Maschinenfabrik Seydelmann KG

Translation of the original

Operating Manual

for the machine

Mixing Grinder MU 200 B

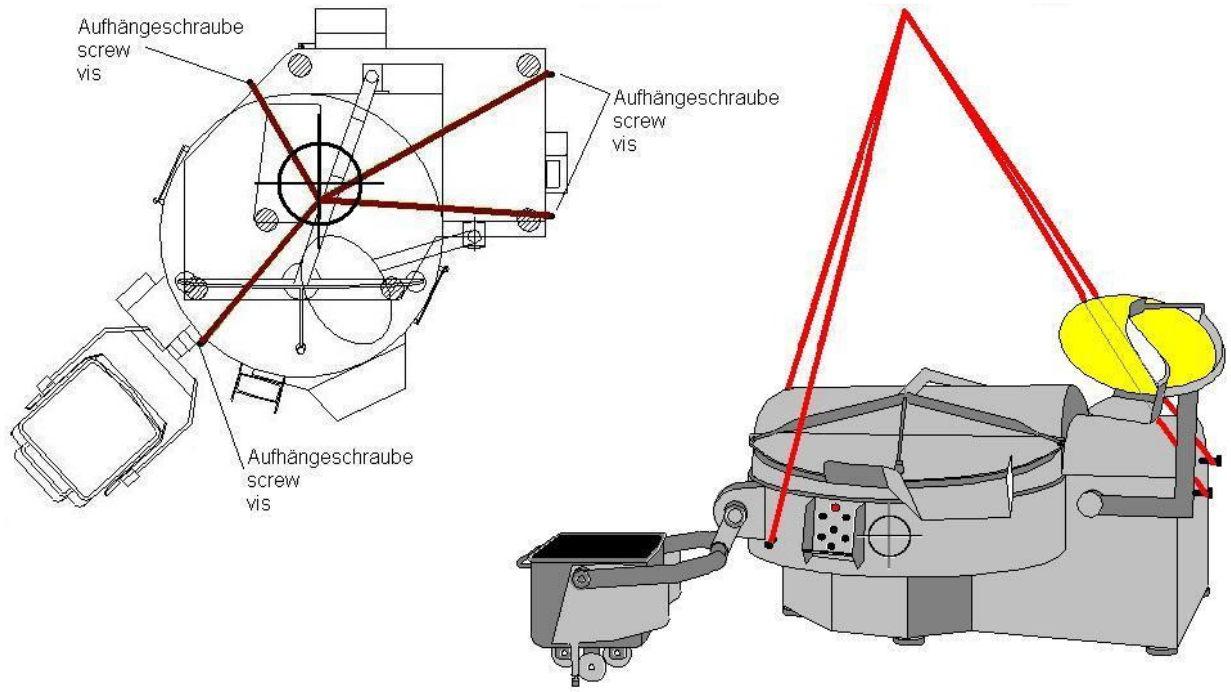
Machine Number: 15 210 - 1

This leaflet is NO substitute for the operation manual but an additional help while commissioning the machine. It represents only a reminder!

Essential points to be reviewed while commissioning:

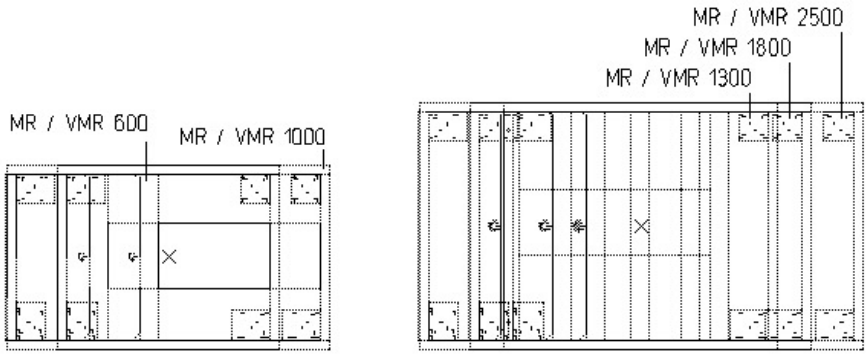
		Chapter of Operation Manual
	Has the responsible double-checked the **operation manual** ?	**1.1.3**
	Has a **security officer** been designated ?	**1.2**
	Have all **securings for transport** been removed?	**3.2**
	Is **cutting set** removed (only grinder)?	**3.2.1**
	Are **cables and main power supply** made in accordance to the VDE regulations by a local electrician?	**3.2.2**
	Has the machine been **levelled** correctly?	**3.2.3**
	Are all **auxiliary supplies** connected correctly?	**3.2.2**
	Has the **revolution senses** of all motors been checked and corrected?	**3.3**
	Are the **safety units** checked for function and effectiveness? Are the **functions** of the machine checked?	**3.3.1** / **3.3.2** **3.3.3**
	Has the **operation staff** been carefully trained on the safety functions, possible dangers, safety arrangements and machine functions?	**1.1.3** / **1.2** **2.2** / **4** / **6**
	Has the **staff in general** been generally trained on the restrictions of use and materials to be processed?	**1.1.3** **2.3**
	Has the **maintenance staff** been trained carefully on the special works to be performed?	**1.1.3** / **1.2** **5** / **7**
	Has the **cleaning staff** been trained carefully on cleaning the machine?	**4.4**
	Are the **knives** handled correctly? (mounting / dismounting / balancing)	**4.2**
	Can the **knives** be reground correctly?	**4.2.2**

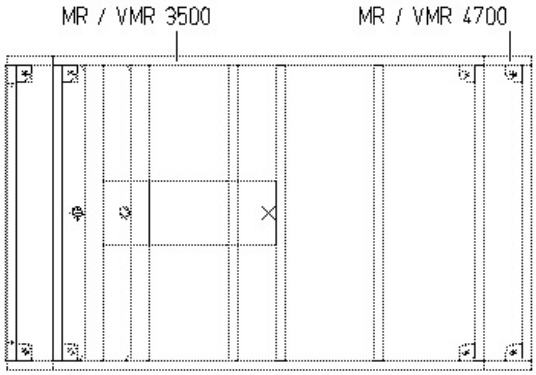
small cutter		weight in kg	with vacuum / cooking equipment	weight in kg
	K 20	140		
	K 40	650		
	K 60	800	K 64	1.700
	K 75	900		
	K 90	1.100		
	K 120	1.260	K 124	2.200
	K 160	1.350		

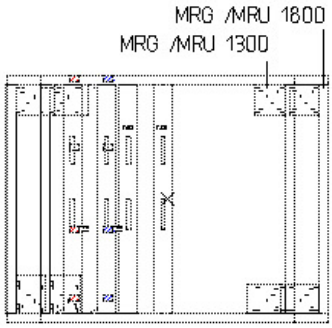


big cutter		weight in kg	with vacuum / cooking equipment	weight in kg
	K 206	2.880	K 204	4.100
	K 326	3.550	K 324	5.000
	K 506	4.700	K 504	6.100
			K 604	7.300
	K 756	5.940	K 754	7.100
	K 552	6.700		
	K 1006	10.000	K 1004	11.000

Measurements are not binding and can differ according to equipment









Mixer		weight in kg	with vacuum	weight in kg
	MR 600	1.250	VMR 600	1.530
	MR 1000	1.400	VMR 1000	1.680
	MR 1300	1.750	VMR 1300	2.200
	MR 1800	2.050	VMR 1500	2.500
	MR 2500	2.300	VMR 2500	2.800
	MR 3500	2.600	VMR 3500	5.000
	MR 4700	3.100	VMR 4700	6.500
	MRU 1300	2.000		
	MRU 1800	2.300		

Measurements are not binding and can differ according to equipment

grinders		weight in kg	with loading device	weight in kg
	WD 114	285		
	AD/MD 114	460		
	ME 130	680	ME 130 B	1.100
	AE 130	680	AE 130 B	1.100
	AG 160 / AU 200	1.550 / 1.600	AG 160 B / AU 200 B	1.850 / 1.900
	AU 200 S / U	2.800 / 4.000	AU 200 S B / U B	3.100 / 4.350
	GW 300	3.300		
	GW 400	3.700		



Loading trolley / bin	according DIN 9797				
	mm	length	width	height	Maximum weight
	BW 120	580	625	595	155 kg
	BW 200	730	720	700	240 kg
	BW 300	730	720	950	350 kg
	The loading trolley / bin corresponding in particular to the trolley fixture are to be used exclusively.				



Kontikutter			weight in kg
	KK 140 AC 6		1.200 kg
	KK 250 AC 6		1.700 kg

All machines:

Operation and Maintenance



Operation of the equipment is permissible only if the active and passive safety devices are fully functional. Also, all cover panels on the equipment body must be firmly seated with all attachment means engaged.
Cover panels must be removed by specially trained and authorised personnel for maintenance purposes only and must be reinstalled immediately after completing the service. All media lines to the machine shall be closed off at the external shut-off valve for all maintenance work and shall be secured against unintentional opening.
The cover panels form part of the equipment and must always be closed for stress and hygiene reasons.

EU Declaration of Conformity for Non-EU Countries

Pursuant to the EU Machine Directive 2006/42/EC, Annex II A

we declare herewith that the machine

Seydelmann Mixing Grinder MU 200 B

Machine Number 15 210 – 1

Year of manufacture: 2015

used for processing meat in the version delivered complies with the following regulations and standards:

EU Machine Directive 2006/42/EC, dated 05/17/2006
EC EMC Directive 2004/108/EC

EN 61000-6-4 :2007	Electromagnetic compatibility (EMC)
EN 60204-1 :2007	Safety of machinery
EN 12331:2004-05	Food processing machinery – grinders – Safety and hygiene requirements
EN 13570:2005-09	Food processing machinery – mixer – Safety and hygiene requirements

Machinery intended for a device for gas use (CO2, N2 etc.) for cooling or fumigation must be equipped (e.g. from a gas supplier) with a device to extract gases by air change up to five times to the surrounding atmosphere before opening the lid of the machine. The interface is the flange which is mounted on the mobile part respectively on the fixed part of the machine cover, according to machinery equipment.

The workspace of the machine must be additional equipped with an air control. This air control must be reviewed and maintained at regular intervals according to respective requirements. Furthermore a complete certificate of compliance concerning the addition and aspiration of liquid nitrogen respectively of CO2 must be distributed by the supplier of liquid nitrogen respectively CO2.

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Emission Date: 28.09.2015

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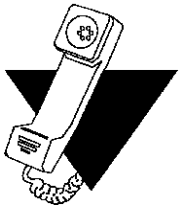
Sina Tuscher
c/o Maschinenfabrik Seydelmann KG

This declaration is only valid with the machine in the originally delivered state of equipment.

0.2 Explanation of Symbols, applied in the following operation manual.



Remark: This symbol is used with remarks and recommendations guiding to better performance and lower wear.
It implicates no hazard to the operator, the machine or the surrounding.



Telephone: Special remark indicating important phone numbers.



Attention: Remarking hazardous points. Non-observance might cause high grade damages at the machine. These damages are not covered by warranty terms.



Hazard of Injury: Non-observance might cause high damages at the machine and personal injuries. These damages and injuries are not covered by warranty terms.



Danger to Life: Non-observance might cause lethal injuries and total loss of machinery. These causes are not covered by warranty terms and will exclude all further claims of warranty and liability.

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The following document is a translation of the original German Operating Manual of machine. It is provided for information purposes only. The German version of the manual shall exclusively be binding.

1 Operation Manual, General Terms

1.1 Exclusion of Liability

All claims of liability are to be founded on the treaty and our General Terms of Sales and Delivery.

Accidents and damages caused by non- observing or acting in opposition to the regulations and security rules of this operation manual (even analogous application) will make us to refuse all claims of liability and warranty.

It is never allowed to operate the machine with faulty security devices. If security devices get damaged or fail the machine has to be put to a rest efficiently. (see 2.2)

Before operating the machine again, the faulty security devices are to be repaired or revisioned. (see 5.7)

The actions taken are to be surveyed by the security officer in charge. After installation of the machine the operational danger is fully located at the operator and his security officer.

Accidents or damages caused by operation of the machine with faulty security devices will make us refuse all kinds of claims of liability or warranty.

1.1.1 Warranty Regulations

To check warranty claims we need the following data:

- Type and number of the machine
- Date of set up or delivery of the machine
- Kind of fault

For all deliveries under warranty terms the same delivery conditions as negotiated with the machine apply. Warranty generally applies on parts and mounting time but never on damages at the material and building or other losses.

1.1.2 Intended use

The application of the machine has to be restricted on the pre-defined range of materials and applications. Chapter 2.3 and following provides lists of materials and application range.

Application on other materials or other environments as previewn by default needs special liberation for each special application. This special liberation has to be requested individually at the factory.

Inappropriate application, processing material not liberated or operation in not liberated environment extinguishes all claims of liability and warranty.

1.1.3 Personnel qualification

The machine must only be operated by skilled and full age employees (at least 18 years). The skilled employees must be regularly instructed on safety instructions. For training purposes employees (at least 16 years) are permitted to operate this device under supervision and guidance.

1.1.4 Instruction

Before starting operation of machine the operator has to instruct thoroughly the staff to be occupied with handling the machine based on the regulations of this operation manual. A special instruction has to be made regarding the security functions.

The machine is not to be operated by any person except of completely trained staff or staff in training under tight supervision of trained staff members. The machine is exclusively planned for one-man operating.

Works at the machine are not to be made except by trained experts. Local safety regulations of the special branches are to be considered.

This operation manual does not extinguish any safety regulation but is valid in addition to the local valid regulations.

1.2 Security Officer

For normal operation a security officer has to be determined and trained. He has to survey constantly the keeping of security regulations in reference to the machine

Tasks of the security officer:

- To check the security devices constantly, at least once a day/once a shift, for function and correctness of performance
- Instruction of operators on functions and security devices at the machine
- Instruction of the maintenance staff in appropriate maintenance and safely repairing the machine and the safety arrangements to be prepared before repairing the machine.
- Acceptance test of the machine and its security devices during set up and daily operation.



Due to reasons of evidence we recommend to prepare a protocol indicating the checks of the machine and instruction of staff.

2 Information about the Machine

2.1 General Description

The grinder consists of housing with 4 feet to the floor, a hopper for the raw material, a main worm a feeding device and several drives. The panel box is mounted inside the housing.

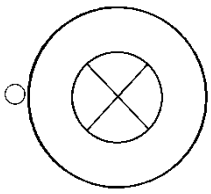
There are different options in equipment possible. The exact design and equipment has to be reviewed in the treaty.

2.2 Protection Devices

The machine is equipped with different devices to protect the operator. The protection devices are defined according to the options on the machine. All machines are equipped by default with the following security devices.

