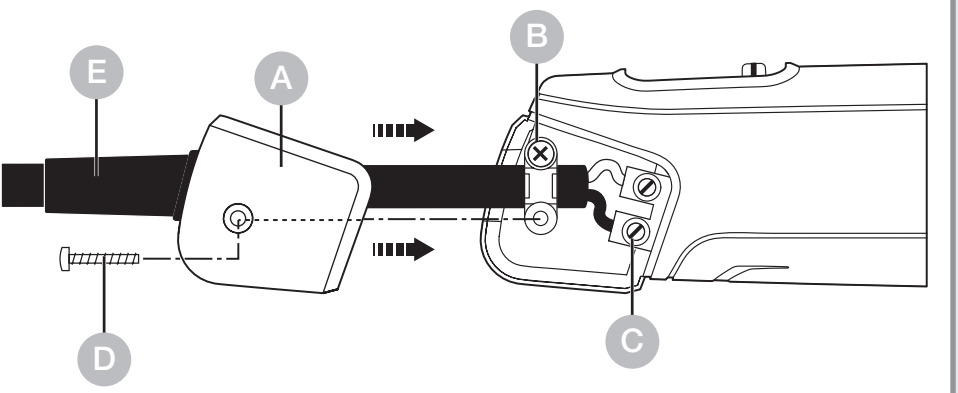
The guard sleeve detaches at a bayonet catch.

HM 2020 E

The tool is switched on and off at the two-stage switch on the back of the grip handle. In addition to three-stage speed / airflow control at the switch, temperature can be continuously adjusted over a range of 80 °C to 630 °C in settings 2 and 3 at the rocker switch. The target temperature can be increased in 10 °C increments by pressing the right-hand "+" side of the rocker switch or reduced by pressing the left-hand "–" side of the rocker switch. Keeping the button pressed will continue to increase or reduce the temperature in steps of 10 °C until the rocker button is released or the minimum or maximum temperature is set. The temperature setting is shown on the display for 3 seconds. On lowering or increasing the temperature, the actual temperature is then displayed at the delivery nozzle. The °C / °F symbol flashes during this period. As soon as the selected temperature is reached, this symbol stops flashing and is displayed all the time.
Blower stage 1 delivers a temperature of 80 °C.
When the tool has been operating at high temperatures on blower stage 2 or 3 it will take a short while to cool to 80 °C after switching down to blower stage 1. While the tool is cooling down, the LCD display shows the actual temperature at the nozzle outlet. After switching off, the tool stays in the last setting that was selected.
The guard sleeve detaches at a bayonet catch.

Changing the power cord (HM 2020 E only)
If the power cord is damaged, it can easily be changed without opening the casing.

4.1



Important! Disconnect tool from power supply.
1. Undo screw D and pull off cover cap A.
2. Release cable grip B.
3. Undo mains terminals C.
4. Pull out cable E.
5. Insert new cable and secure in reverse order (1. Firmly screw down mains terminals etc.).

5. Applications

Here are some of the applications you can use STEINEL hot air tools for.

5.1 HM 2020 E

Stripping paint: paint is softened and can be removed with a stripping knife and paint scraper to leave a clean surface.

Applying heat-shrinkable tubings: The shrink tubing is slipped over the section you want to insulate and heated with hot air. The tubing shrinks by approx. 50% in diameter to give a sealed union. Shrinking is particularly fast and even using reflector nozzles. Sealing and stabilising cable breaks, insulating soldered joints, gathering cable runs, sheathing terminal blocks.

5.2 HM 1920 E

Shaping PVC: tiles, piping or ski boots can be softened and formed with hot air.

Thawing: Water pipes, frozen door locks, steps. Gently thaws and dries all in one go.

Soft soldering: First, clean metal parts you want to join. Then, using hot air, heat the point you want to solder and offer up the soldering wire. Use flux or a soldering wire with a flux core to prevent oxide formin

5.3 HM 1820 E

Stripping paint: paint is softened and can be removed with a stripping knife and paint scraper to leave a clean surface.

Lightning barbecues: Gets charcoal glowing in next to no time; no more waiting.

Applying heat-shrinkable tubings: The shrink tubing is slipped over the section you want to insulate and heated with hot air. The tubing shrinks by approx. 50% in diameter to give a sealed union. Shrinking is particularly fast and even using reflector nozzles. Sealing and stabilising cable breaks, insulating soldered joints, gathering cable runs, sheathing terminal blocks.

5.4 HM 1620 S

Welding and joining plastic: all parts being welded must be of the same plastic material. Use an appropriate welding rod.

Welding sheeting: The sheets are overlapped and welded together. A slit nozzle is used to direct hot air under the overlap, then the two sheets are firmly pressed together with a feed roller.
Also possible: **Repairing PVC tarpaulins** by overlap welding with a slit nozzle.

Lightning barbecues: Gets charcoal glowing in next to no time; no more waiting.

Guide for selecting the right type of welding rod for welding plastics

Material / Applications / Characteristic signs

- **Rigid PVC** / Pipes, fittings, tiles, structural sections, technical mouldings, 300 °C welding temperature / Chars when held in flame, pungent odour; crashing sound
- **Rigid PE** (HDPE) Polyethylene / Tubs, baskets, canisters, insulating material, piping, 300 °C welding temperature / Light yellow flame, drips continue to burn, smells of a candle being extinguished; crashing sound
- **PP** Polypropylene / High-temperature drainpipes, seat buckets, packagings, automotive parts, 250 °C welding temperature / Bright flame with a blue core, drips continue to burn, pungent odour; crashing sound
- **ABS** / Automotive parts, equipment enclosures, cases 350 °C welding temperature / Black, fluffy smoke; sweet odour; crashing sound

6. Disposal

Electrical and electronic equipment, accessories and packaging must be recycled in an environmentally compatible manner.

