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ET 565

Operating Instructions



Stapling device

SGR1 /QE SGR1 / LE with a role-staple stapling head, pneumatic height-adjustable

IMPORTANT

Before the first commissioning read this manual thoroughly and completely and keep it in a safe place.

Observe and follow the safety instructions and only use the device if you are sure that you have completely understood all the instructions.

Failure to comply can lead to injuries!

If you have any questions, contact the manufacturer

MEZGER Heftsysteme GmbH Saganer Straße 24 90475 Nuremberg Germany



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SGR model

Type/description:
Serial number:
Stapling head type:
Matching roll staple:
Year of construction:

See machine type plate

Preface

For a safe operation of the stapling machine it is necessary to acquire the knowledge conveyed by these **ORIGINAL OPERATING INSTRUCTIONS**. The information is presented in brief and clear form. The chapters are sorted by numbers.

Copyright

The copyright of this operation manual remains MEZGER Heftsysteme GmbH

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1 Safety information

Safety instructions and important explanations, are labelled with the following pictograms. The symbols used in the operating instructions have the following meaning:

Symbol	Signal word	Meaning
<u>^</u>	Warning notice	Warning of possible injuries to persons or possible damage to property Warning of possible defects or destruction of the machine
0	Prohibition	Indicates general prohibitions!
	Warning notice	Risk of fingers being crushed!
	Prohibition	Protect from moisture!

Read all these instructions before using the stapling device and keep the safety instructions in a safe place.

The operating personnel must be trained in the handling of the stapling device and they must have fully read and understood the operating instruction.

To avoid injury or damage, the operator must additionally observe the company's internal safety quidelines!

In addition, we would like to refer to further national rules and safety provisions which are not contained in this manual.



Keep persons who are not instructed, especially children, away from the facility and from your work area!

If damage to the device is determined by the operator during production, the device may no longer be used and must be repaired by a professional!

The required personal protective equipment must be provided by the operator.

Only original parts may be used as spare parts!



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2 Warranty and liability

Our "General Terms of Sale and Delivery" shall generally apply" These terms were made available to the operator by the time of contract award at the latest.

General Terms of Sale and Delivery

Any warranty and liability claims in the case of personal and material damage shall be excluded, if such damage occurred as a result of:

- Improper use of the machine (not in compliance with intended use).
- Non-compliance with the specification provided in the operating instructions as regards transport, storage, assembly, commissioning, operation, maintenance and setup of the equipment.
- Operation of the machine with defective safety equipment or improperly installed or non-functional safety and protection facilities.
- Improper monitoring of machine parts which are subject to wear and improperly executed repair work.
- Any type of manipulation of the machine.

Causes of exclusion of warranty and liability

3 Intended use

The *stapling device* may **only** be used as intended. It may only be used, operated and maintained according to the information contained in this operating manual.

The stapling device is a pneumatic precision stapler. From pieces of wire that are wound into rolls, U-shaped brackets are formed in the stapling heads and then primarily used for the stapling of cardboard, but also of other materials as well as for the nailing of these materials onto wood.

Any other usage is not regarded as intended use and can lead to damage to persons or property. The operator of the machine is solely liable for damages deriving from any non-intended use.

The operator must ensure that the machine is operated as intended and all types of hazards to life and health for the user or third parties are avoided. In addition, a compliance with the accident prevention regulations and other safety regulations and laws must be observed.



If the stapling device is abused for purposes other than the specified usage scenarios, this can lead to accidents



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3.1 Application area/designated use

The role-staple stapling heads may only be used for the stapling or nailing of solid, single-, double-corrugated cardboard, thin sheet metal and other thin, soft materials.

Do not nail onto hard (e.g. metal plates, pins, etc.) and brittle materials. (This could damage the stapling head)

3.2 Ambient conditions/Emission

The device should be operated at room temperature, protected against environmental influences. Use within an explosive atmosphere is permitted only with prior consent and written permission of the manufacturer.

The noise emission is less than 70 dB(A).

Non-atmospheric gases are not released during the stapling process.

3.3 Operating personnel

Only trained and knowledgeable staff is permitted to operate the machine.