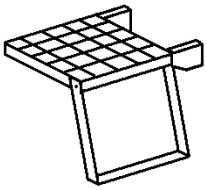
2.2.1 Security Devices, Active Protection

Off-Switch:



Switches the machine off.

Safety stairway



When swiveling down the step the machine switches off and prevents a restart of the machine. The machine is not to be switched on without the step swivelled up again.
Swivelling down the step causes also a “reset” of the hand protection.

Switching frame



the machine switches completely off as soon as the frame is moved from the resting position.
The machine can be turned on first again as soon as the switching-frame is in the resting position.

Hand Protection Unit:
(optional)

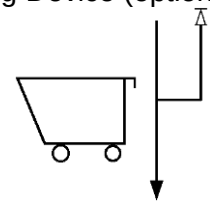


Only by standstill of the machine the hand guard can be opened. The standstill of the machine is announced by lighting up of stop button.

At use of final hole plates equal or larger 8 mm is the use of an hand protection necessary.

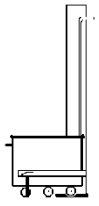
The machine is not to be switched on without the hand protection unit swivelled in again.

Loading Device (optional):



The built-in hydraulic loader runs up after pressing button until final position.
The built-in hydraulic loader runs down after pressing button without hydraulic pressure so that a tilting of the machine is avoided.

Mast Loading Device
(optional):



The final 500 mm of the loading device going down are to be commanded by pressing the switch constantly.

Safety request:

The security devices are interlocked. After rupture

of main power supply at least one of the security devices has to be operated before it is possible to restart the machine again.

Working worm

By mounting or dismantling of the working worm (dead weight above 25 kg) through a person a level able trolley with stop furnishings must to be used.



All security devices are interlocked positively. Failure of the security switch or rupture of connection will activate the security function.

2.2.2 Security Devices, Passive Protection

By Design:

the safety distances given by law and regulations are to be looked at as passive protection.

It is never allowed to bridge the passive protection devices and safety distances by adding pedestals, ladders, or similarities beside the machine. This procedure will extinguish the validity of the Declaration of Conformity CE and all claims of liability and warranty.

The security officer has to check the above mentioned security devices constantly, at least once a day/shift for their well-functioning and correct performance. The operation staff has to be instructed in the functions of the security devices. (see 1.2)

2.3 Application Range

The machine is designed for disintegration. The default application is restricted by design and type of grinder according to the technological application restriction.

2.3.1 Technological Limits of Appliance

The following materials are recognised as appropriate and allowed for being processed:

Material	Special Restriction	Temperature Range
Meat	Without bones	See following chart
Fat		
Fish	Without head	
Cheese	Mind the fat	
Vegetables	Washed	
Nuts	Without shells	
fruit	Without kernel	

Temperature range and size depending on type and execution:

Machine Type	Lowest Temperature	Lump Size
Mixing Grinder	- 2°C – 85 °C	App. size of fist

When processing products over 85 ° C (185 °F), you must request a concession in the factory.



All material has to be free from foreign parts and hard pieces (f. ex.: metal parts, wood, sand, soil, plastics) when entered into the machine.

All materials not mentioned in the above list need a special agreement of the factory before first processing them.



Plastic foils may be processed without problems up to a specific percentage but they ruin the quality of the final product. They can not be separated out of the material after processing.

2.3.2 Environmental Restrictions of Application

The environment of the machine has to correspond to the application of the machine (tiles, humidity, temperature, etc.) The necessities are to be determined according to the valid local regulations.

General demands

Temperature of surrounding	+5°C to +30°C
Humidity	up to 90%
Installation height	up to 1000m above sea
gas	non-explosive mixtures



During operation a minimum distance of 500 mm measured at the must protruding part of the machine and the next obstacle has to be kept clear all around the machine. Beside traffic lanes and conveying routes the distances given in local regulations are valid.

For servicing 1 m all around the machine must be cleared or the machine has to be moved accordingly.



The main insulator must be at easy access all the time.

For measurements and weights please consult the drawings later in the manual.

2.3.3 Emissions

2.3.3.1 Operator

Noise emission	The noise emission is 80 dB(A) acc. to EN 12331.

2.3.3.2 Environment

Except noise, there are any other specific emissions of the machine during normal operation. During service and repair it has to be assured that no residues of fat, grease or oil get into the drainage.
Parts exchanged during repair are to be deposed expertly. The local regulations and restrictions for deposits are to be matched. Your local waste disposal agency office may help you finding the right terms.

2.3.3.3 Scraping

When finally scraping the machine the local regulations and laws apply. Your local waste disposal agency office may help you finding the right terms.

3 Setting Up



The place of installation has to be chosen achieving a minimum clearance of 500 mm between the most protruding machine part and the next obstacle. Beside traffic lanes and conveying routes the distances given in local regulations are valid.

For servicing 1 m all around the machine must be cleared or the machine has to be moved accordingly.



The main insulator must be at easy access all the time.

3.1 Transport

Transporting is only allowed in the original package. Transport devices must be suitable and with sufficient loading capacity.
The transporting agent is the only responsible for transport.
If modifications for entering the machine into the workshop are required the costs are only be borne by the buyer.
Damages at machine or building due to transport and set-up are out of our range of liability.

3.2 Installation

After transporting the machine to its final destination all securing's and padding's are to be removed. The conveying wood has to be replaced by the rubber feet from the accessories. The cutting set has to be dismounted and the V-belt to be removed.

3.2.1 Preparations for Connection

The connection of the machine is only to be made by a local electro-specialist considering the VDE regulations. For the expert connection there is a complete circuit diagram in the switch cabinet. If the machine should not have a net dividing equipment, according to type and implementation, this is to be retrofitted through the local electrician. The net dividing equipment must have a thermal management protection and a magnetic instantaneous release.
The final positions of switch cabinet and machine must determine and the components mounted in accordance and adjusted. The route of the wiring is also to be defined, to lay out the cables and connected.

3.2.2 Connection

After having laid all control lines and junctions wirings and installed, if required, water, steam and compressed air, the main current supply can be connected to the net. The installation of gazes equipment (N^2, LN^2 or similar) and for steam facilities is exclusively permissible by in particular trained specialists. All added media must be equipped (on part of customer) before the machine with a shut-off valve.



Connection of the main line is only to be made by a local expert electrical technician!

A brief start will reassure the right revolution direction of the motors. The V-belts may be re-fit and the cutting set may be re-mounted.

3.2.3 Adjustments

Now, the machine may be straightened horizontally and the loader adjusted to the local requirements.
Be sure that a slit measure of 5 cm between trolley and hand protection trailing edge is not exceeded.

3.3 Commissioning

3.3.1 Function Check

After end of all preparations and successful connection the machine is ready for test run to review the functions of the machine. During the test run the different functions of the machine are to be operated watching the adjusted parameters.

Please consult chapters 4 and 8 referring on the facilities and possibilities of the machine to be checked.

3.3.2 Re-Adjustment

If necessary the pre-adjusted parameters may be modified locally for the requirements an site (Loader limit stop, height of trolleys and its lock. Slit measure < 50 mm between hand protection and trolley.

3.3.3 Security Check

After test run and re-adjustment all security devices are to be double checked again. The technician doing the commissioning does this together with the security officer of the operator.
The security officer is putting up a protocol on this check.

3.4 Acceptance

The acceptance of the machine by the buyer has to be recorded. The record has to show the functions checked, the well-functioning of the security devices and the names of the operators which have been instructed on the machine.
The record o0f acceptance has to be signed by the technician and the security officer. It has to be returned to the factory to get amended to the machine card. An installation report of our technician may replace the acceptance record.

3.5 Putting out of Commission, Storing

To put the machine out of commission and store it for some longer terms some conserving activities are required to prevent the machine from damages and faults:

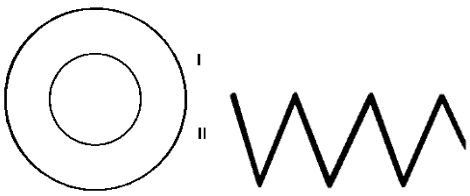
- Careful inside and outside cleaning of the machine
- Careful drying of the machine
- Change of all oils
- General lubrication of all grease nipples
- Main line disconnection
- Covering of the complete machine with plastic foil

4 Operation

4.1 Handling

The various functions of automatic grinders get controlled according to the equipment with turn and push button switches at the panel board.

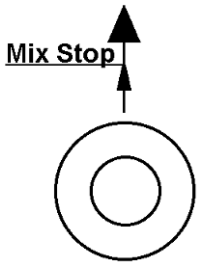
Following a survey on the symbols, indications and functions used on the machine:



Starting of the grinder by turning first mixing paddle and then switching on of the working worm. The button is longer to be hold.

A second pressing of the button changing the motor to the second speed.

The Stop-button must be activated if the stop of the grinder is acted by opening of the safety stairway.



A short activating of the switch disconnects the mixing paddle.
A longer activating of the switch disconnects the complete machine, that means mixing paddle and working worm.
At machines with hand protection:
If the machine is switched off with this press button, the hand protection can be opened first after the bulb of the stylus is lighting up.



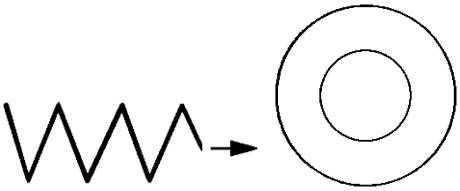
Selector for mixing paddle:

On and Right- / Left

With every operation the mixing paddle is driven reverse in an adjustable time.

This function is blocked during operation of main worm.

hydraulic device for worm ejector (optional):

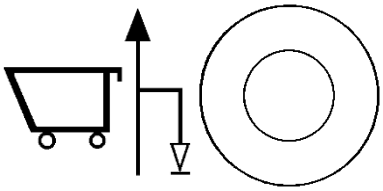


By using, this device (instead of the standard available hand lever) ejects the working worm with the entire cutting set hydraulically approx. 10 cm out off the worm housing. First of all it is to dismantle the locking nut and to open the holding device of the cutting set. It is a one-man-handling device only.



Finger/hand must not be in the area off the cutting set. Injury danger !!

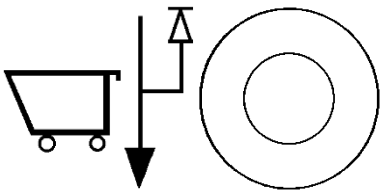
At machines with integrated loading device:



Loader up

Pushing once makes the loader to rise into the upper end position.

Pressing during downward run stops the down movement.

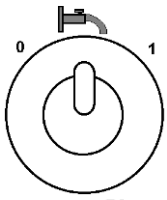


Loader down

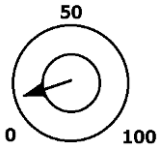
Pushing once makes the loader to rise into the lower end position.

Pressing during upward run stops the up movement.

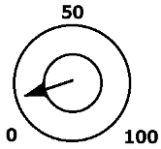
Machines with pneumatic separating device (optional):



Switch on activates the valve of the pneumatic separating device.



interval



open

With the left Poti-switch the range is defined for the closing of the outlet-valve.

The right Poti-switch determines how long the outlet-valve keeps on being opened.

4.2 Cutting Set

All components of cutting set manufactured in the corresponding size according to DIN may be used on the machine. The cutting set has to be combined sensible. Only with outlet hand protection a final hole plate equal / larger 8 mm can be used.

We recommend our knives and hole plates for we carefully consider highest quality and endurance. We get our knives and plates manufactured exclusively according to DIN from special steel.

Any manipulation at the cutting set or with its parts must not be done without protection gloves against cutting.

4.2.1 Selection of Cutting Set

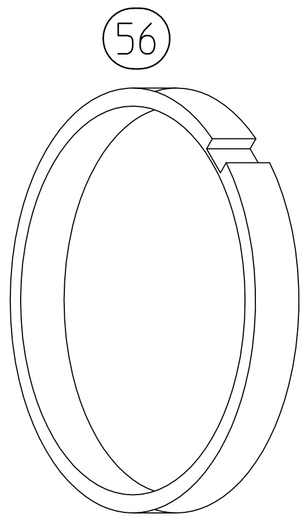
All sensible combinations of plates and knives from the cutting set parts range according to DIN may be used on the machine:

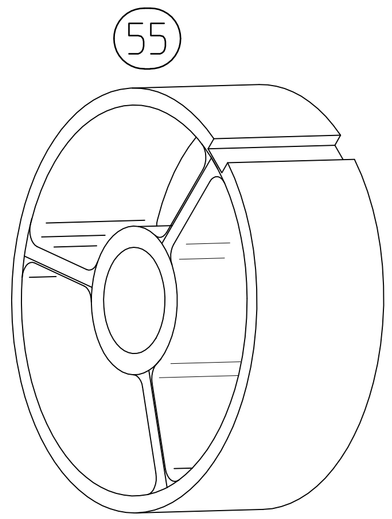
Hole plates:	Precutter (kidney plate) with plastic bush
	All hole diameters
	Hole blade systems
	Degristling plates
Knives :	bruising knife
	Full steel knife
	Exchangeable blade knife
	Frozen meat knife with spacer
	Degristling knife with half moon blades

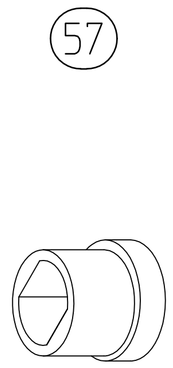


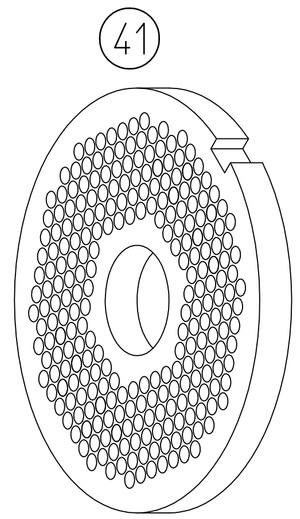
The half moon blades of the degristling knife must become greased in order to prevent a falling out before the start with physiologically harmless fat.

