

Operating instructions

(Translation from German original version)

Heat cutter Type HSG-1-VW (-K) (-ASV-M)



These operating instructions are to be treated confidentially.

Assignment to third parties is prohibited and obliges to pay damages.

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Operating instructions

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Operating instructions

1. Symbols used



This instruction manual is part of this product. Please read this instruction manual carefully and keep it for later use!

Warning sign

In this operating manual and, if necessary, also on the device, the following warning signs are used for occupational safety instructions where there is a danger to life and limb of persons.

Follow these instructions and behave particularly carefully in these cases.



Attention danger in general!



Danger from electric current
or voltage!



Danger from hot surface!

Prohibition signs



Do not dispose of in
household waste!

Mandatory signs



Use eye protection!



Use protective clothing!



Use protective gloves!



Operating instructions

2. Warning Concept/Signal Words

This operating manual contains information that you must observe for your personal safety and to avoid property damage. The notices are highlighted by one of the above warning signs, notes for sole information are without warning signs. Depending on the hazard level, the warnings are displayed in decreasing order as follows.

Warnings/Signal Words



DANGER!

Means that death or serious bodily injury will occur if the appropriate precautions are not taken.



WARNING!

Means that death or serious bodily injury can occur if the appropriate precautions are not taken.



CAUTION!

Means that minor bodily injury can occur if the appropriate precautions are not taken.



ATTENTION!

Means that property damage can occur if the appropriate precautions are not taken.



HINT!

Means important information about the product or the highlighting of a part of the documentation to which special attention should be drawn.

If several hazard levels occur, the warning for the highest level is always used.

If a warning warns of personal injury with the warning triangle, then a warning of property damage may also be attached to the same warning.



Operating instructions

3. Functional description and intended use



HINT!

The device is used in the commercial sector.

The device is suitable for cutting and simultaneous blade welding of cords, ropes, ropes, belts and braided tubes made of fully synthetic fibers such as polyamides, polyacrylnitril, polyester, polyethylene, etc.

The prerequisite, however, is that the material consists of fully synthetic fibers, without any non-meltable threads.

The cutting belt, which is electrically heated directly via a safety transformer, is heated to approx. 600 °C in 6 to 8 seconds. Any thermoplastic material that comes into contact with this cutting belt will melt. In the thread bond, the individual warp and weft threads tend to flow into each other at a sufficiently close distance and thus form a gapless, welded blade. The blades welded in this way do not fray, prevent tears and in many cases make sewing unnecessary.



ATTENTION!

Operation under adverse environmental conditions is not permitted.

Adverse environmental conditions are:

- Wetness or excessive humidity,
- dust and flammable gases, vapours or solvents,
- Strong vibrations.



Operating instructions

4. Safety



ATTENTION!

In the event of damage caused by non-observance of these operating instructions, the warranty claim expires! We assume no liability for consequential damages! We assume no liability for property damage or personal injury caused by improper handling or non-observance of the safety instructions. In such cases, any warranty claim will expire.



Hints

1	For safety reasons, unauthorized modification and/or modification of the hot cutting device is not permitted.
2	The voltage source may only be a proper mains socket (230 volts / 50 Hz) of the public supply network.
3	Devices that are operated on mains voltage do not belong in children's hands. Therefore, take special care in the presence of children
4	Make sure that the hot cutting device is properly commissioned. Please refer to these operating instructions.
5	Commissioning must be carried out by suitably qualified persons to ensure the safe operation of this product. The operator must ensure that all employees who handle the device have read and understood the operating instructions.
6	Observe all safety and hazard instructions on the appliance and keep them in legible condition.
7	Make sure that the power cord does not come into contact with heat, oil or sharp blades when operating the appliance. Damaged power lines can cause fires, short circuits, and electric shocks.
8	Do not expose the hot cutter to high temperatures, strong vibrations or moisture.
9	In addition to the safety instructions in this operating manual, the applicable safety, accident prevention and environmental protection regulations must be observed.
10	Spare parts must comply with the technical requirements set by the manufacturer. The installation of parts that are not original parts can lead to a hazard to people and equipment. This excludes any liability of the manufacturer.