<u>Note:</u> Competent, is someone who based on his training and experience has sufficient knowledge in the field of stapling machines and is familiar with the relevant government industrial safety regulations, accident prevention regulations and the generally accepted rules of technology (e.g. DIN standards, VDE regulations) to the extent that he can assess the secure state of machines and in particular the state of stapling machines.

4 Transport and assembly

The stapling device is delivered completely assembled and can be transported as a whole.

Transportation equipment can also be used for transporting the machine.

During transport, the staple role including any staples which are possibly present in the device must be removed completely.



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5 Initial commissioning

The machine is delivered preassembled ready for operation.

To make the stapling device ready for operation after delivery, the following tasks must be carried out:

- Check the equipment for completeness
- Check the installation location for its suitability
- Load the stapling head with staples
- Connect the compressed air

Before the stapling device is put into operation, please read all instructions in this manual. This stapling machine may only be put into operation by **trained** personnel.



When the stapling machine is ready for operation, it is prohibited to touch the stapling ejection opening or the running stapler! DANGER OF injury!



Oxygen or combustible gases may not be used as a propulsion source for pressure driven machines.

The machine is to be fastened in such a way, that a secure positioning is ensured. For this purpose it may be necessary to anchor the machine onto the floor, since otherwise there could be a danger of injury from falling parts.

The role-staples must be inserted into the role-staple stapling heads according to the operating instructions.

The device should be operated at room temperature, protected against environmental influences. Use within an explosive atmosphere is permitted only with prior consent and written permission of the manufacturer.

6 Stapling heads

Loading and handling of the stapling heads, see operating instructions.

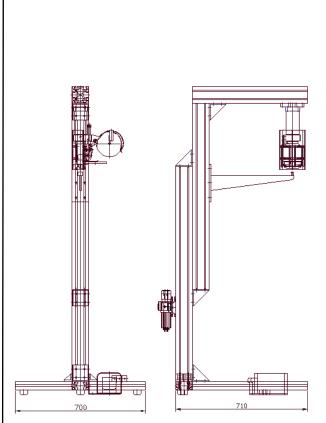


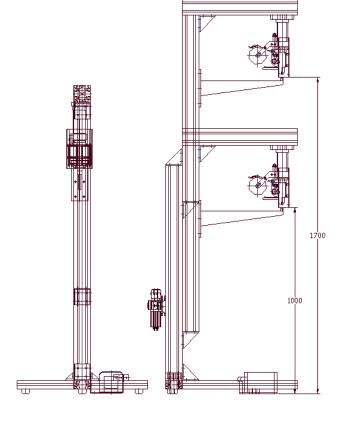
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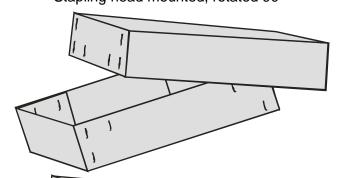
Technical data/versions





SGR/LE/ for **longitudinal stapling**–Stapling head mounted, rotated 90°

SGR/QE/ for transverse stapling



Technic	SGR/QE and SGR/LE
Footprint: W	700 x 600 mm
Overall	1655 mm
W. T.	37 kilos
Cd ption:	1.7 NL / stapling
Air pressort.	4 - 6 bar overpressure
Anvil / working height (adjustment range)	approx. 1000 – 1700 mm (others on request)
Insertion depth/stapling arm length	439 mm



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7.1 Compressed air connection

It is necessary to install a filter regulator upstream which consists of a filter and a pressure regulator. (See instruction manual filter regulator).

As a connecting hose, a hose with an internal diameter of 6 mm is required. For this connection hose there is a self-closing hose coupling standardly provided on the maintenance unit. If long feed hoses are used it is recommended to use a hose with an internal diameter of 9 mm. Of course, the hose fitting must be replaced in this case.



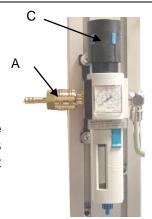
CAUTION! When the compressed air is switched on the stapling head moves to its initial

The filter regulator is factory set to a pressure of about 5 bar overpressure.