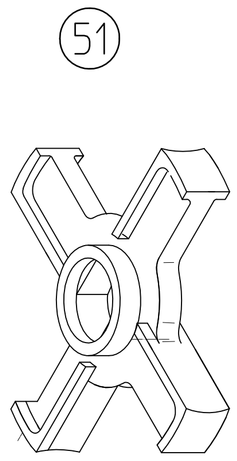
	Post cutting knife
Spacers :	Spacer without hub

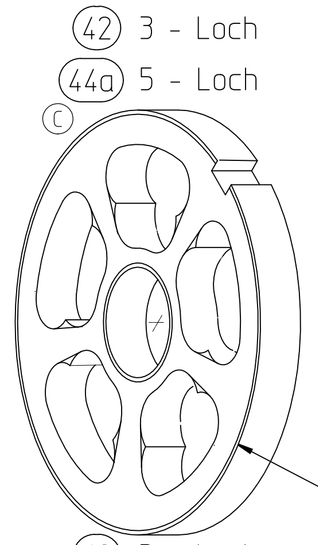


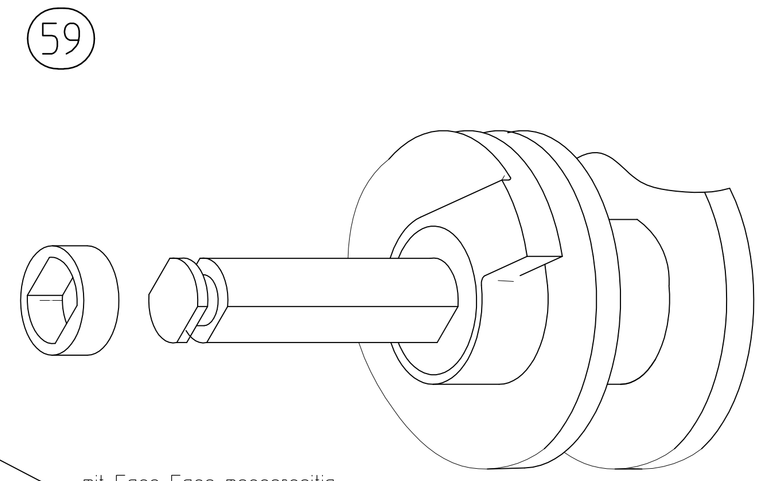






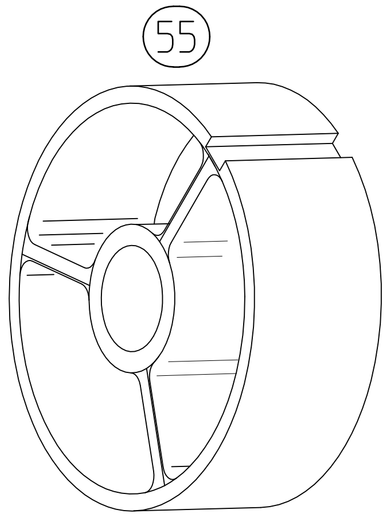


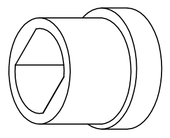


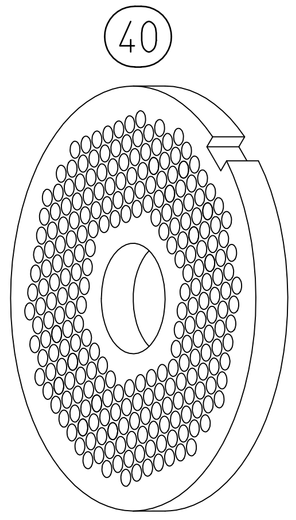


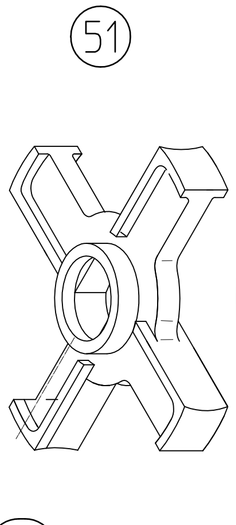
Schneidsatz
3-teilig

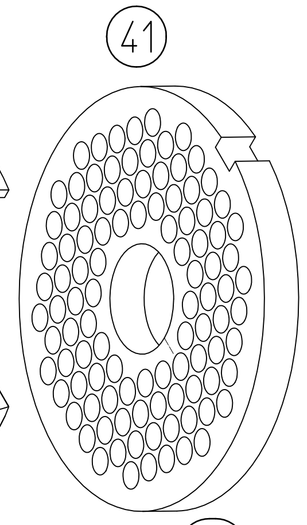
grinding set
3-parts

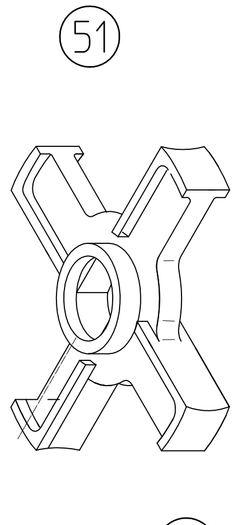


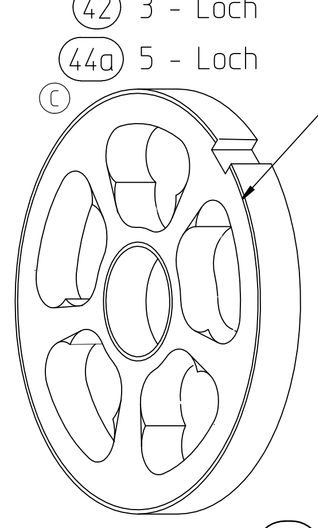




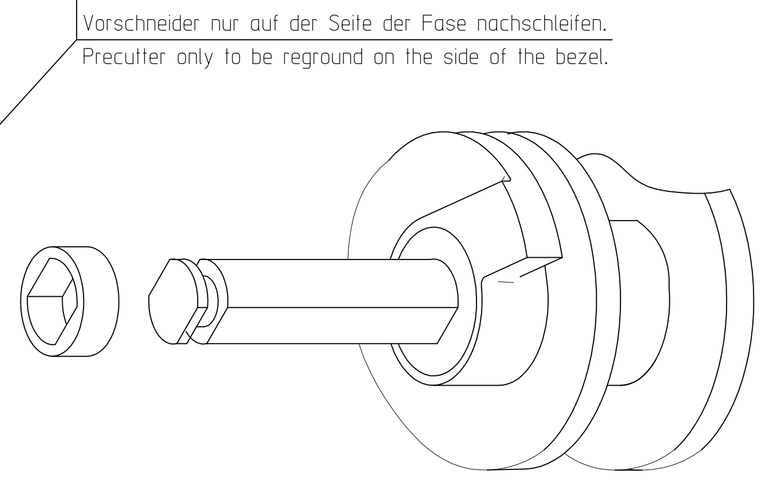






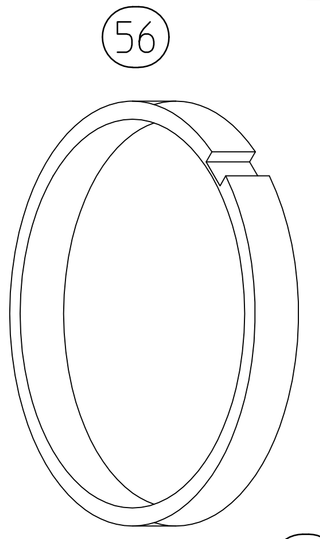


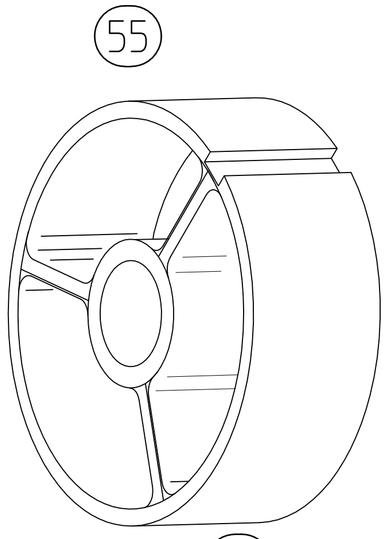
mit Fase Fase messerseitig.
with bezel: bezel on knifeside.
Vorschneider nur auf der Seite der Fase nachschleifen.
Precutter only to be reground on the side of the bezel.

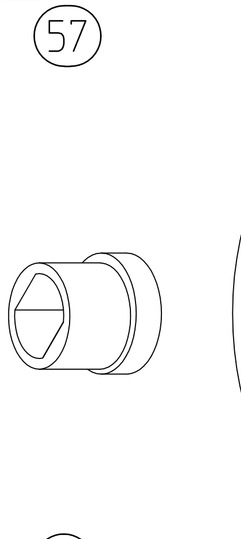


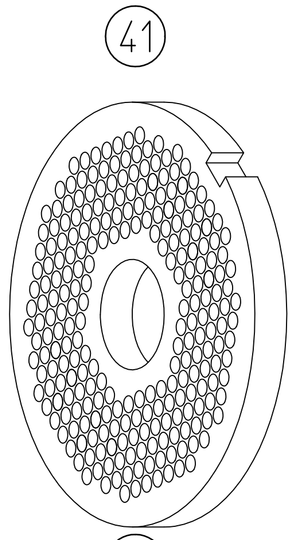
Schneidsatz
5-teilig

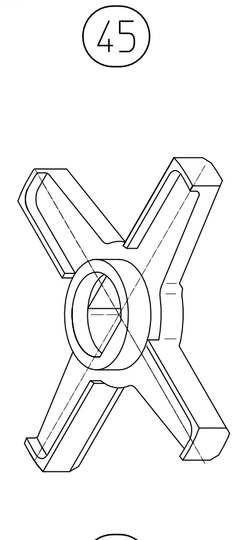
grinding set
5-parts

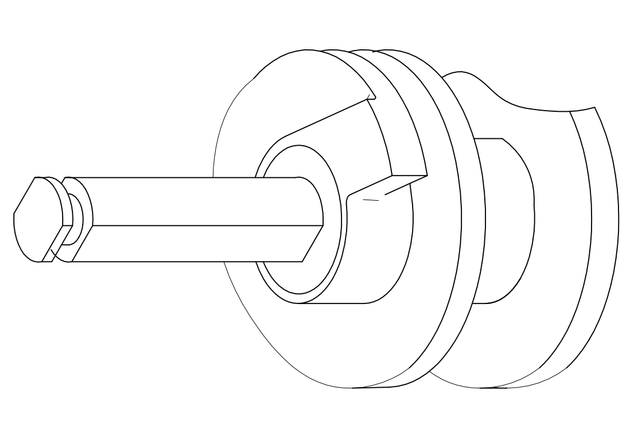




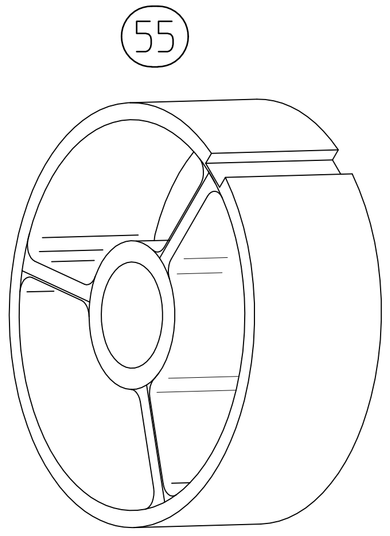


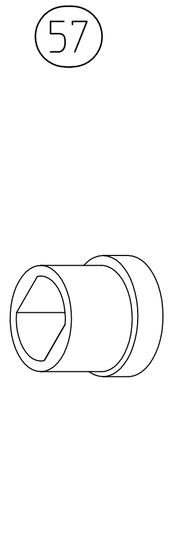


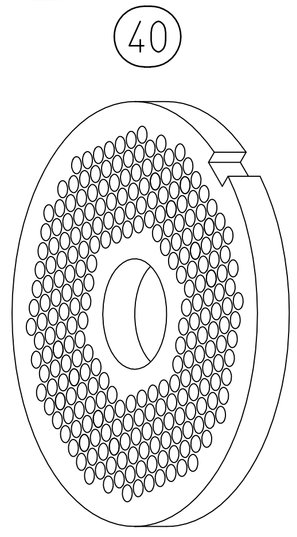


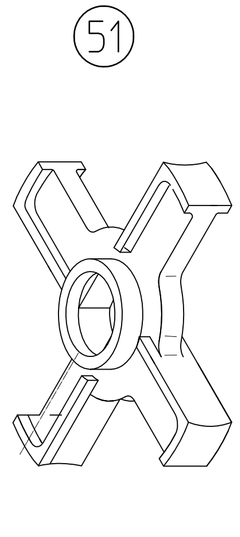


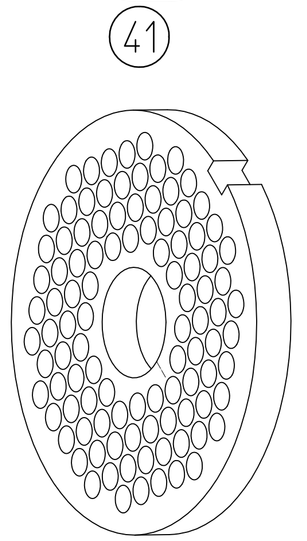
Schneidsatz für
weiches Material
2-teilig
fresh meat grinding set
2-parts

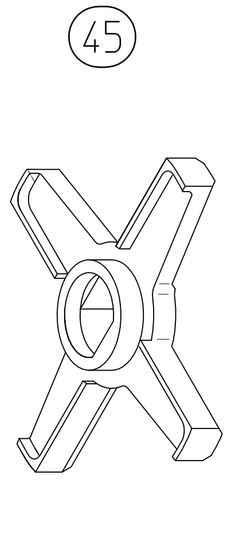


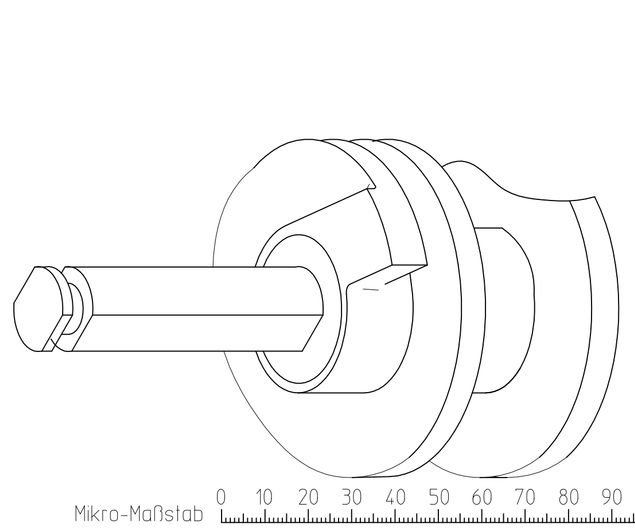












Schneidsatz für
weiches Material
4-teilig
fresh meat grinding set
4-parts

Mikro-Maßstab 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Auslaufseitige Lochscheiben mit Bohrungen von mehr als 8mm dürfen nur in Wölfen mit Auslaufhandschutz verwendet werden.

Plate guard must be installed when using front hole plate with holes larger than 8mm.