CAUTION!

The fumes produced during cutting must be removed with an extraction device directly at the cutting blade when working in rooms, or only work in well-ventilated rooms.

PVC and PVC-coated materials must not be processed because of the harmful fumes produced during cutting.



Operating instructions



CAUTION!

Be aware of the risk of burns when handling the device!

The cutting blade can reach temperatures up to about 600° Celsius. Do not touch the cutting blade after turning on the device. Do not lean the machine against objects until the cutting blade has cooled down completely.



DANGER! DANGER TO LIFE DUE TO ELECTRIC SHOCK!

If water penetrates the housing, a fatal electric shock can occur.

Keep the device away from the water.

If water penetrates, immediately unplug and stop using the device.

5. Personal protective equipment



HINT

The following protective equipment must be worn when working on the device:

- Eye protection
- Protective clothing
- Gloves



WARNING!

Molten plastic and splashes can cause serious burns or eye damage!

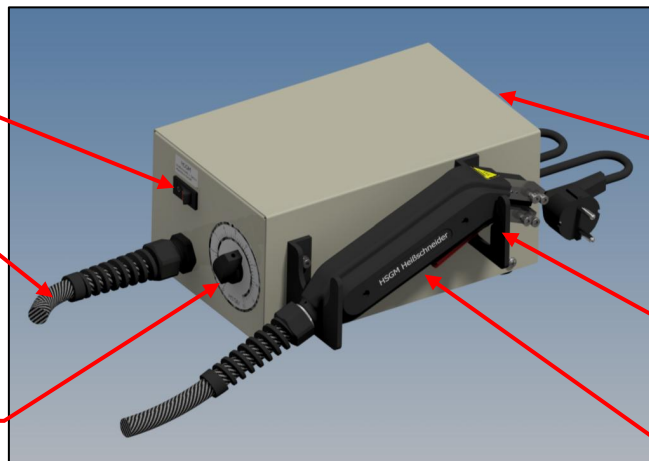
Operating instructions

6. Structure of the device

ON-OFF switch
with lighting

Welding Cable SK

Power Control Knob
= Temperature controller



On the back of the case
there are:
- Power line with
Safety plug
- Fuse holder

Support bracket*
2 pieces

Cutting blade holder M

7. Commissioning

- Attachment of the support brackets* to the housing. Only M4 x 10 screws with washer and toothed washer may be used to attach the support brackets. (*Only in combination with the blade holder-M!)
- Check that the existing mains voltage matches the voltage indicated on the nameplate.
- Depending on the type of work to be carried out and the thickness of the material, different cutting blades are available. Please refer to the list sheet Hot Cutting Devices / Cutting Blades.



HINT!

Only use the cutting blade when the device is switched off.

The rocker of the on-off switch is in the -0- position.

This means that the signal lamp of the on-off switch is not lit.

Turn the power knob to the left to the min position -0-.

- Attach the cutting blade to the cutting blade holder.



ATTENTION!

When inserting the cutting blade, care must be taken to ensure a tight screw connection to ensure a perfect passage of current. Poor connections or loose fittings lead to unnecessary heating of the clamps, the working performance of the cutting blade decreases and heating on one or both terminals can lead to damage to the cutting blade holder.



Operating instructions

- After pressing the on-off switch, the device is ready for operation. The on-off switch signal light is on.
- ☞ The cutting blade must not heat up yet.



HINT!

Depending on the material, thickness and cutting speed, a certain temperature is required.

This adjustment is made by means of the power control knob (= temperature controller).

After a few practice cuts, the operator will easily have the right feeling for adjusting the cutting blade temperature and guiding the cutting blade holder with the cutting blade.