The stapling machine should be operated with an air pressure between 4 - 6 bar overpressure.

Thread connector size \mathbf{A} = feed line (inlet pressure)

To perform adjustments, the control knob \boldsymbol{c} is turned clockwise until the desired pressure is shown in the pressure gauge, when the inlet pressure is present and the outlet pressure is at zero flow. If the control knob is pressed it is locked in place and protected against unintentional adjustment.



8 Fundamental notes on work technique and handling

Before the operator starts to use the machine he must acquire information about the application scenario and check if the machine as well as the tools are positioned correctly. Carefully observe all safety instructions!



Check to make sure that the stapling machine is not damaged and that it can be operated in a safe way.

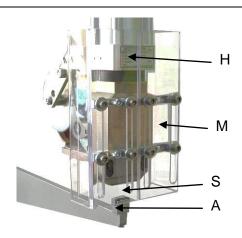
The safe operation state of the stapling machine must be checked each time before any work is started!

Safety devices may not be bypassed or rendered ineffective!

Keep your work area in order.

Disorder in the work area can cause accidents.

The opening (S) between the stapling head (H) and clinching anvil (A) is optimally set ex-factory.





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The product to be stapled is prearranged and placed over the clinching anvil (A). Upon actuation of the pneumatic foot valve, the stapler head (H) is triggered, and places the staple. After releasing the valve the stapling head moves back to the starting position. The product to be stapled can be removed.



For protection purposes a slidable mechanical protection Makrolon (M), is provided which prevents an unintentional reaching into the stapling area.

This guard must not be removed or locked!

8.1 Anvil Height adjustment

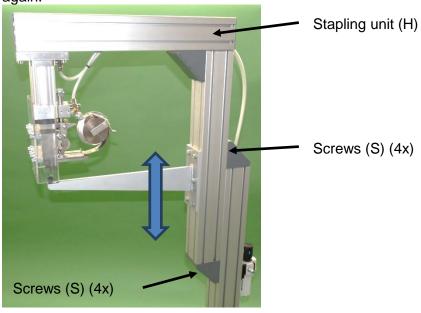


CAUTION! Disconnect compressed air supply.

Before loosening the screws, secure the stapling unit to protect it from falling down! Set stapling device horizontally

DANGER OF INJURY!

Loosen screws (S) (8x), move stapling unit (H) to the required working height. Tighten screws (S) again.





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8.2 Maintenance plan



<u>CAUTION!</u> Before performing any maintenance work, the compressed air supply must be disconnected.

Only original spare parts

from the manufacturer may be used (see Appendix "Spare parts list").

To maintain the operational readiness and functionality of the machine, it must be checked daily by the operator or by professionally trained personnel.

Check area	Activity / check	D	W	М	Υ	Area	
Machine area and environment	cleaning		•			Entire machine	
All available protective measures present / closed	check	•				Safety devices	
Stapling head	check / clean		•			Stapling area	
Stapling head movable parts	Maintenance				Υ		
Loading area	check / clean		•				
Pneumatic hoses, leak tightness, damages	check		•			Pneumatics	
Filter regulator, condensate	check			•			
Screw connections for tightness	check			•			
Sinter filter Maintenance unit, replace (if dirty)	replace				•		
Stapling head movable parts (Driver, spring guides)	Clean and lubricate lightly		•			Lubrication	
Other moving parts	Clean and lubricate lightly		•				



Adequate maintenance will help to permanently keep the machine in a functionally correct state. The machine should be cleaned thoroughly at least once a week.

- No aggressive cleaning agents or solvents (could damage seals), or even sandpaper may be used for cleaning.
- The cleaning with compressed air should also be avoided, since this could transport dirt particles into the seals and damage them.
- Do not use lint cotton for cleaning.



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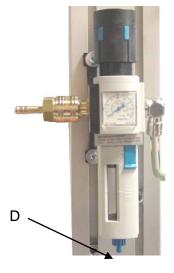
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Cleaning agents	Application areas				
Degreaser	All machine parts				

Check the filter controller for condensation water. Possibly the condensate water must be removed. Hereby, the release valve **D** must be opened through a counter clockwise turning, which will release the condensate collected in the tank. Subsequently it must be closed again by turning it in a clockwise direction.