Da die aufgeführten Schneidsätze teilweise von der DIN Norm abweichen bitten wir auch bei Nachbestellung unsere Originalschneidsatzteile zu verwenden.

It is only recommended to use only the original spare parts for some of the cutting set pieces are not corresponding with the DIN regulation.

Erläuterungsblatt zu Preisliste (09 13 1E)

Diese Zeichnung ist unser geistiges Eigentum. Jede unbefugte Vervielfältigung oder Mitteilung an dritte Personen ist strafbar und macht schadenersatzpflichtig.

Allgemeintoleranz ISO 2768 - m	bis 6	über 6 bis 30	über 30 bis 100	über 100 bis 300	über 300 bis 1000
	±0.1	±0.2	±0.3	±0.5	±0.8

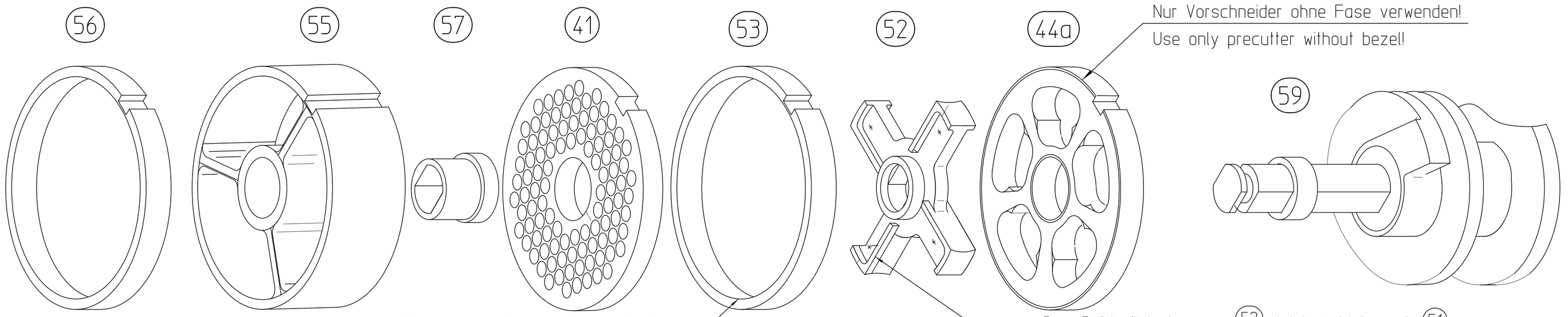
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			Gepr.		
			Erst.	03.04.2001	Eldefiny

Index	Änderung	Datum	Name
C	2006/9466	26.01.2006	Eldefiny
B	2002/8781	05.07.2002	Eldefiny

Maschinenfabrik Seydelmann Aalen

Maßstab 1:2.5
Klassifizierung Woelfe
Teilebezeichnung Schneidsaetze Woelfe
Zeichnungsnummer_Blatt V200713_01
Anz.Blatt 7
Status: freigegeben

A1



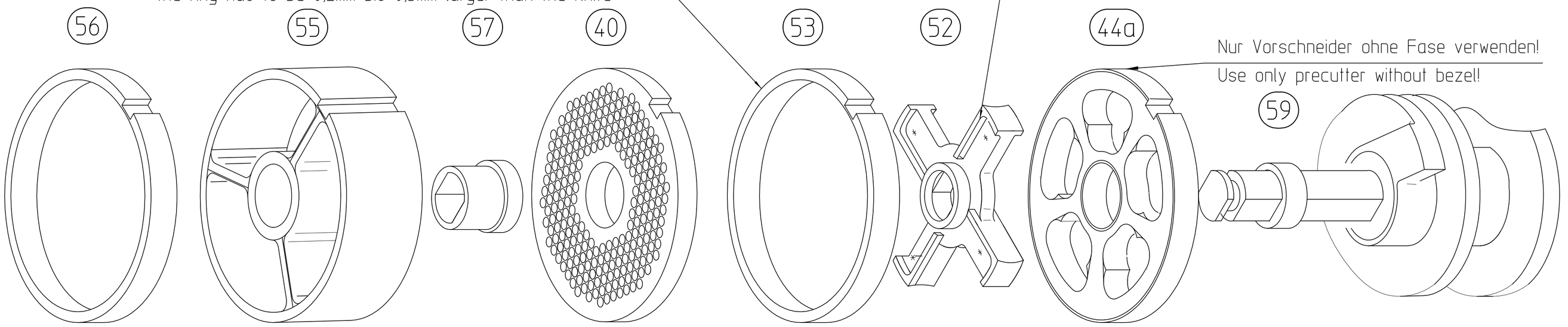
Nur Vorschneider ohne Fase verwenden!
Use only precutter without bezel!

Gefrierfleischschneidsatz
3-teilig

frozen meat grinding set
3-parts

Ringbreite auf Messerbreite abstimmen
width of ring to be matched with knife
Der Ring muß um 0,2mm bis 0,3mm breiter sein als das Messer
the ring has to be 0,2mm bis 0,3mm larger than the knife

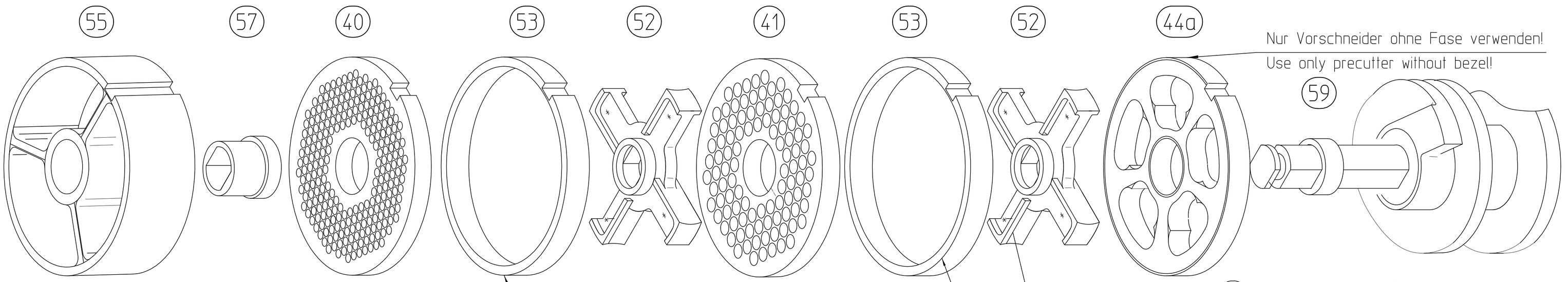
Das Gefrierfleischmesser (52) ist im ø kleiner als (51)
und mit einem * gekennzeichnet.
The frozen meat knife (52) has a smaller diameter
than (51) and is marked with a *



Nur Vorschneider ohne Fase verwenden!
Use only precutter without bezel!

Gefrierfleischschneidsatz
3-teilig

frozen meat grinding set
3-parts



Nur Vorschneider ohne Fase verwenden!
Use only precutter without bezel!

Gefrierfleischschneidsatz
5-teilig

frozen meat grinding set
5-parts

Der Ring muß um 0,2mm bis 0,3mm breiter sein als das Messer
the ring has to be 0,2mm bis 0,3mm larger than the knife
Ringbreite auf Messerbreite abstimmen
width of ring to be matched with knife

Das Gefrierfleischmesser (52) ist im ø kleiner als (51)
und mit einem * gekennzeichnet.
The frozen meat knife (52) has a smaller diameter
than (51) and is marked with a *

Erläuterungsblatt zu Preisliste

09 13 1E

Mikro-Maßstab 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Auslaufseitige Lochscheiben mit Bohrungen von mehr als 8 mm ø dürfen nur in Wölfen mit Auslaufhandschutz verwendet werden.

Plate guard must be installed when using front hole plate with holes larger than 8 mm.

Da die aufgeführten Schneidsätze teilweise von der DIN Norm abweichen bitten wir auch bei Nachbestellung unsere Originalschneidsatzteile zu verwenden

It is recommended to use only the original spare parts for some of the cutting set pieces are not corresponding with the DIN regulation.

Allgemeintoleranz ISO 2768 - m	bis 6	über 6 bis 30	über 30 bis 100	über 100 bis 300	über 300 bis 1000
	±0.1	±0.2	±0.3	±0.5	±0.8

		Datum	Name
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Gepr.			
Erst.		15.03.2001	Eldefiny

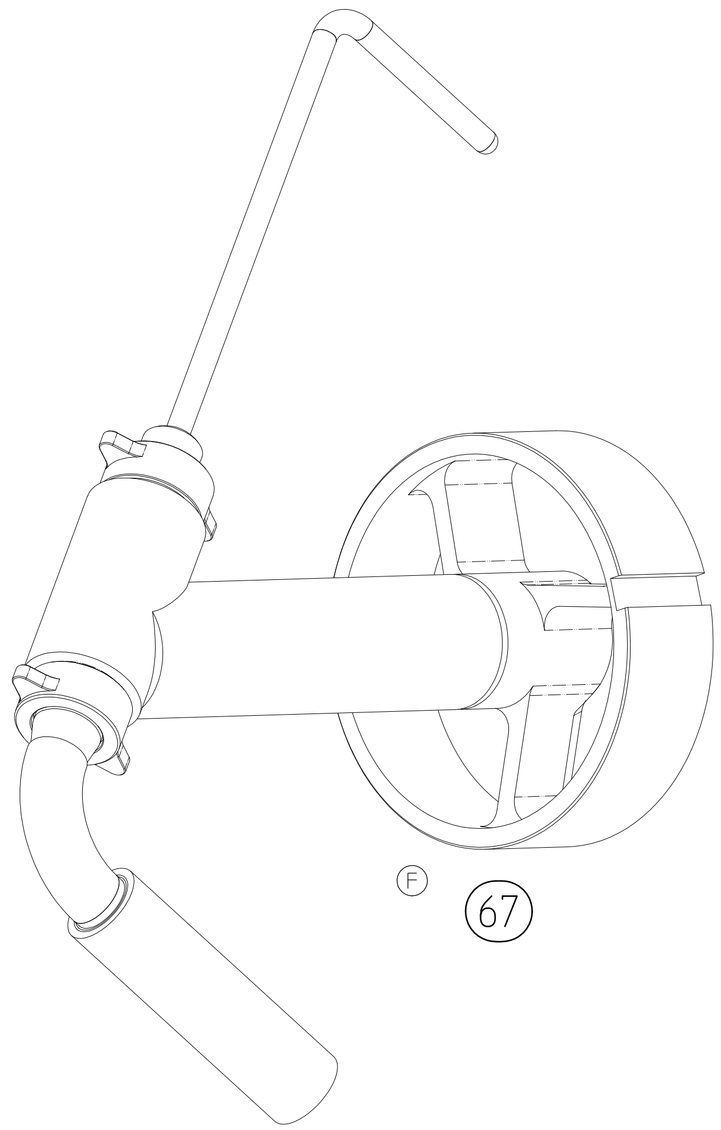
Index	Änderung	Datum	Name
B		06.04.2001	Eldefiny

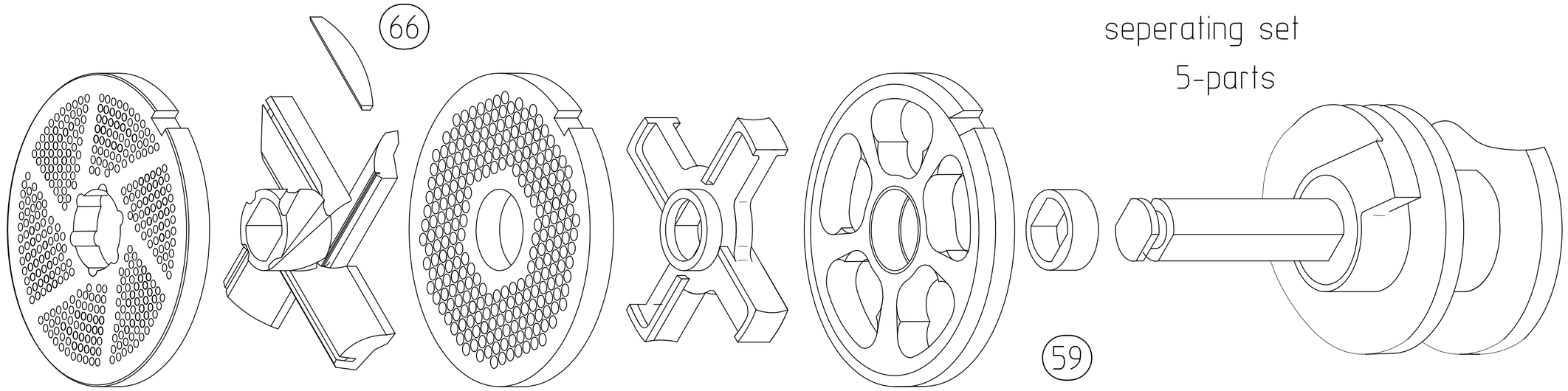
Maschinenfabrik
Seydelmann
Aalen

Maßstab 1:2.5
Klassifizierung
Woelfe
Teilebezeichnung
Schneidsaetze Woelfe
Gefrierfleischschneidsatz
Zeichnungsnummer_Blatt
V200713_02
Anz.Blatt
7
Status: freigegeben

Diese Zeichnung ist unser geistiges Eigentum. Jede unbefugte Vervielfältigung oder Mitteilung an dritte Personen ist strafbar und macht schadenersatzpflichtig.