The effective settings of the power control knob (= temperature controller) are to be determined empirically, since the power requirement of the cutting blades is very much dependent on the type and thickness of the material to be cut and is therefore subject to strong fluctuations, especially for all shaped cutting blades (round, oval, square, angular, etc.), as well as the length of the cable (welding cable) between transformer (housing) and cutting blade holder (standard 2m).

- Operate or hold down the gear lever. (Only in combination with the cutter holder-M!)
- Slowly turn the temperature controller clockwise to the right until the inserted cutting blade is dark red.



ATTENTION!

The gear lever must not be mechanically locked or electrically overridden.



HINT!

The working or cutting surface should be made of a smooth material that extracts as little heat as possible from the cutting blade so that all the power is available for the cutting process.

Glass with a thickness of 4-6 mm is ideally suited for this.

After the work is finished, the cutter holder can be placed in the retaining bracket.

The gear lever automatically returns to its end position. (Only in combination with the cutter holder-M!)



Operating instructions

7.1. Blade holder for fixed attachment (optional)

The device can optionally be equipped with a cutting blade holder for fixed attachment to an existing customer's device, the terminal block type: NV-IV.

In this version, the contact for switching on the heating on the welding cable is already bridged by bringing the switching wires together and the support brackets are omitted.

7.2. Air-cooled cutting blade holder (option -K)

The device can optionally be equipped with an air-cooled cutting blade holder at the factory. Cooling air is blown into the cutting blade holder through an air hose laid in the welding cable. This is used to cool the connection terminals for the cutting blade and the welding cables inside. This means that even powerful cutting blades can be operated over a longer period of time without the cutting blade holder being thermally overloaded. On the back of the device is mounted a connection plug for the cooling air and a throttle valve for adjusting the cooling capacity. Turning counterclockwise increases the cooling capacity, while turning clockwise reduces the cooling capacity.

7.3. Suction device

7.3.1. (Option -ASV-M in combination with vacuum pump -ASP)

The device can optionally be equipped with a suction device type –ASV at the factory or at a later date. You will also receive the following accessories:

- 1) Vacuum pump type –ASP/ (SP) ready for use equipped with a motor circuit breaker and a 3m mains supply cable with CEE plug 400V/16A. The intake air is supplied to the pump filtered via a suction filter VF-11/4B 1.53.2.003 incl. filter cartridge C112 2.53.2.0005.
- 2) Vacuum suction hose with steel wire spiral Item No.: 2700190132 Identification No.: 113910 Ø i= 12mm / a=18mm



HINT!

For proper functioning, it is important to pay attention to the permeability of the suction device and, if necessary, to clean it.

Operating instructions

7.3.2. (Option -ASV-M in combination with vacuum pump -ASP (SP) Z. no. G20091-000)

The device can optionally be equipped with a suction device type –ASV at the factory or at a later date. You will also receive the following accessories