For this, also refer to the section "filter controller" in the operating instructions.



9 Decommissioning

If the machine is not used for a prolonged period of time or disassembled, the pressurized air supply must be separated and all the staples must be removed from the machine/magazine.

10 Notice of residual risks



Protect the machine from moisture! Do not operate the machine in a humid environment! Only operate the machine within buildings!

Compressed air connections should be checked regularly.



When working on pressurized air connections and hoses as well as on the auxiliary devices, the complete system must be depressurized.

11 Maintenance and care

The stapling device or respectively the role-staple stapling head does not require a great deal of care, but should be cleaned and maintained on a regular basis.

Soiling should be removed directly by the operator after the machining processes.

Soiling on the workpieces can be blown away.



Any alterations to the stapling device especially to the safety equipment - are prohibited!



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Before the start of all major maintenance and cleaning, all safety precautions must be taken and the pressurized air supply must be switched off and disconnected.

The following work processes/inspections should be performed by knowledgeable personnel on a regular basis:

- Clean the stapling head on a regular basis
- Regular oiling of the movable parts (no graphite oil!) on a weekly basis
- Check the filter controller for condensation. If necessary remove the condensation water.
- Cleaning of cardboard dust

Any kind of alteration to the device (e.g. drilling of holes) is only permitted with prior consent and written permission of the manufacturer.

Only ORIGINAL spare parts may be used. (see "spare parts list") Failure to comply will void any guarantee claim and exclude any liability!

Only original spare parts are subjected to our quality control. To ensure a safe and reliable operation, only spare parts from the manufacturer may be used.

All technical equipment, especially the safety equipment, must be inspected by professional staff after a modification or repair.

12 Error detection



During any kind of defect, the machine is to be shut down and separated from the pressurized air supply until the flawless operation is ensured again. Please do not try to dismantle or repair the machine.

No stapling occurred or the staple wasn't fully bent, or it remains in the stapler head. For this, also refer to the section "Stapling heads" in the operating instructions.

No.	Cause:	Troubleshooting:
1.	Air pressure too low. Feed movement not	During the stapling 4 - 6 bar overpressure, during the
	guaranteed.	nailing 6 bar.
		Check hoses and valves and ensure that the stapling
		head as a sufficient air supply.
2.	Air cleanliness inadequate	Connect a maintenance unit upstream consisting of a
		pressure regulator and water separator.
3.	Staple is jammed in the stapling head and is not	Air pressure too low (see item 5). Stapling head moves
	preformed.	back too quickly. Correspondingly prolong the time (1 -
		2 sec)
4.	Tension strap torn	Remove a few staples from the tension strap and
		reattach them again.

Remove <u>all</u> the staples from the role-staple stapling head and clean the device from deposits in soiling. Reconnect the air supply.

Now you can use the stapling device to the full extent again.



In the event of a malfunction, which is more extensive than just some jammed staples, please contact us. The machine will be examined by our specialists and the malfunction will be remedied.



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Technical documentation 13

Repair work by: MEZGER Heftsysteme GmbH

or

authorized professional companies

Damages which are caused in particular by natural wear and tear, overloading, misuse or damage caused by the user or other use contrary to the operating instructions will be excluded from the

Keep the operating instructions, safety instructions, parts list and proof of purchase in a safe place.

Order form for spare and wear parts

MEZGER Heftsysteme GmbH

Staples, staplers and stapling machines

Saganer Strasse 24, 90475 Nuremberg Tel.: 0049 (0)911 / 984 94 0 Fax: 0049 (0)911 / 984 94 30

			e-Ma	il: info@mezger.eu		
	Spar	e Parts Ordering				
Customer - c	order - No:					
Name of the	system / tool:					
Spare parts I	lists - No.:		Current as of:			
Pos No.	Description / Dimension Type / DIN	Order ID - No.:	Order quantity	Delivery date		
Shipping add	dress: / Attn.					