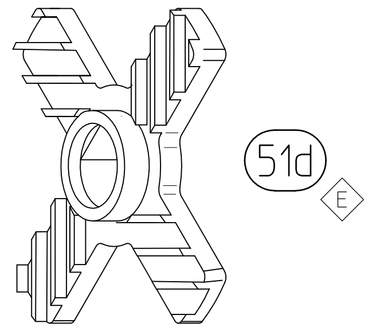
A1



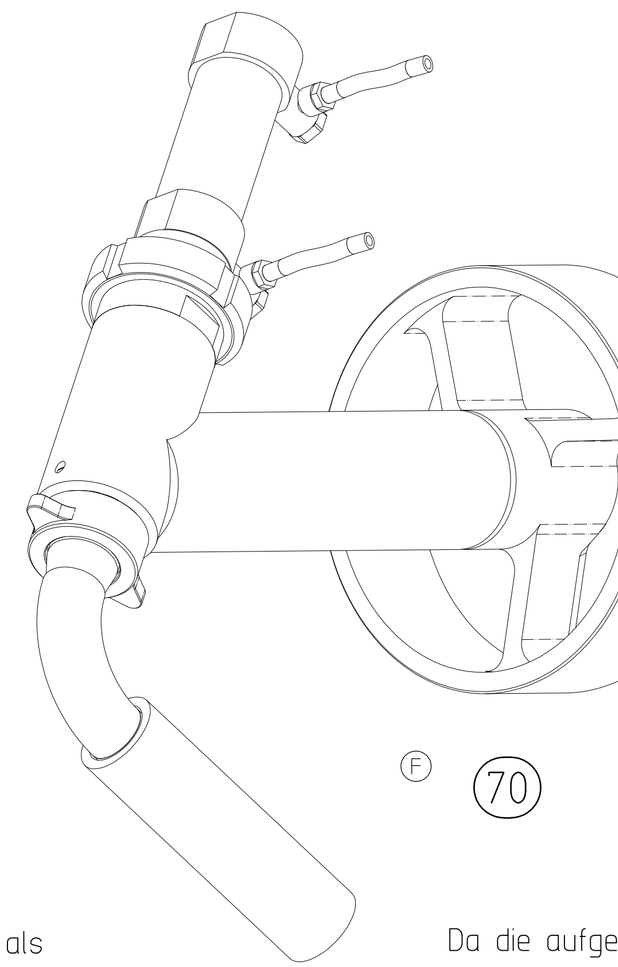


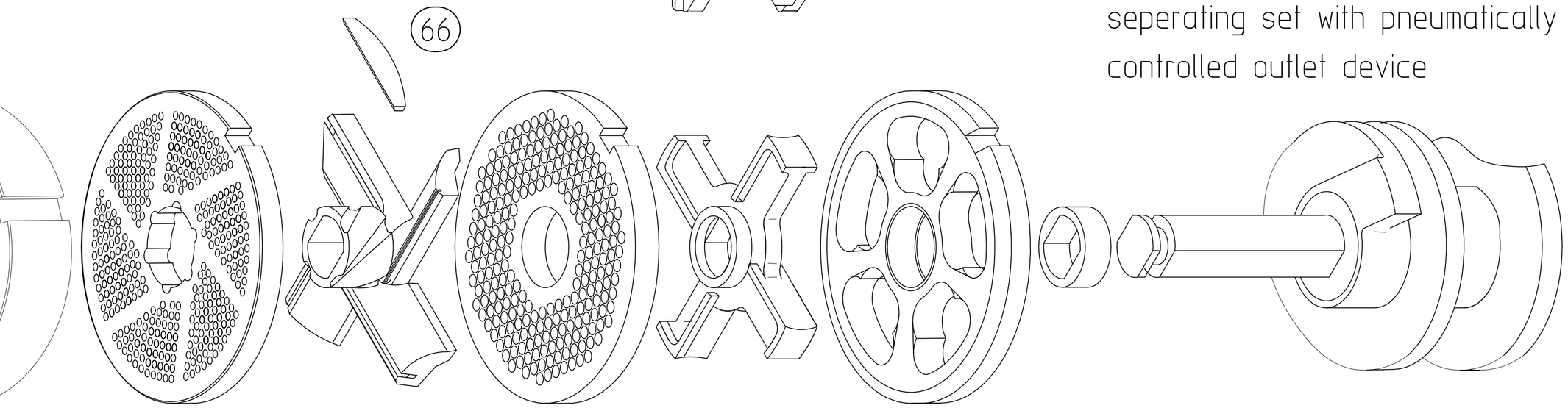
Seydelmann Trennschneidsatz
5-teilig

Seydelmann christle
seperating set
5-parts



Seydelmann Trennschneidsatz
(pneumatisch gesteuert)
Seydelmann christle
seperating set with pneumatically
controlled outlet device





Erläuterungsblatt zu Preisliste
09 13 1E

Mikro-Maßstab 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Auslaufseitige Lochscheiben mit Bohrungen von mehr als 8mm dürfen nur in Wölfen mit Auslaufhandschutz verwendet werden.

Plate guard must be installed when using front hole plate with holes larger than 8mm diameter.

Da die aufgeführten Schneidsätze teilweise von der DIN Norm abweichen bitten wir auch bei Nachbestellung unsere Originalschneidsatzteile zu verwenden.

It is recommended to use only the original spare parts for some of the cutting set pieces are not corresponding with the DIN regulation.

Allgemeintoleranz ISO 2768 - m	bis 6	über 6 bis 30	über 30 bis 100	über 100 bis 300	über 300 bis 1000
	±0.1	±0.2	±0.3	±0.5	±0.8

		Datum	Name
CAD		16.03.2001	Eldefiny
Gepr.			
Erst.		16.03.2001	Eldefiny

Index	Änderung	Datum	Name
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E		08.08.2014	Gentzwein
D	2006/9466	26.01.2006	Eldefiny

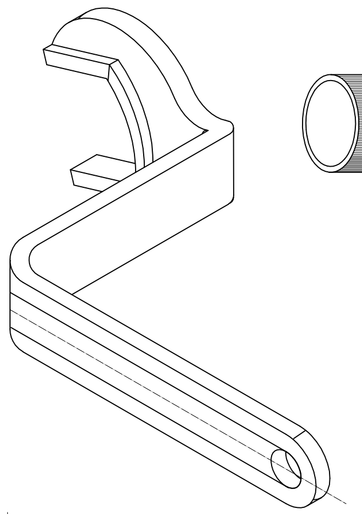
Maschinenfabrik
Seydelmann
Aalen

Maßstab 1:2.5
Klassifizierung
Woelfe
Teilebezeichnung
Schneidsaetze Woelfe
Trennschneidsaetze
Zeichnungsnummer_Blatt
V200713_03
Anz.Blatt
7
Status: freigegeben

Diese Zeichnung ist unser geistiges Eigentum. Jede unbefugte Vervielfältigung oder Mitteilung an dritte Personen ist strafbar und macht schadenersatzpflichtig.

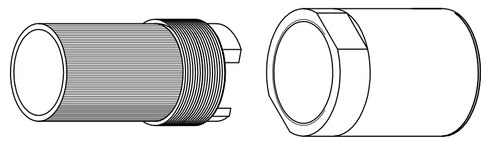
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(63)



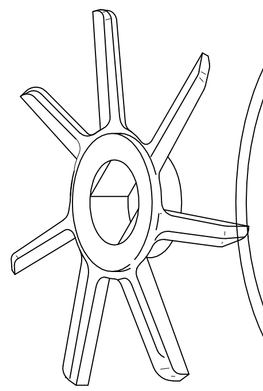
Nachschneideeinrichtung zum besseren körnen
post cutting device for better granulating

(62)

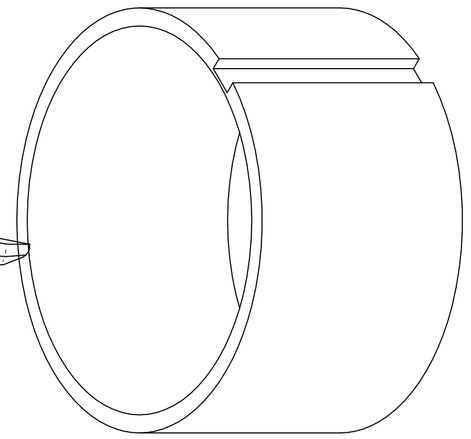


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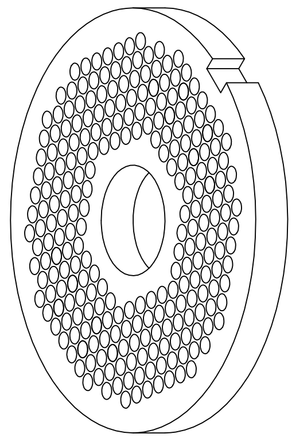
7 wings / 7 Flügel
9 wings / 9 Flügel



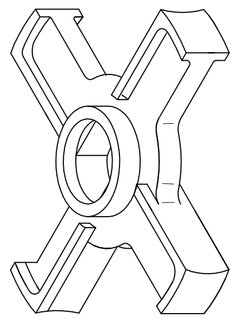
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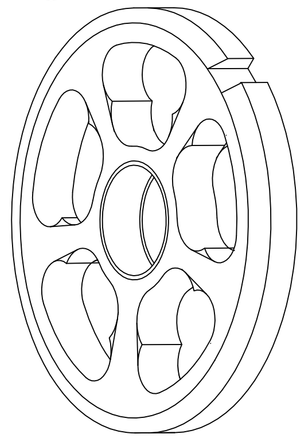
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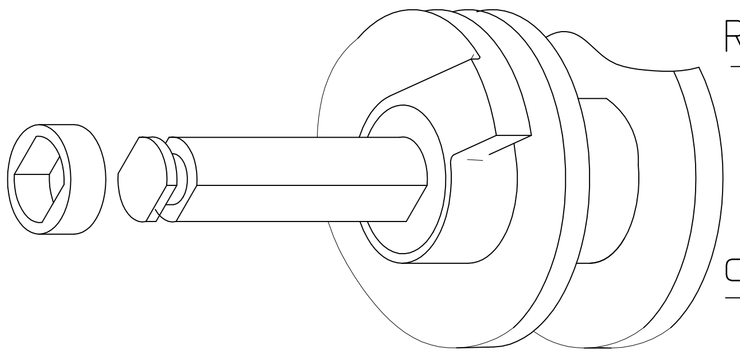
(51)



(42) 3 - Loch
(44a) 5 - Loch



(59)



Rohwurstschneidsatz

mit Nachschneidemesser

dry sausage grinding set

with outside cut knife

Erläuterungsblatt zu Preisliste

09 13 1E

Auslaufseitige Lochscheiben mit Bohrungen von mehr als 8mm ∅ dürfen nur in Wölfen mit Auslaufhandschutz verwendet werden.
Plate guard must be installed when using front hole plate with holes larger than 8mm.

Da die aufgeführten Schneidsätze teilweise von der DIN Norm abweichen bitten wir auch bei Nachbestellung unsere Originalschneidsatzteile zu verwenden

It is recommended to use only the original spare parts for some of the cutting set pieces are not corresponding with the DIN regulation.

Mikro-Maßstab 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Allgemeintoleranz ISO 2768 - m	bis 6	über 6 bis 30	über 30 bis 100	über 100 bis 300	über 300 bis 1000
	±0.1	±0.2	±0.3	±0.5	±0.8

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			Gepr.		
			Erst.	19.03.2001	Eldefiny

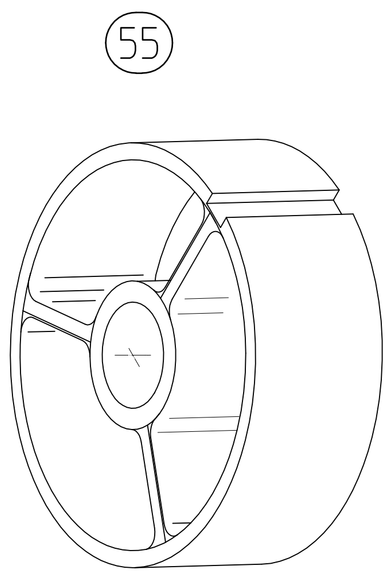
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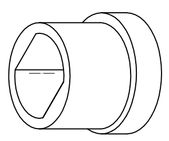
Maschinenfabrik Seydelmann Aalen

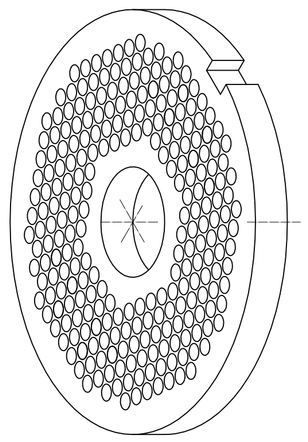
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Klassifizierung Woelfe
Teilebezeichnung
Schneidsaetze Woelfe
Sonderschneidsaetze
Zeichnungsnummer_Blatt V200713_04
Anz.Blatt 7
Status: freigegeben

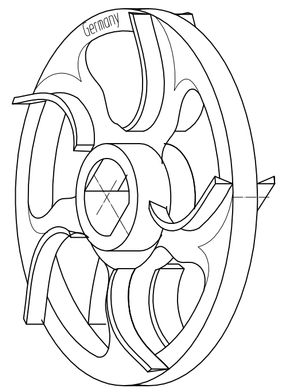
Diese Zeichnung ist unser geistiges Eigentum. Jede unbefugte Vervielfältigung oder Mitteilung an dritte Personen ist strafbar und macht schadenersatzpflichtig.

A1

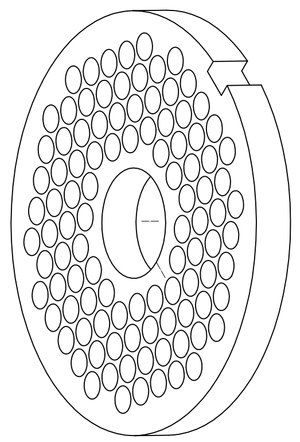


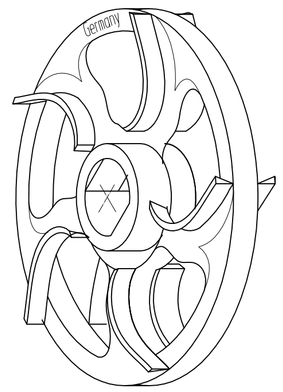




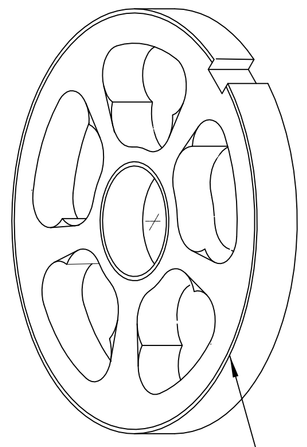


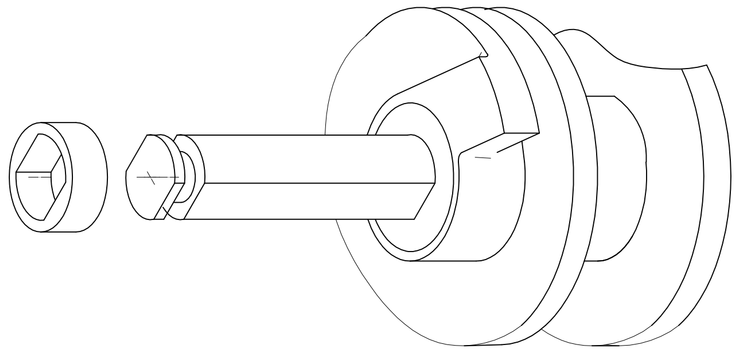
114 - 130 5-Flügel
160 - 200 6-Flügel
114 - 130 5-wings
160 - 200 6wingss