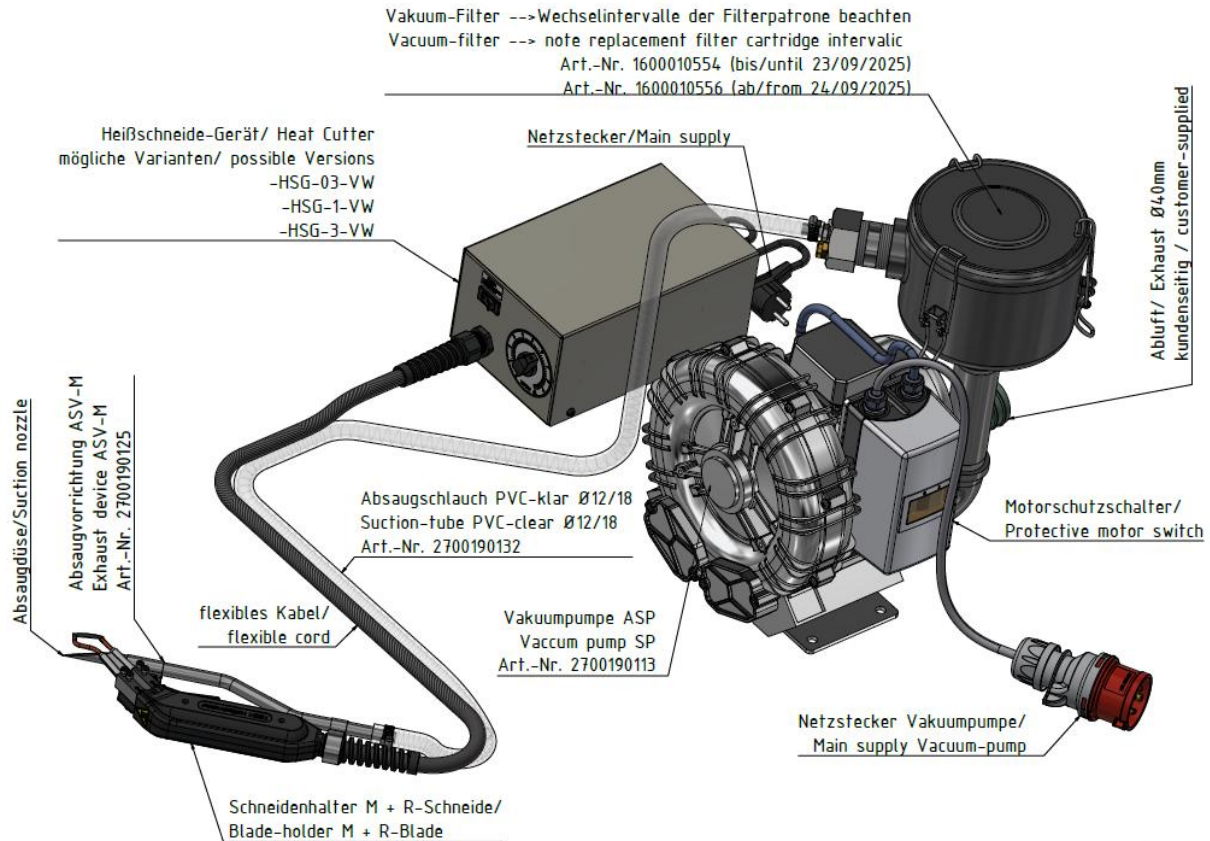


Abbildung ähnlich/
 Similar illustration

Overview sketch

- 1) Vacuum pump type –ASP/ (SP) ready for operation equipped with a motor circuit breaker and a 3m power supply cable with CEE plug 400V/16A (optionally with 230V Schuko plug).

The intake air is supplied to the pump filtered via a:

- Intake filter from 9/2025 F.003 1_1/4 (until 9/2025 VF-11/4B 1.53.2.003) incl.
- Filter cartridge from 9/2025 K.2051 (until 9/2025 C112 2.53.2.0005)

- 2) Vacuum suction hose with steel wire spiral Item no.: 2700190132 Ø i= 12mm / a=18mm



HINT!

For proper functioning, it is important to pay attention to the permeability of the suction device and, if necessary, to clean it.



Operating instructions

8. Handling

Never operate your hot cutter as soon as it is moved from a cold to a warm room. The resulting condensation can destroy your hot cutting machine under unfavourable circumstances.



HINT!

First, let your hot cutter come to room temperature when it is not switched on.



ATTENTION!

The operator is obliged to operate the device only in perfect condition.

Danger spots that arise due to the linking of equipment must be secured by the operator.

9. Maintenance



ATTENTION!

Switch off the appliance before cleaning or maintenance work and secure it against accidental switch-on.

This is done by unplugging it.

The operator must be able to check that the mains plug is still removed from any place to which he or she has access.



CAUTION!

The cutting blades of the device become very hot during operation.