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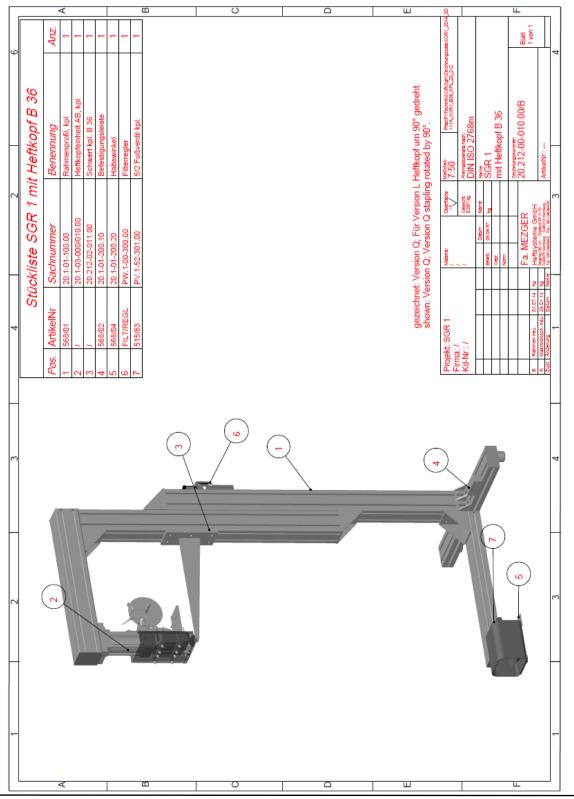
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13.1 List of spare parts

In the case of the L-version, the stapling head is rotated through 90°. Spare parts list stapling heads: see operating manual "Stapling heads"