114 - 130 5-Flügel
160 - 200 6-Flügel
114 - 130 5-wings
160 - 200 6wingss

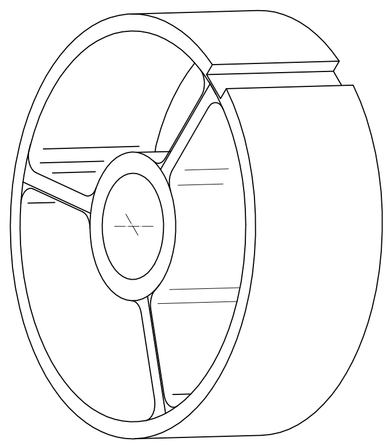


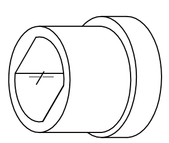


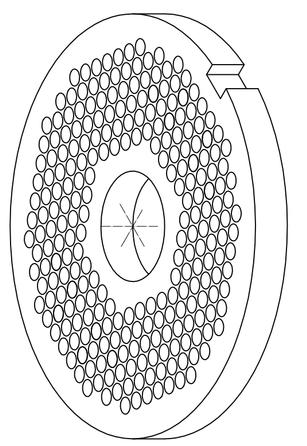
Sonderschneidsatz
5-teilig
special grinding set
5-parts

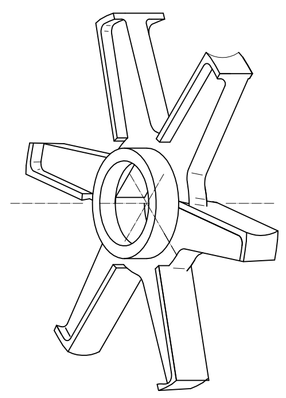
mit Fase: Fase messerseitig
wih bezel: bezel on knifeswide
Vorschneider nur auf der Seite der Fase nachschleifen
Precutter only to be reground on the side of the bezel

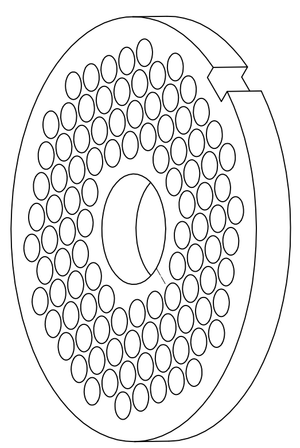
114 - 130 5-Flügel
160 - 200 6-Flügel
114 - 130 5-wings
160 - 200 6wingss

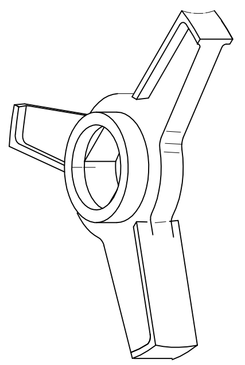


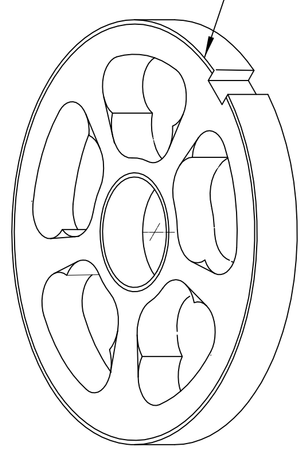


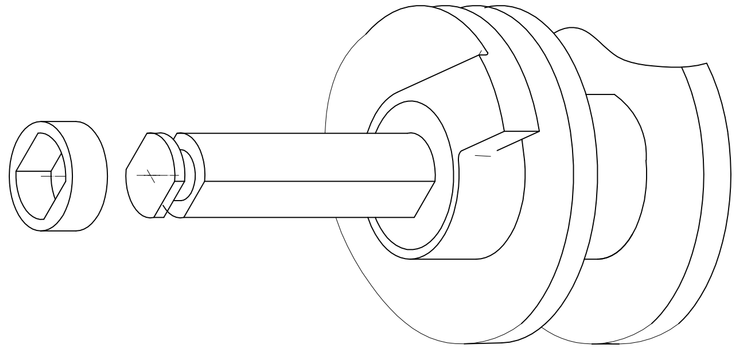












Sonderschneidsatz
5-teilig / U 200
special grinding set
5-parts / U 200

Auslaufseitige Lochscheiben mit Bohrungen von mehr als 8mm dürfen nur in Wölfen mit Auslaufhandschutz verwendet werden.

Plate guard must be installed when using front hole plate with holes larger than 8mm.

Da die aufgeführten Schneidsätze teilweise von der DIN Norm abweichen bitten wir auch bei Nachbestellung unsere Originalschneidsatzteile zu verwenden.

It is only recommended to use only the original spare parts for some of the cutting set pieces are not corresponding with the DIN regulation.

Erläuterungsblatt zu Preisliste

09 13 1E

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Mikro-Maßstab 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Allgemeintoleranz ISO 2768 - m	bis 6	über 6 bis 30	über 30 bis 100	über 100 bis 300	über 300 bis 1000
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			Gepr.		
			Erst.	03.04.2001	Eldefiny

Index	Änderung	Datum	Name
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B	2002/8781	05.07.2002	Eldefiny

Maschinenfabrik
Seydelmann
Aalen

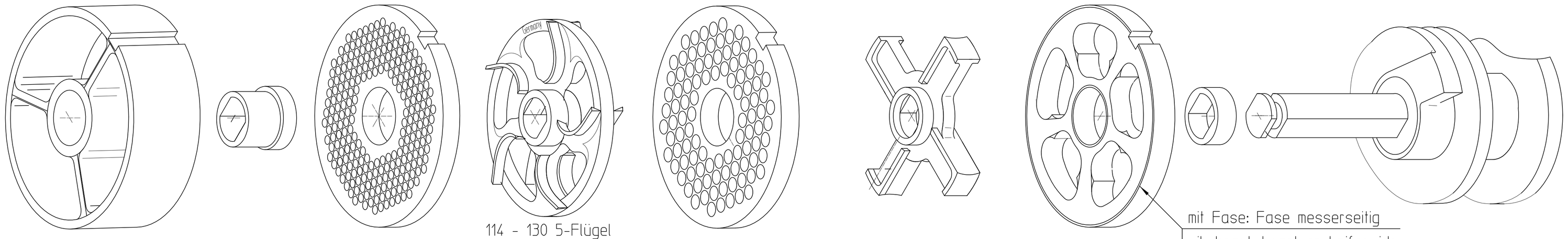
Maßstab 1:2.5
Klassifizierung
Woelfe
Teilebezeichnung
Schneidsaetze Woelfe
Zeichnungsnummer_Blatt
V200713_05
Anz.Blatt
7
Status: freigegeben

A1

Standardschneidsatz
regular grinding set

Schneidsatz für Wölfe von 114 bis 200

(55) (57) (40) (51) (41) (51) (42) (44a) (59)



114 - 130 5-Flügel
160 - 200 6-Flügel
114 - 130 5-wings
160 - 200 6wingss

mit Fase: Fase messerseitig
wih bezel: bezel on knifeswide
Vorschneidernur auf der Seite der Fase nachschleifen
Precutter only to be reground on the side of the bezel

Standardschneidsatz
5-teilig
alternative 2
regular grinding set
5-parts

Auslaufseitige Lochscheiben mit Bohrungen von mehr als 8mm dürfen nur in Wölfen mit Auslaufhandschutz verwendet werden.

Plate guard must be installed when using front hole plate with holes larger than 8mm.

Da die aufgeführten Schneidsätze teilweise von der DIN Norm abweichen bitten wir auch bei Nachbestellung unsere Originalschneidsatzteile zu verwenden.

It is only recommended to use only the original spare parts for some of the cutting set pieces are not corresponding with the DIN regulation.

Erläuterungsblatt zu Preisliste
09 13 1E

Diese Zeichnung ist unser geistiges Eigentum. Jede unbefugte Vervielfältigung oder Mitteilung an dritte Personen ist strafbar und macht schadenersatzpflichtig.

Mikro-Maßstab 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Allgemeintoleranz ISO 2768 - m	bis 6	über 6 bis 30	über 30 bis 100	über 100 bis 300	über 300 bis 1000
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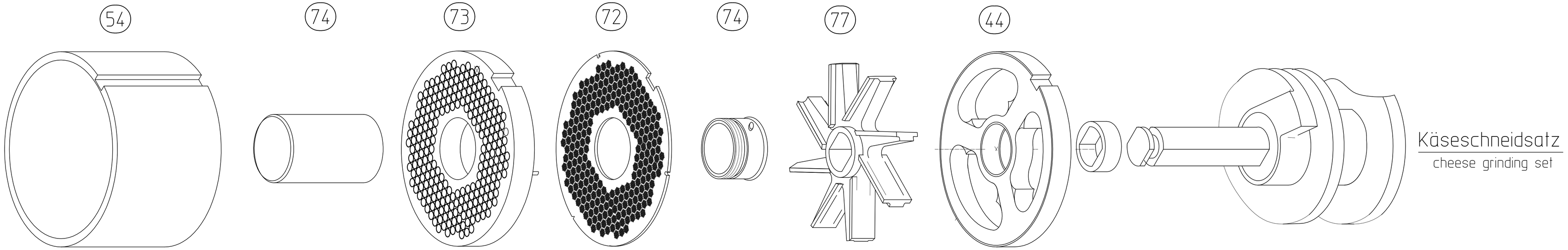
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			Gepr.		
			Erst.	2002/07/05	Eldefiny

Index	Änderung	Datum	Name
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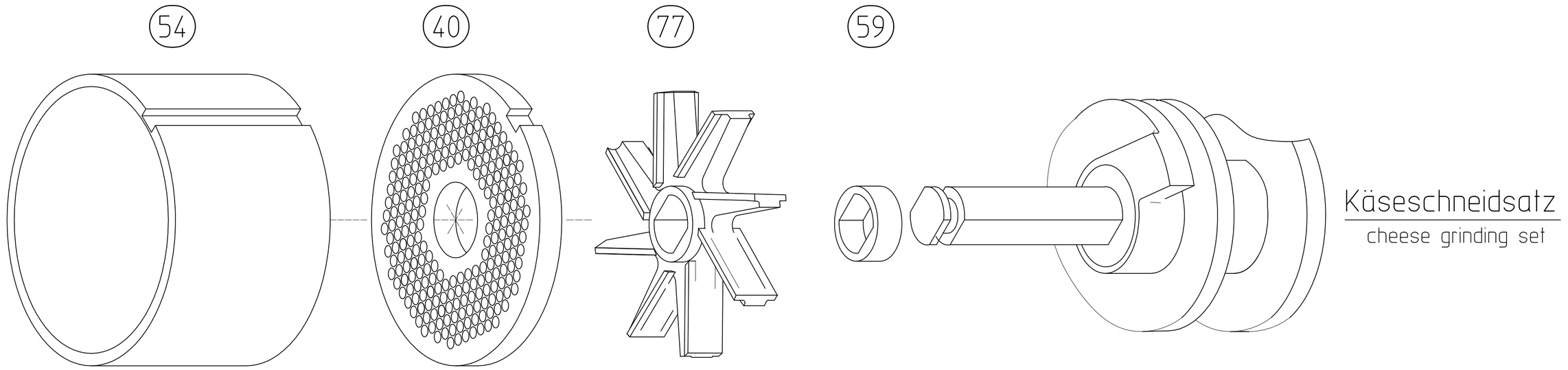
Maschinenfabrik
Seydelmann
Aalen

Maßstab 1:2.5
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Woelfe 114 - 200
Teilebezeichnung
Schneidsaetze Woelfe
-Standardschneidsatz-
Zeichnungsnummer_Blatt
V200713_06
Anz.Blatt
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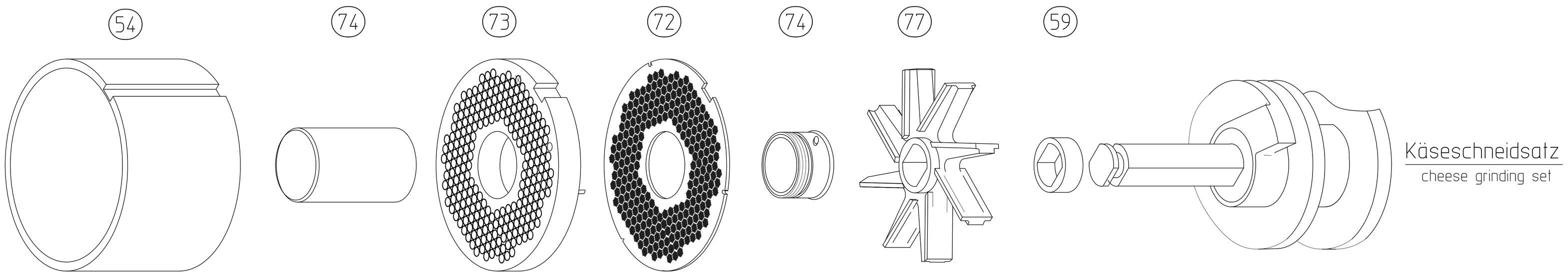
A1



Käseschneidsatz
cheese grinding set



Käseschneidsatz
cheese grinding set



Käseschneidsatz
cheese grinding set

Erläuterungsblatt zu Preisliste

09 13 1E

Mikro-Maßstab 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Auslaufseitige Lochscheiben mit Bohrungen von mehr als 8mm ⌀ dürfen nur in Wölfen mit Auslaufhandschutz verwendet werden.
Plate guard must be installed when using front hole plate with holes larger than 8mm.

Da die aufgeführten Schneidsätze teilweise von der DIN Norm abweichen bitten wir auch bei Nachbestellung unsere Originalschneidsatzteile zu verwenden

It is recommended to use only the original spare parts for some of the cutting set pieces are not corresponding with the DIN regulation.

Allgemeintoleranz ISO 2768 - m	bis 6	über 6 bis 30	über 30 bis 100	über 100 bis 300	über 300 bis 1000
	±0.1	±0.2	±0.3	±0.5	±0.8

Index	Änderung	Datum	Name
	CAD	07.04.2003	Eldefiny
	Gepr.		
	Erst.	07.04.2003	Eldefiny

Maschinenfabrik Seydelmann Aalen

Maßstab 1:2.5
Klassifizierung: Woelfe
Teilebezeichnung: Schneidsaetze Woelfe Kaeseschneidsaetze
Zeichnungsnummer_Blatt: V200713_07
Anz.Blatt: 7
Status: freigegeben

Diese Zeichnung ist unser geistiges Eigentum. Jede unbefugte Vervielfältigung oder Mitteilung an dritte Personen ist strafbar und macht schadenersatzpflichtig.

