HSGM

Heißschneide-Geräte
u.- Maschinen GmbH

Operating Instructions

Heat cutting device
Model HSG-MK-S1-2,4/020

HSG-MK-S1-2,4/020
with bladeholder MK-S1-105
and inserted blade MK-S1-N.
Please note: Basic kit is without blade!

General information

These Operating Instructions belong to this product.
They contain important information about commissioning and operation.
Important information for your safety are specially marked.

Explanation of symbols

Warnings and Precautions!

Warning about a hot surface!

Warning about dangerous voltage!

To prevent accidents and damage to the device, it is essential to heed these signs.
Please also observe this if passing the product on to others.
For this reason, please keep the Operating Instructions for further reference!

Introduction

Dear Customer, thank you for purchasing the heat cutting device.
With this heat cutting device, you have bought a state of the art product.
The product meets the requirements under applicable European and national regulations.
As user, you must follow these Operating Instructions to maintain this situation and guarantee safe operation!

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Intended use

This tool - in connection with the blade type MK-S1 - is suitable to cut and at the same time seal the edges of fabric and webbings, preferably synthetic curtain material.
The very light weight blade holder MK-S1 allows easy cutting of curved or shaped forms out of the fabric. The extremely pointed curved cutting blade MK allows cutting of even smallest corners and edges.

However, for this, the material must be made of fully synthetic fibres, w i t h o u t the inclusion of non-melting threads.

The cutting blade is directly electrically heated to approx. 600°C in 6 to 8 seconds by a safety transformer. Any thermoplastic material that comes into contact with this cutting blade melts. In the fibre arrangement, the individual warp and weft threads if close enough have a tendency to flow into each other, thereby forming an uninterrupted, sealed edge. The edges sealed in this way do not fray, prevent tears and in many cases mean that there is no need for a hem.

Operation under adverse ambient conditions is not permitted.
Adverse ambient conditions are:

- Wet conditions or excess humidity;
- Dust and flammable gases, vapours or solvents;
- Strong vibrations.

Safety information

Damage caused by a failure to observe these Operating Instructions invalidates the warranty!
We will not assume any liability for consequential damage!
We will not assume any liability for damage to property or for personal injury caused by incorrect use or failure to observe the safety instructions. All warranty claims will become invalid in these cases.

For safety reasons, the unauthorised modification and/or alteration of the heat cutting device is not permitted.

The voltage must be supplied using a regular mains socket on the public grid. Attention must be paid to the supply voltage specified on the type plate.

Ensure that the heat cutting device is correctly commissioned, paying attention to the Operating Instructions.

The commissioning must be performed by qualified staff in order to ensure the safe operation of this product.

Make sure that the power cord does not come into contact with heat, oil or sharp edges during operation of the device. Damaged power cords can cause fires, short circuiting and electric shocks.

Do not expose the heat cutting device to high temperatures, strong vibrations or moisture.

Devices powered by mains voltage do not belong in the hands of children.
Please exercise special caution when children are present. In commercial establishments, the accident prevention regulations of the health and safety executive for electrical installations and equipment must be observed.

When working in rooms, the vapours that arise on the cutting blade during cutting must be removed directly using an extractor fan. Or only work in well-ventilated rooms.
PVC and PVC-coated materials may not be processed due to the harmful vapours arising during cutting.

Pay attention to the risk of burns when using the device!
The cutting blades can reach temperatures of approx. 700° Celsius. Do not touch the cutting blades once you have switched the device on. Do not lean the blade holder against objects before the cutting blade has cooled down completely.