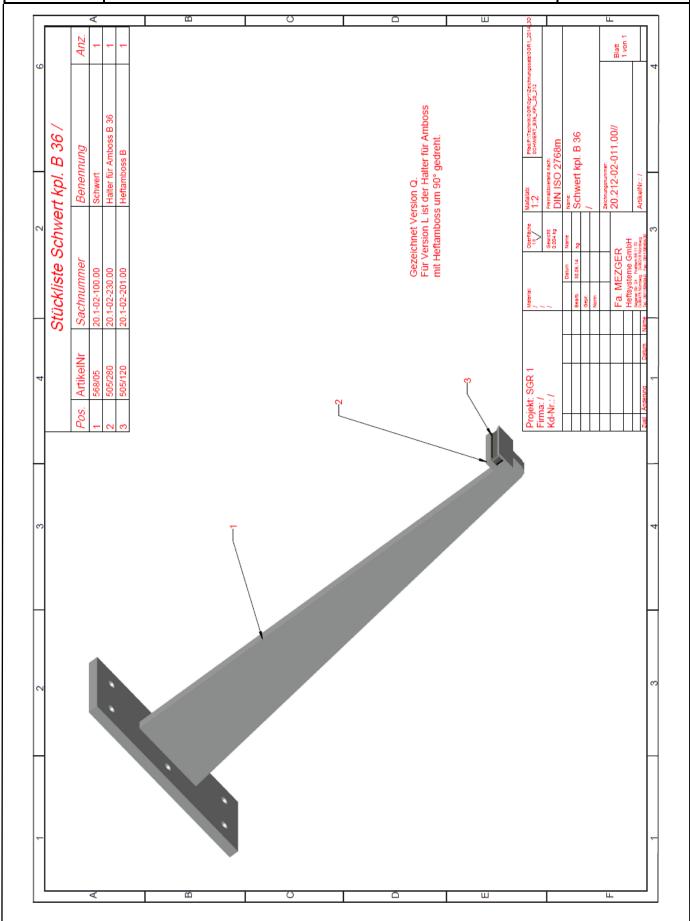
13.1.1 SGR1 with stapling head B 36





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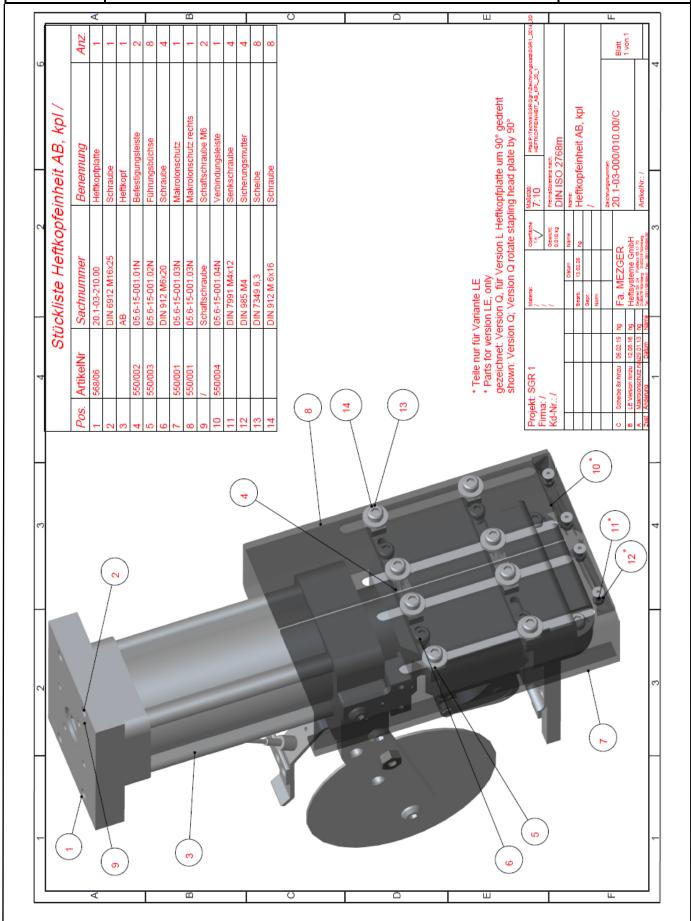
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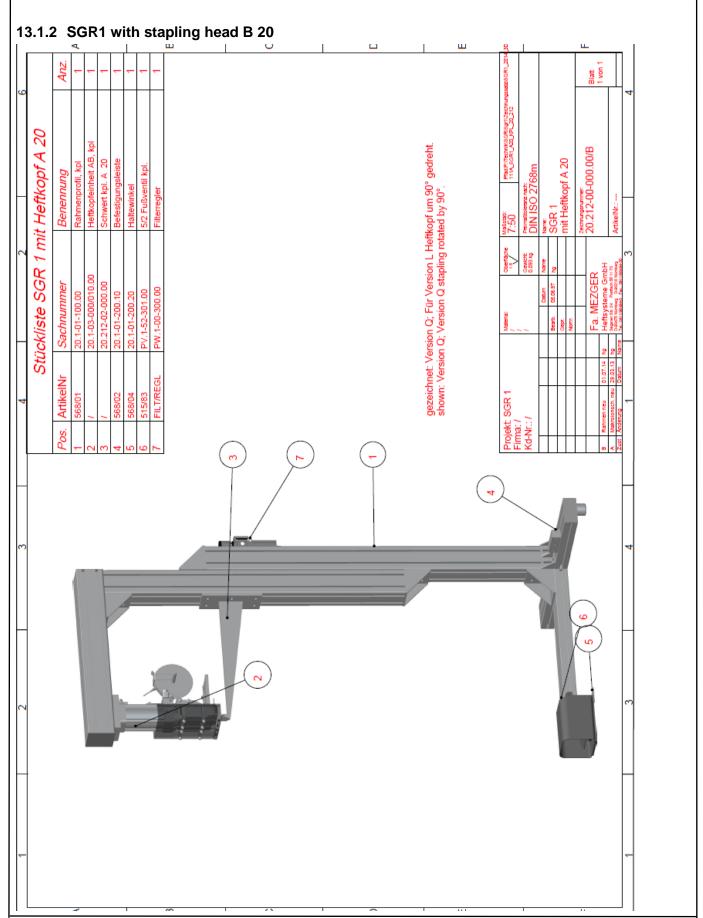
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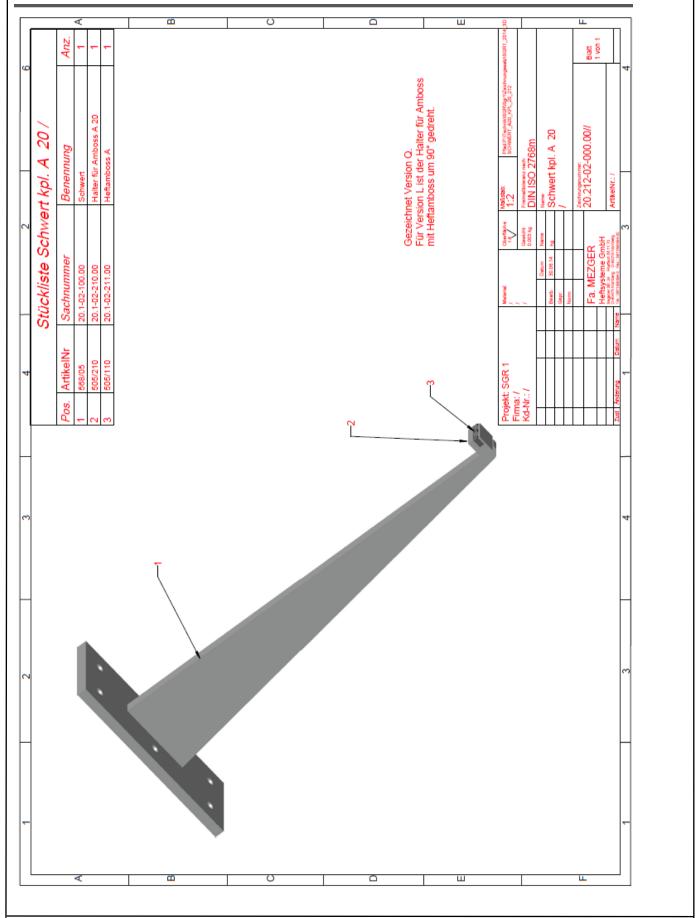
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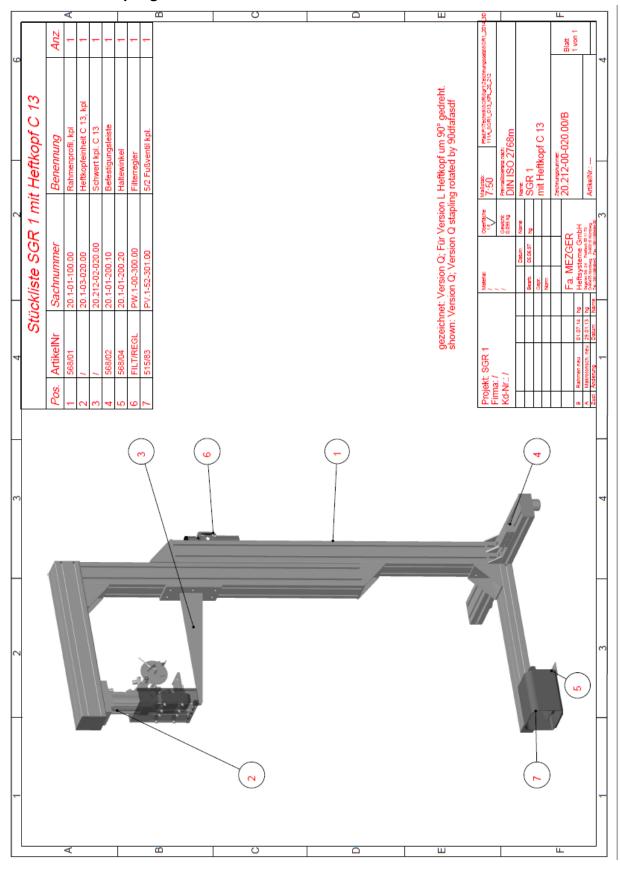