A1

Spacer with hub and plastic bush
Degristling device
Special tools

4.2.1.1 Mounting of Cutting Set

After selecting and preparing the cutting set the main worm has to be slid on the driver. It has to be considered that no material residues are hidden behind the worm (we recommend to take out the worm completely every time when changing the cutting set and to clean the barrel. See the chapter “Cleaning”, too).

The mounting of the working worm with a dead weight above 25 kg occurred through 2 man. The mounting of the working worm by one person a level able trolley with stop furnishings must be used.

At use of final hole plates equal or larger 8 mm is the use of an hand protection necessary.

First insert the precutter with plastic bush and secure it with the holding device (if mounted) and then the knives, plates and spacers as selected. Then put on the locking nut.



Please do not fix the locking nut too tight when mounting.

After a short run of the worm the locking nut has to be re-tightened to adjust the pressure inside the cutting set.

Never not making the cutting set be run dryly! Danger of the seizing-up!

4.2.1.2 Dismounting of Cutting Set

Dismounting procedure:

1. Release holding device (if mounted)
2. Remove post cutting knife o.s.
3. Release locking nut
4. Dismantling of distance ring
5. Operate worm ejector (Finger / hand out off the cutting set area - **injury danger)**
6. Take away cutting set parts from knife tab

4.2.2 Sharpening and Regrinding

For a good performance of the machine a well-attended cutting set is essential:

The plates are to be reground in short periods. Never use any plates showing roughnesses or grooves from the knives. Only smooth and flawless plates give a good cut. Regrinding in short periods reduce the wear of knives and blades. 2/3 of the initial thickness of the hole plate is to be regarded as an abrasion-boundary.

Diameter	Thickness of hole plate		Minimum thickness
	Hole size < 2 mm	Hole size > 2 mm	
114	11,0 mm	11,0 mm	7,5 mm
130	12,0 mm	12,0 mm	8,0 mm
160	14,0 mm	14,0 mm	8,5 mm
200	15,0 mm	17,0 mm	10,0 mm
250	18,0 mm	20,0 mm	13,5 mm
300	20,0 mm	22,0 mm	14,0 mm
400	-	28,0 mm	18,0 mm

Exchangeable blades are not allowed to be reground but have to be exchanged in time. Blades are worn out if it gets reasonable that the blade holder may touch the plate. Worn out blades may cause a complete cutting set rupture!

4.3 Cleaning

For the cleaning of the machine the housing nut, the cutting set, as well as the working worm is to be extended and to be cleaned separately (using protective gloves). Because the working worm is heavier than 25 kg, the dismantling of the worm out of the grinder housing has to occur by two persons. The dismantling of the working worm by one person a level able trolley with stop furnishings must be used.

The mixing paddle cannot be extended. Switch off the power of the machine. Swivel down safety step. Pre-cleaning the hopper and the housing of the working worm with detergent moved water, squirt out with water pressure, than disinfecting and rinse out again with water pressure. Do not grasp into the worm housing.

Generally only the following cleaning agents are permitted for use on the machine considering the concentration according the product data sheet.

4.3.1 Admitted Cleansers

Cleaning	System Henkel	System Goldschmidt
pre, rough and alkaline	P3-topax 19 or P3-topax 66	SOMPLEX grease solvent
alkaline, for Aluminium alloys	P3-topax 12	SOMPLEX F
acidic	P3-topax 56	SOMPLEX Acidic foam
disinfecting	P3-topax 99 Or P3-topax 91	TEGO 2000 Or TEGP IMC
rinsing	Drinking water	Drinking water

The Product data sheets and Safety data sheets of above cleaning agents are to be requested at the producer (or their agents).

4.3.2 Cleaning of Cutting Set



All parts of the cutting set are to be cleaned only with domestic dish cleaner in the normal concentration, then disinfected and rinsed with drinkable water.

4.3.3 Cleaning Procedure

Please consider the handling instructions for safety of the producer. Valid for the machines: Cutter Grinder Stuffer, Blender, Slicer for meat processing.

Step	Cleanser	Procedure	Device	Remark
Rough cleaning, remove material residues, remove small parts if necessary		manually, mechanically	Spatula, Scraper	Starting immediately after end of production
Dismounting and cleaning of small parts	2-5% f. ex: Henkel Hygiene: P3-topax 19 P3-topax 66 Goldschmidt: SOMPLEX grease solvent	After thorough rinsing with water (max. 60°C depending on the fat fusion point) foaming or manual, app. 15 min reaction time	Low pressure foaming device, brush, tub	
thorough **rinsing**	Drinking water	Low pressure < 30 bar, max. 60°C depending on the	Low pressure device, water hose	Including all small parts

Step	Cleanser	Procedure	Device	Remark
		fat fusion point		
Check of visual cleanness		Visually		
Alkaline Cleaning	2-5% f. ex: Henkel Hygiene: P3-topax 19 P3-topax 66 Goldschmidt: SOMPLEX grease solvent Aluminium parts: 2-5% Henkel Hygiene: P3-topax 12 Goldschmidt: Somplex F	Foaming or manually, app. 15 min reaction time	Low pressure foaming device, hand sprayer, brush, tub	Every day, small parts included

Step	Cleanser	Procedure	Device	Remark
Acidic Cleaning If necessary instead of alkaline cleaning	Henkel Hygiene: 3-6% P3-topax 56 Goldschmidt: SOMPLEX Acidic foam	Foaming app. 15 min reaction time, manually, mechanically	Low pressure foaming device, hand sprayer, brush to remove chalk layers	
Rinsing	Drinking water	Low pressure < 30 bar, temperature 50-60°C	Low pressure device, water hose	Complete unit including the small parts
Check of visual cleanness		Visually		Consider special remarks of the producer, critical zones and points to be double checked.
Disinfecting	Acc product data sheet 0,5-2%, f. ex.: Henkel Hygiene: P3-topax 99 P3-topax 91 Goldschmidt: TEGO 2000 TEGP IMC	Spraying, foaming, reaction time acc. product data sheet	Low pressure device, spraying device	Complete unit and small parts after end of all cleaning works in the room. The given disinfecting agents are suitable for aluminium parts, too.
Rinsing	Drinking water	Low pressure < 30 bar, temperature 50-60°C	Low pressure device, water hose	Rinsing procedure acc. to FLHV, encl. 2, II N°4
drying				
attending	f. ex. physiological oil	spraying	Spraying system	

This cleaning procedure is only valid for machines from stainless steel. Using other materials need a alignment with the cleanser supplier
The data refer on machines mostly operated in a one shift production. When operating the machine in multiple shifts the corresponding data are to be considered from the valid regulations.

5 Maintenance

Out the following grease and maintenance statements the statements of the manufacturers of the built-in components are valid (for example motors). The corresponding instructions are added in the chapter 8.

5.1 Lubrication

5.1.1 List of Lubricants

Generally, only the following lubricants have improved and are permitted to be used to lubricate the machine. The product data sheets and the security data sheets of the manufacturer are to be considered when applying these lubricants. Spilled or worn out lubricants are to be disposed expertly.

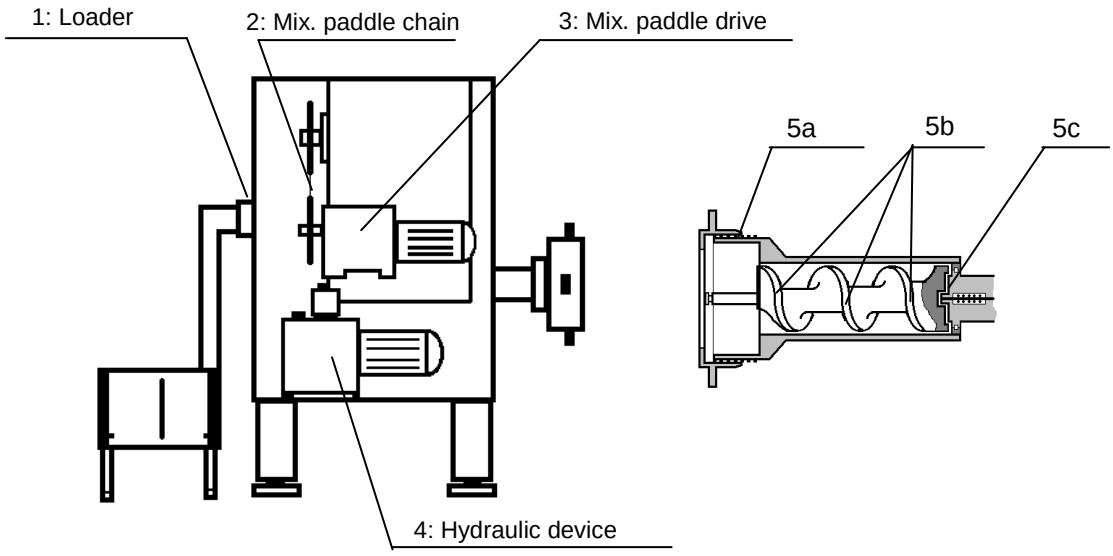
Other brands are allowed if they perfectly match the requirements of the type list.

OPTIMOL OBEEN FS2 is the only grease allowed as physiologically unobjectionable grease. It has an USDA H1 permission.

Admitted Lubricants:

N°	Use	Type	Brand
A	Main bearing, general lubrication purpose in the product area	physiologically unobjectionable food stuff grease OPTIMOL OBEEN FS2	OPTIMOL OBEEN FS2
B	Motor bearings	Lithium saponifyed grease or roller bearing, marking NLGI3/2 acc. to DIN 51825,	Shell Alvania G2/G3 Esso Beacon 2/3 BP Energrease LS2/3 SKF LGEP2
C	Gear box either	Gear oil on petroleum base , marking CLP, ISO VG 220 acc. to DIN 51502	Shell Omala 220 Esso Spartan EP 220 Aral Degol BG 220 BP Energol GR-XP 220
D	or	Gear oil on synthetic base, marking PGLP, ISO VG 220 acc. to DIN 51502	Shell Tivela WB Esso Glycolube 220 Aral Degol GS 220 BP Enersyn SG-XP 220
E	Hydraulics	Hydraulic oil acc. to DIN 51524 part 1+2, Viscosity 46	Shell Tellus C 46 Esso Nuto H 46 Aral Vitam DE 46 BP Energol HL 46
F	Chain drive	Chain spray from the biker's shop	diverse

5.1.2 Lubrication Plan



SAFETY DATA SHEET

1 . Identification of the substance/preparation and company/undertaking

Product name **Obeen FS 2**

SDS no. DE-08257, UK-3757

Product use Food machinery lubricant

Supplier Deutsche BP Aktiengesellschaft
Industrial Lubricants & Services
Erkelenzer Straße 20,
D-41179 Mönchengladbach
Germany

Telefon: +49 (0)2161 909-319
Telefax: +49 (0)2161 909-392

EMERGENCY TELEPHONE NUMBER Carechem: +44 (0) 208 762 8322

2 . Composition/information on ingredients

Synthetic lubricant and additives. Thickening agent.

Chemical name	CAS no.	%	EINECS / ELINCS.	Classification
N-Oleyl sarcosine	110-25-8	0.1 - 1	203-749-3	Xi; R38, R41 N; R50/53
Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates	80939-62-4	0.1 - 1	279-632-6	Xi; R36/38 N; R51/53
1H-imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro-	95-38-5	0.1 - 1	202-414-9	Xn; R22 C; R34 N; R50/53

See section 16 for the full text of the R-phrases declared above

Occupational exposure limits, if available, are listed in section 8.

3 . Hazards identification

This preparation is classified as dangerous according to Directive 1999/45/EC as amended and adapted.

Physical/chemical hazards Not classified as dangerous.

Human health hazards Not classified as dangerous.

Environmental hazards Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Effects and symptoms

Eyes May cause mild eye irritation.

Skin Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

Inhalation Vapours and aerosol can produce mucous membrane, nose and throat irritation.

Ingestion Ingestion may cause gastrointestinal irritation and diarrhoea.

4 . First-aid measures

Eye contact In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin contact Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

Inhalation If inhaled, remove to fresh air. Get medical attention if symptoms appear.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

5 . Fire-fighting measures

Extinguishing media

Suitable	In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Not suitable	Do not use water jet.
Hazardous decomposition products	These products are carbon oxides (CO, CO_2). Some metallic oxides.
Unusual fire/explosion hazards	This material is not explosive as defined by established regulatory criteria.
Special fire-fighting procedures	None identified.
Protection of fire-fighters	Fire-fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

6 . Accidental release measures

Personal precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").
Environmental precautions and clean-up methods	If emergency personnel are unavailable, contain spilled material. Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Minimize contact of spilled material with soils to prevent runoff to surface waterways. See Section 13 for Waste Disposal Information.
Personal protection in case of a large spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7 . Handling and storage

Handling	Avoid contact of spilled material and runoff with soil and surface waterways. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.
VCI Storage class (Lagerklasse)	11

8 . Exposure controls/personal protection

Ingredient name	**Occupational exposure limits**
aluminum, (benzoato-o)hydroxy(octadecanoato-o)-	**ACGIH TLV (United States, 1/2005).** TWA: 2 mg/m^3 8 hour(s). Form: Soluble

Where there are no regulatory exposure limits, for information and guidance, the ACGIH values are included.
For further information on these please consult your supplier.

Control Measures	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.
Hygiene measures	Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Personal protective equipment

Respiratory system	None required; however, use of adequate ventilation is good industrial practice.
Skin and body	Wear appropriate clothing to avoid prolonged skin contact.
Hands	Wear protective gloves if prolonged or repeated contact is likely. Chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
Eyes	Safety glasses with side shields.

9 . Physical and chemical properties

Colour	Amber.
Odour	Mild
Physical state	Solid. (Paste.)
Melting point / range	>230 °C
Density	<1000 kg/m^3 (<1 g/cm^3) at 20°C
Solubility	Insoluble in water.

10 . Stability and reactivity

Incompatibility with various substances	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous polymerisation	Will not occur.

11 . Toxicological information

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC) or the European Commission (EC).

12 . Ecological information

Persistence/degradability	Inherently biodegradable.
Mobility	Nonvolatile. Paste.. Insoluble in water.
Environmental hazards	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13 . Disposal considerations

Disposal Consideration / Waste information	Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities.
Unused product	
European waste catalogue (EWC)	12 01 12* spent waxes and fats
Used/contaminated product	
European waste catalogue (EWC)	12 01 12* spent waxes and fats
Packaging	
European waste catalogue (EWC)	15 01 10* packaging containing residues of or contaminated by dangerous substances
	However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.
Hazardous waste	This product is listed as Hazardous by the EU Directive on hazardous waste. Dispose of according to all national and local applicable regulations.