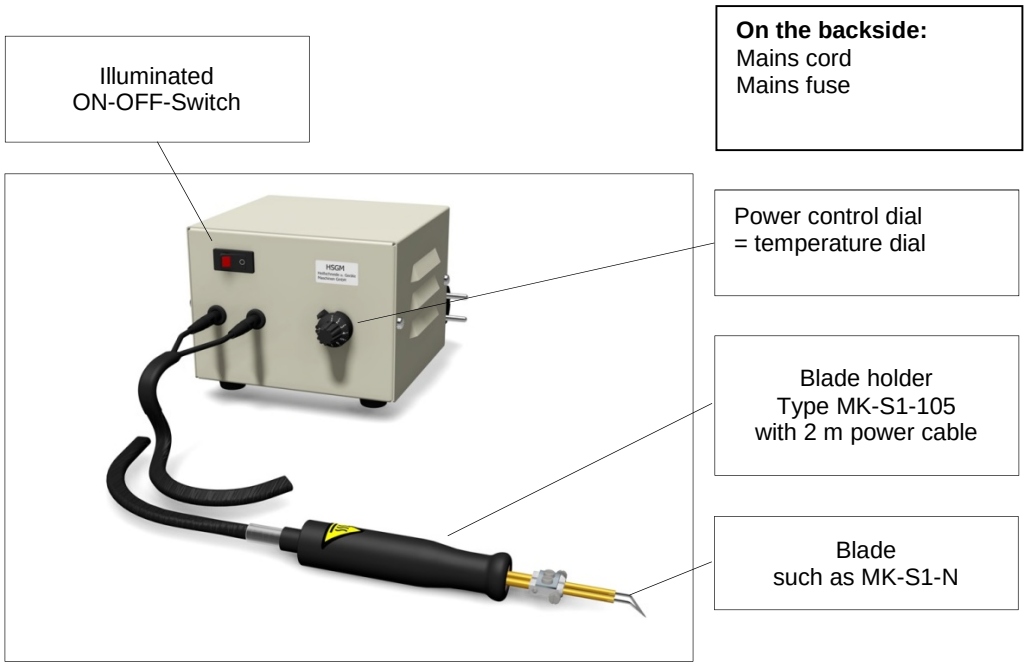
Danger! Danger to life due to electric shock!
A fatal electrical shock can result if water gets into the housing.
Keep the device away from water.
If water does get in, pull the plug out immediately and do not continue to use the device.

Functional description

This tool is suitable to cut and at the same time seal the edges of fabric and webbings, preferably synthetic curtain material.

The cutting blade is directly electrically heated to approx. 600°C in 6 to 8 seconds by a safety transformer. Any thermoplastic material that comes into contact with this cutting blade melts.

Commissioning



- Check whether the available mains voltage conforms to the voltage specified on the type plate.
- Various cutting blades are available depending on the work at hand and the thickness of the material. Please refer here to the heat cutting devices / cutting blades data sheet.

  The cutting blade may only be inserted when the device is switched off.

  The toggle for the on/off switch is set to -0- .

  This means: the signalling lamp on the on/off switch is not lit up.

  Turn the power control dial to the left to the min. position -0- .

- Secure the cutting blade in the blade holder.

Caution !

- **To guarantee perfect electrical continuity, it is important to ensure the cutting blade is screwed tight when inserted. Poor connections or loose screw connections result in unnecessary heating of terminals, the cutting blade output is reduced, and the heating of one or both terminals may damage the blade holder.**
- After activating the on/off switch, the device is ready for use.

  This means: The signalling lamp on the on/off switch is lit up.

  The cutting blade should not heat up.

- Determining the temperature setting on the dial:

  A specific temperature is needed in line with the material, thickness and cutting speed.
  This setting is made using the temperature dial.
  After a few practice cuts, the operator will quickly get a feel for adjusting the cutting temperature and guiding the blade holder with the cutting blade.

  The effective settings for the power control dial (= temperature dial) should be determined empirically, because the power needed by the cutting blades depends greatly on the type and thickness of the material to be cut, and is therefore subject to strong fluctuations.

  Setting

  - Switch the device on as described above.
  - Turn the temperature dial **slowly** in a clockwise direction

    until the cutting blade inserted is **dark red**.

  From experience we know that an attempt is made to achieve a higher cutting speed with **high temperature = bright red** and pressure on the cutting blade.
  Unfortunately, this is not the case!

  At around 500 °C, the material is usually best cut. The cutting tip is **dark red**. The cut should be done evenly with light pressure, the synthetic fibers must have time to melt.

The **work or cutting surface** should be made of a smooth material that draws as little heat as possible away from the blade, leaving all of the power for the cutting process.
Glass that is 4 – 6 mm thick is ideal.