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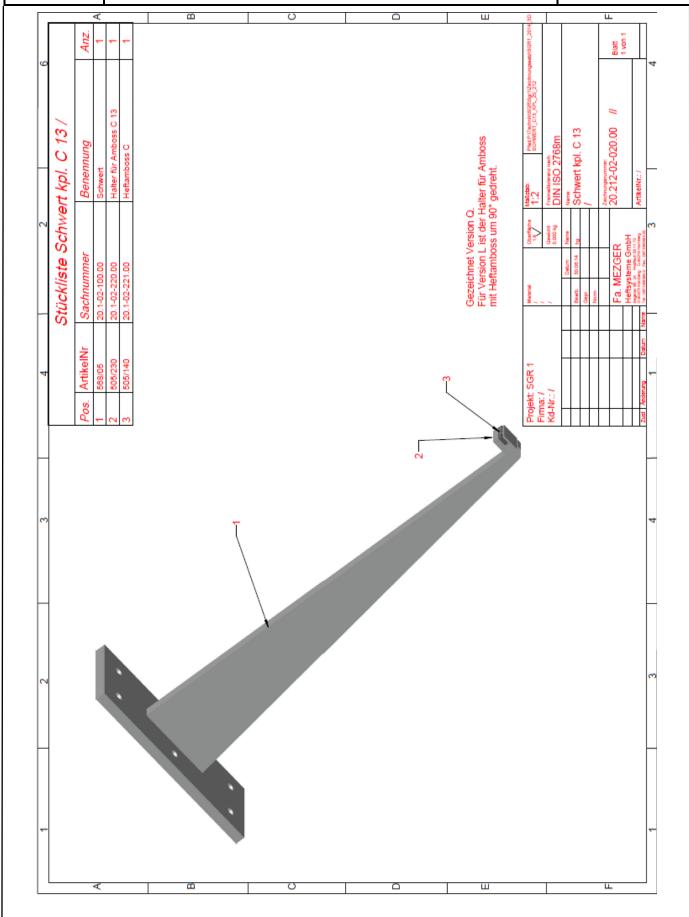
13.1.3 SGR1 with stapling head C 13