14 . Transport information

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

15 . Regulatory information

Label requirements

Risk phrases	R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.
EU regulations	Classification and labelling have been performed according to EU directives 1999/45/EC and 67/548/EEC as amended and adapted.

Other regulations

Inventories	AUSTRALIAN INVENTORY (AICS): In compliance. CANADA INVENTORY (DSL): Not determined. CHINA INVENTORY (IECS): Not determined. EC INVENTORY (EINECS/ELINCS): In compliance. JAPAN INVENTORY (ENCS): Not determined. KOREA INVENTORY (ECL): Not determined. PHILIPPINE INVENTORY (PICCS): Not determined. US INVENTORY (TSCA): In compliance.
Technical instruction on air quality control	Class III
Hazard class for water (WGK)	2, classified according to VwVwS.

16 . Other information

Full text of R-phrases referred to in sections 2 and 3	R22- Harmful if swallowed. R34- Causes burns. R36/38- Irritating to eyes and skin. R38- Irritating to skin. R41- Risk of serious damage to eyes. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
History	
Date of issue	06/07/2005.
Date of previous issue	01/09/2004.
Prepared by	Product Stewardship

Notice to reader

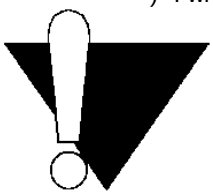
All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

Lubric. point	Position	Description	Lubricant	Lubrication-interval
See above sketch			See lubricant list	
1	loader arm	Some good pushes with the grease gun into each nipple. (app. 8 gr.)	**B**	monthly, at least every 100 operation hours
2	Feeder chain	Lubricate thoroughly with chain spray	**F**	monthly, at least every 100 operation hours
3	Feeder drive	Empty with drainage screw, re-fit screw and fill in new oil	**C or D**	Half a year)[1] or if oil cloudy
4	Hydraulic power pack	Empty with drainage screw, re-fit screw and fill in new oil	**E**	Half a year)[1] or if oil cloudy
5 a	Thread of locking nut	Grease thoroughly	**A**	Every time when inserting the main worm
5 b	Grooves of main worm			
5 c	Neck of worm			
	Main bearing	Some good pushes with the grease gun into each nipple. (app. 8 gr.)	**A**	Every fortnight, at least every 40 operation hours

)[1] : when using synthetic oil the interval will double



Caution: Clean nipples before greasing!

5.2 Maintenance

To keep the machine on a reliable performance mode some checks and readjustments are to be performed time after time. The following list describes the works to be done.

Our After-Sales-Service offers maintenance agreements at a good price. This includes the maintenance works to be performed expertly, fast and in time as we check the intervals ourselves.

The following time delays refer on a one shift operation. If the machine is used in multiple shift operations the operation hours given applies.



Caution: Maintenance works at the machine are only to be performed with the machine insulated from main supply and the main insulator safely locked against switching on. (see “Risk Assessment”, too)

5.2.1 Drives

Our machines are driven electrically. Transmission of force is made with different devices.

5.2.1.1 Motors

AC motors:

Check interval: 12 months / 4000 operation hours
Maintenance works: check fixations
retighten cable terminals
clean aeration grid
visual check for damages

5.2.1.2 Gears

Paddle Drive gear
Check interval: 6 months / 1000 operation hours
Maintenance works: Oil change (see lubrication plan)
check of bearings
visual check for leakage

5.2.1.3 V-Belts

Art. No.	Pieces	Profile	Length

Check interval: 3 months / 500 operation hours
Maintenance works: re-tighten belts
check for wear

Check interval: 12 months / 2000 operation hours
Maintenance works: Change V-belts
check for correct pulley position

Check interval: if necessary:
belts whistling, bad performance, app. 5 hours after changing belts
Maintenance works: re-tighten v-belts
check for wear



Remark: V-belts tightened too tough will damage the bearings, low tension of v-belts will cause excessive wear and bad performance.

Correct tension allows the belts to by pressed in for app. one thickness of belt, one by one.

5.2.2 Main Bearing

Check interval: 2 weeks / 40 operation hours
Maintenance works: push into the rear and front greasing nipple for main bearing app. 8 gr. (2-3 pushes) of OPTIMOL OBEEN FS2 using the grease gun.
Noise check of bearings



Caution: Clean nipples before greasing!

5.2.3 Hydraulics

Check interval:	6 months / 1000 operation hours
Maintenance works:	oil change
	clean filter
	visual check of tank, pump and cylinders for leakage
	check bolted connections of the cylinders

5.2.4 Electric's

Check interval:	12 months / 2000 operation hours
Maintenance works:	visual check of wiring for damages
	visual check for water proofness
	cleaning of panel box and terminal boxes

5.3 Maintenance and lubrication of additional equipment



Have been supplied with Seydelmann machines extra equipment, such as extension or connection components, mast-feeding, screw conveyors or pumps, inclined conveyor belts etc., so the user manuals to comply with their instructions on lubrication and maintenance.

5.4 Spare Parts

We recommend using only original spare parts for repairing. This is the only way to keep the warranty claims. Original spare parts may be ordered at the factory at the service department.

For fast ordering spare parts we need the following data:

Machine type:	see manual
Machine number:	see manual
Spare part number:	see drawing and part list
Spare part description:	see part list

If the above information is partly or completely lost the specialists of our service staff are able to help on the phone.

The specialists will also help to detect faults and keep a staff of technicians available.

Spare parts, counsel and technicians:



phone: +49 (0)7361 565-235 Mo-Fr, 07.00 to 17.00,
Sa, 08.00 to 15.00

fax: +49 (0)7361 35951 every day 00.00 to 24.00

6 Risk Assessment

6.1 Security Checks

For ordinary operation the owner has to determine and train a security officer. He has to check the operation security and the operation safety at the machine constantly.

Tasks of the security officer:

- Checking performance and functions of security devices as necessary, at least once a shift.
- Training of operators on function and performance of the security devices at the machine.
- Training of operation staff in handling the machine at its standard and security functions during operation.
- Continuous check of the machine and the security devices during operation.



It is recommended to create a record file on the security checks due to reasons of evidence.

The machine is not allowed to be operated with faulty security devices. It has to be cut off safe and secure until the fault is repaired.

6.2 Risk Evaluation

The machine and its security devices are built according to the latest stand of design. On the other hand some risks couldn't be excluded due to operation. They result in operational functions and purpose of the machine.

The following evaluations of hazards during regular use are listing the different dangers and the resulting injuries possible. The security officer of the operator has to improve the evaluations periodically, re-evaluate the hazards during operation due to material and mode of operation and to abolish them or to create job instructions for safer operation.



To minimise the risks during maintenance, service and cleaning the machine has to be cut off at the main insulator and secured.

For securing the main insulator has to be locked with two padlocks at least. One key has to be with the worker performing the works at the machine and the other with the person responsible for safety (f. ex. security officer).



It is recommended to use a separate padlock for each group working at the machine.

6.3 Hazards of...

6.3.1 ... Mechanics

Everywhere parts moving inflict the danger of getting squeezed or drawn in. Powered machine parts need special consideration even with their special safety units.

Grinder nut:	Danger of squeezing when mounting and tightening the nut. Danger of squeezing the lower limbs if the locking nut falls down
Precautions:	Special caution
Main worm:	Danger of squeezing when inserting the worm into the barrel
Precautions:	Special caution
Loading device:	Danger of squeezing during up, down and swivelling motion.
Precautions:	Special caution

6.3.2 ... Electric

The machine has no special dangers from the electric equipment during normal operation.

Possible dangers might come from the electric equipment if the following preconditions occur:

- Damage at the wiring
- Injection of water into opened panel box or terminal boxes
- Touching live devices

Danger:	Electrocution (230 / 400V, 50Hz)
Precaution:	special caution, keep panel box and terminal boxes closed all the time, never override cables or touch cables with tipped tools. Keep panel box and terminal boxes tidy inside all the time. Insulate and secure machine all the time during all maintenance and service works. Only expert and well-trained electricians are allowed to open panel box and terminal boxes.

6.3.3 ... Hydraulic

The hydraulic unit is mounted the way that it is impossible to create any danger at all during normal operation. Dangers may occur especially with exceptional operation states:

Bursting tubes:	Injuries caused by oil jets, dysfunction's by rapidly decreasing oil pressure and uncontrolled hydraulic motions.
Precautions:	Special caution, good maintenance in advance
Fetching air:	Danger of getting injured by uncontrolled hydraulic motions or dysfunction's.
Precautions:	Special caution, periodical oil check.
Low oil pressure:	Danger of getting injured by uncontrolled hydraulic motions or dysfunction's.
Precautions:	Special caution, periodical check of filter and oil pressure.

6.3.4 ... Miscellaneous

Depending on the state of equipment of the machine options may create additional dangers. Especially, thermal equipment may bear the danger of freezing and burning. Special protection clothing will help.



Basically, safety distances or security devices are never to be bridged or put out of service.

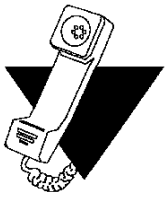
Safety distances and security devices are to be check periodically (see 1.2).

7 Trouble Shooter

The amended trouble shooter lists are for your fast and easy survey of faults occurring. Evidently, not all faults may be recognised and solved using these lists.

For solving any problem beside the trouble shooters there are our specialists of the service staff available. The service staff will help solving problems, determine and dispatch spare parts and technicians. Furthermore, they will help to avoid problems in future.

Contacting service staff:



phone:	+49 (0)7361 565-235	Mo-Fr, 07.00 to 17.00, Sa, 08.00 to 15.00
fax:	+49 (0)7361 35951	every day 00.00 to 24.00

7.1 General Mechanical and Electrical Faults

N°	Fault	Reason	Solution	Valid for
1	Machine whistles when changing speed or under load	V-belts loose	Retighten / change V-belts	All grinders
2	Hydraulic functions don't work	Solenoid valve doesn't contact	Check signal lines, change solenoid	Big grinder
		Pump without pressure	see top 3	Big grinder
		Pump doesn't run	Check signal lines, change pump motor	Big grinder
3	Hydraulic pump without pressure	Oil leakage	Check hose connection	Big grinder
		Oil level low	Check oil level	Big grinder
		Wear	Change pump	Big grinder
4	Cylinder move down under load	Oil leakage	Check tube connections	Big grinder
		Oil level low	Check oil level	Big grinder
		Wear	Change cylinder seals and oil, clean hydraulic system	Big grinder
5	Main bearing runs noisily	Faulty lubrication of main bearing	See lubrication plan	All grinders
		main bearing faulty	Change bearing and sealing section completely	All grinders
6	Feeder runs noisily	Feeder chain loose	Re-tighten chain	A - grinder
		Faulty lubrication of feeder bearing	See lubrication plan	A - grinder
		main bearing faulty	Change bearing and sealing section completely	A - grinder
6a	Mixing paddle runs noisily	Mixing paddle chain loose	Re-tighten chain	M - grinder
		Faulty lubrication of paddle bearing	See lubrication plan	M - grinder
		bearing of mixing paddle faulty	Change bearing and sealing section completely	M - grinder
7	Worm ejector doesn't work	Ejector bar seized	Change main bearing together with ejector	All grinders
		Ejector broken	Change main bearing together with ejector	All grinders
8	Ejector doesn't move back	Ejector spring broken	Change spring and seals	All grinders
9	Fuses trip when starting	Short cut	Check motor coils, change motor	All grinders
10	Machine can not be started	No safety check made	before starting at least one security device has to be operated	Big grinder
		Timer relay faulty	Check/change relay	Big grinder

N°	Fault	Reason	Solution	Valid for
		Main fuses tripped	Change fuses, check for the reason	Big grinder
		Limiter faulty	Check signal lines, check/change Limiter	Big grinder
		Hand protection not closed	Close hand protection	Big grinder
		Step swivelled down	Swivel step up	Big grinder
11	Feeder runs, main worn not	Timer relay faulty	Change timer relay	A – grinder
		V-belts ruptured	fit new V-belts	A – grinder
12	Machine shows strange behaviour when starting	Switch wet / bridges in the switch box	Dismount and dry switch box, change protection hoods of switches	All grinders
13	Cutting set doesn't work any more	Worm tap broken	Change worm tap, check cutting set	All grinders
		Key of housing broken	Change key, check cutting set	All grinders
14	Machine brings bad cutting results	Cutting set blunt or grooved	Re-ground cutting set, change knives / blades	All grinders
		Knives / blades worn out	Re-ground cutting set, change knives / blades	All grinders
16	Knives / hole plates are breaking	Knives / blades worn out	Re-ground plates, exchange faulty plates, knives and blades	All grinders
		No spacers in the frozen meat cutting set	Use spacers and frozen meat knives	All grinders
		Material too cold	Use frozen meat cutting set	All grinders
		Wrong cutting set	use correct cutting set	All grinders
		Machine overloaded	Use plastic bush in pre-cutter and spacer with hub, select low feeder speed	All grinders
		Hard foreign parts in the material	see restrictions of use	All grinders

7.2 Electronic Faults

The machine has no electronic control unit.

8 Appendix I

The appendix contains further information for safe operation, correct maintenance and secure ordering of spare parts.

8.1 Part A

Please find enclosed drawings and part lists according to the structure according which the machine has been built.

They correspond to the release of design at the date of delivery.

The machine has been built according to the structure-N°:

40-0055-2

The erasing list defines the state of equipment with the corresponding N° of the assembly drawing which may be sub-structured if necessary.

8.2 Part B

This section contains special manuals for electronic components, displays and mechanical devices of Seydelmann.

Device / Type		Release
Part lists and drawings according to structure and machine card		Release at the date of delivery
LOGO		

Components / devices not delivered erased.

8.3 Part C

For the electric and electronic components and devices listed below the operation manuals of the manufacturer are enclosed. They are not included in the liability range of Seydelmann but on their own due to the reason that the devices may be operated alone equally.

The addresses of the manufacturers are indicated in the different manuals.

Device / Type		Release	Manufacturer
Brake device		BG 40	Tele

The manuals enclosed are out of our range of control, liability and responsibility. They are supplied for reasons of information.
For any question arising from these manuals please contact the manufacturer.

8.4 Part D

For the mechanical components and devices listed below the operation manuals of the manufacturer are enclosed. They are not included in the liability range of Seydelmann but on their own due to the reason that the devices may be operated alone equally.

The addresses of the manufacturers are indicated in the different manuals.

Device / Type		Release	Manufacturer
Hydraulic unit		1061399	Harms

The manuals enclosed are out of our range of control, liability and responsibility. They are supplied for reasons of information.
For any question arising from these manuals please contact the manufacturer.