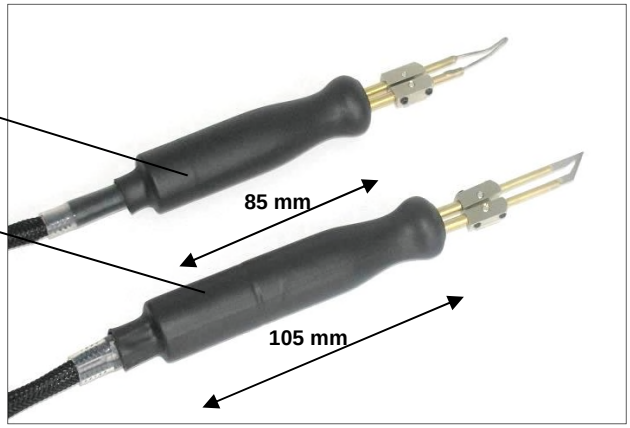
When work has been completed, turn off the power switch (ON-OFF-Switch).

Practicable blade holders and blades

Blade holder type MK-S1-85
(discontinued!),
in this case with blade type MK-S1-D

Blade holder type MK-S1-105,
in this case with blade type MK-S1

Note!
Blade holder and cutting tips can be combined with each other



Blades (Cutting tips)

Type MK-S1-N

Type MK-S1-D

Type MK-S1

Operation

Never operate your heat cutting device when it has just been moved from a cold room into a warm room. The condensation that occurs may under unfavourable circumstances damage your heat cutting device.

Leave your heating cutting device turned off and allow it to reach room temperature.

Maintenance

Regularly inspect the technical safety of your heat cutting device, e.g. for damage to the power cord or the housing.

If it is to be assumed that safe operation is no longer possible, the device must be taken out of use and secured to prevent inadvertent use. Pull the plug out of the socket!

It may be assumed that safe operation is no longer possible in the following circumstances:

- If the device shows signs of damage;
- If the device no longer works;
- After prolonged storage in unfavourable conditions; or
- After rough handling during transport.

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

Warning!
The device must be disconnected from the power supply during maintenance and when replacing parts. This is done by pulling out the plug.
The operator must be able to check that the plug is still disconnected from each point of access.

To clean the device, it is sufficient to wipe any dust or other dirt off using a dry cloth and/or a soft brush.

Eliminating faults

With this heat cutting device, you have bought a state of the art product that is safe to operate.

Problems or faults may nevertheless arise.

Therefore we would like to describe here how you can eliminate possible faults:

It is essential to observe the safety instructions!

Problem	Solution
No function	- The on/off switch has not been pressed - The power plug has not been plugged in - Check the socket - The cutting blade has not been clamped tight - The installed fuse has blown

Technical data

Mains voltage:	230 V - 50 Hz (115 V - 60 Hz)	
Power input:	max. 55 W	
Operating mode:	Continuous operation 100% ED	
Dimensions:	160 x 160 x 122 mm	
Weight:	2,7 kg incl. Blade holder	
Nominal fuse rating:	Mains voltage 230V:	0,4 A time lag fuse
	Mains voltage 115V:	0,8 A time lag fuse

Mains switch with signalling lamp
Power cord 3 m long, with safety plug
Device corresponds to protection class I

Ambient conditions

Operating temperature range (min. +max.):	+5°C to +40°C
Rel. humidity:	Max. 85 %
Air pressure:	600 to 1000 hPa

Spare parts

When ordering spare parts, please specify:

The device model xxx

The device number xxx

Disposal

Dispose of a defective heat cutting device in accordance with applicable statutory regulations.
The device must not be disposed of with household waste! A defective device must be returned to the retailer, manufacturer or municipal disposal point set up for this purpose!

Warranty

You receive 1 year's warranty on this device. The warranty does not include the cutting blade.
The warranty claim starts on the day of purchase.
This warranty covers all defects based on possible material or manufacturing defects.
The warranty is invalidated in the case of incorrect use or misuse.

Conformity

Name/address of the issuer: HSGM Heissschneide-Geräte
und Maschinen GmbH
In der Rehbach 13
D - 65396 Walluf

Description of the device:

Product designation:	Plastic cutting tool
Model:	HSG-MK-S1-2,4/020
Data:	230 V, 50 Hz (115 V, 60 Hz)
Nominal output:	max. 55 W

This device meets the requirements of EU directives

2014/30/EU "Electromagnetic compatibility"
2014/35/EU "Electrical equipment for use within certain voltage limits"
2011/65/EU "RoHS Directive"

The device bears the CE mark for this purpose. CE

Stephan Herrmann
Managing Director

Walluf, 05.01.2018