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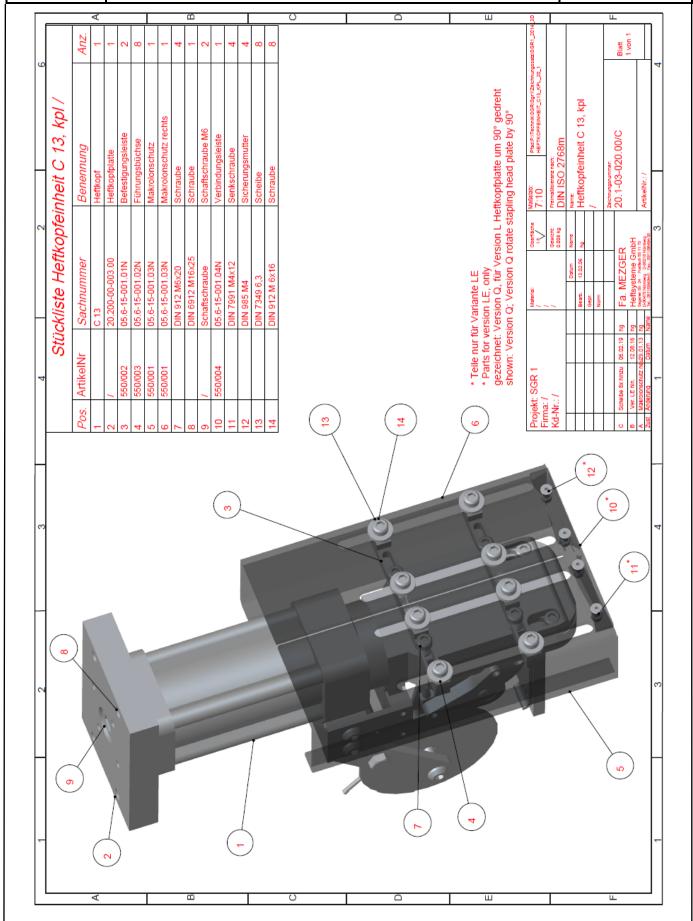
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