Do not dispose of electrical and electronic equipment as domestic waste.

EU countries only:
Under the current European Directive on Waste Electrical and Electronic Equipment and its implementation in national law, electrical and electronic equipment no longer suitable for use must be collected separately and recycled in an environmentally compatible manner.

7. Declaration of conformity

STEINEL GmbH hereby declares that the hot air blower HM 1620 S, HM 1820 E, HM 1920 E and HM 2020 E complies with Directive 2006/42/EC.
The full text of the EU Declaration of Conformity is available at the following Internet address:
www.steinel.de

8. Manufacturer‘s warranty

Manufacturer’s warranty of STEINEL GmbH, Dieselstrasse 80-84, DE-33442 Herzebrock-Clarholz, Germany
All STEINEL products meet the highest quality standards. For this reason, we, the manufacturer, are pleased to provide you, the consumer, with a warranty under the following terms and conditions:
The warranty covers the absence of deficiencies which are proven to be the result of a material defect or fault in manufacturing and which are reported to us immediately after detection and within the warranty period. The warranty shall apply to all STEINEL products sold and used in Germany - excluding STEINEL Professional products.
You can opt for warranty cover in the form of repair or replacement which will be provided free of charge (if applicable, in the form of a successor model of the same or higher quality) or in the form of a credit note.
The warranty period for the STEINEL product you have purchased is **3 years** (5 years for products from the XLED home range) in each case from the date on which the product was purchased.
We shall bear the shipping costs but not the transport risks involved in return shipment.

Statutory rights accruing from defects, gratuitousness
The warranty cover described here shall be applicable in addition to the statutory rights of warranty – including special consumer protection provisions – and shall not restrict or replace them. Exercising your statutory rights in the event of defects is gratuitous.

Exemptions from the warranty
All replaceable lamps are expressly excluded from this warranty. In addition to this, the warranty shall not cover:

– any wear resulting from use or any other natural wear of product parts or any deficiencies in the STEINEL product that are attributable to wear caused by use or other natural wear,

– any improper or non-intended use of the product or any failure to observe the operating instructions,
– any unauthorised additions, alterations or other modifications to the product or any deficiencies attributable to the use of accessory,
– supplementary or replacement parts which are not genuine STEINEL parts,
– any maintenance or care of products that is not carried out in accordance with the operating instructions,
– any attachment or installation that is not in accordance with STEINEL's installation instructions,
– any damage or loss occurring in transit.

Application of German law

The warranty shall be governed by German law excluding the United Nations Convention concerning the International Sale of Goods (CISG).

Making claims

If you wish to make a warranty claim, please send your product complete and carriage paid with the original receipt of purchase, which must show the date of purchase and product designation, either to your retailer or directly to us at STEINEL (UK) Ltd. – 25 Manasty Road, Axis Park, Orton Southgate, GB- Peterborough Cambs PE2 6UP United Kingdom. For this reason, we recommend that you keep your receipt of purchase in a safe place until the warranty period expires.

3 YEAR MANUFACTURER'S WARRANTY

9. Technical specifications

HM 1620 S

- Voltage: *220 – 230 V, 50/60 Hz*
- Output: *1,600 W*
- Stage / Airflow rate / Temperature:
  1 / 240 l/ min / 300 °C
  2 / 450 l/ min / 500 °C
- Residual heat indicator: *No*
- Protection class: *II*
- Thermal cut-out: *Yes*
- Emission sound pressure level: *≤ 70 dB (A)*
- Total vibration value: *≤ 2.5 m/s² I K = 0.08 m/s²*
- Weight: *0.670 kg*

HM 1820 E

- Voltage: *220 – 230 V, 50/60 Hz*
- Output: *1,800 W*
- Stage / Airflow rate / Temperature:
  1 / 100 l/ min / 50 °C
  2 / 300 l/ min / 400 °C
  3 / 500 l/ min / 600 °C
- Residual heat indicator: *No*
- Protection class: *II*
- Thermal cut-out: *Yes*
- Emission sound pressure level: *≤ 70 dB (A)*
- Total vibration value: *≤ 2.5 m/s² I K = 0.08 m/s²*
- Weight: *0.800 kg*

HM 1920 E

- Voltage: *220 – 230 V, 50/60 Hz*
- Output: *2,000 W*
- Stage / Airflow rate / Temperature:
  1 / 150 l/ min / 80 °C
  2 / 150 – 300 l/ min / 80 – 600 °C
  3 / 300 – 500 l/ min
- Temperature setting: *Infinitely variable in 9 increments via setting dial*
- Residual heat indicator: *No*
- Protection class: *II*
- Thermal cut-out: *Yes*
- Emission sound pressure level: *≤ 70 dB (A)*
- Total vibration value: *≤ 2.5 m/s² I K = 0.04 m/s²*
- Weight: *0.840 kg*

HM 2020 E

- Voltage: *220 – 230 V, 50/60 Hz*
- Output: *2,200 W*
- Stage / Airflow rate / Temperature:
  1 / 150 l/ min / 80 °C
  2 / 150 – 300 l/ min / 80 – 630 °C
  3 / 300 – 500 l/ min
- Temperature setting: *Infinitely variable in 10 °C steps via pushbutton*
- Temperature display: *LCD*
- Residual heat indicator: *Yes*
- Protection class: *II*
- Thermostat: *Yes*
- Thermal cut-out: *Yes*
- Emission sound pressure level: *≤ 70 dB (A)*
- Total vibration value: *≤ 2.5 m/s² I K = 0.04 m/s²*
- Weight: *0.880 kg*