When handling the cutting blades of the device, be aware of the risk of burns.

The cutting blades can reach temperatures up to about 600 ° Celsius.

Before cleaning, let the cutting blades cool for at least 15 minutes.



HINT!

Repairs may only be carried out by the manufacturer or its customer service.



Operating instructions

Regularly check the technical safety of your hot-cutting device, e.g. damage to the power cable or housing. If the mains connection cable of this device is damaged, it must be replaced by the manufacturer or its after-sales service or a similarly qualified person to avoid hazards.

If it can be assumed that safe operation is no longer possible, the equipment must be decommissioned and secured against unintentional operation. Unplug from the socket!



HINT

It can be assumed that a safe operation is no longer possible,

- if the device has visible damage,
- if the device stops working, and
- after prolonged storage under unfavorable conditions, or
- after heavy transport loads.

10. Troubleshooting



ATTENTION!

Be sure to follow the safety instructions as described in chapter 4 described.

With this hot cutting device, you have acquired a product that has been built according to the state of the art and is operationally reliable.

Nevertheless, problems or disruptions may occur.

Therefore, we would like to describe here how you can fix possible malfunctions:

Problem	Possible cause of the fault	Removal
No function	ON-OFF switch not pressed	Press ON-OFF switch
	Device power plug not in the socket	Plug in appliance power plug
	Cutting blade not clamped	Clamp cutting blade
	Built-in fine fuse blown	Contact customer service



Operating instructions

11. Specifications

Type	HSG-1-VW
Line voltage:	230 V/115 V - 50/60 Hz
Class:	I - Protective earthing
Recording power:	Max. 160 W
Mode:	Continuous operation 100% ED
Dimensions:	155 x 220 x 105 mm
Weight:	5.8 kg
Fuse Rating:	Mains voltage 230/240 V: 1 A inertia Mains voltage 115 V: 2 A inertia
Other:	Power switch with signal lamp Power cable 3 m long, with safety plug

12. Ambient conditions

Type	HSG-1-VW
Operating temperature range (min. +max.):	+5 °C to +40 °C
Relative humidity:	max. 85 %
Atmospheric pressure:	600 to 1000 hPa

13. Spares

For spare parts orders, please specify:

of the device type (information on the type can be found on the nameplate or in the user manual)

the device number (*the device number can be found on the nameplate*)

14. Disposal



HINT!

The symbol of the "crossed-out garbage can" means that the device must not be disposed of in the household waste!

An unusable device can be returned free of charge to the retailer or the manufacturer, or disposed of at a designated collection point for waste electrical and electronic equipment.

If the old electrical or electronic equipment contains personal data, you are responsible for deleting it yourself before returning it.



Operating instructions

15. Warranty

You get a 1-year warranty for this device. The cutting belt is excluded from the warranty.

The warranty claim begins on the day of purchase.

This warranty covers all defects resulting from any defects in materials or workmanship.



HINT!

The warranty is void in the event of improper or abusive handling.

16. EU Declaration of Conformity

according to the guidelines:

2004/108/EC	"Electromagnetic compatibility"
2006/95/EC	"Electrical equipment for use within certain voltage limits"
2011/65/EC	"RoHS Directive"

We hereby declare that the device described below meets the essential safety and health requirements of the above-mentioned guidelines in its conception and design as well as in the design we place on the market. In the event of a change to the device that has not been agreed with us, this declaration loses its validity.

Manufacturer / distributor:

HSGM
Heisschnitt-Geräte und -Maschinen GmbH
Industriestrasse 30
D-65366 Geisenheim - Germany

Description of the device:

Product name: Heat cutter
Type: HSG-1-VW
Data: 230 V, 50 Hz (115 V, 60 Hz)
Rated power: 160 W

Date of declaration: 08.10.2025

Signature:

Geisenheim, 08.10.2025

Name and position of the signatory: Stephan Herrmann / Managing Director