

# TRADITION + INNOVATION = FUTURE









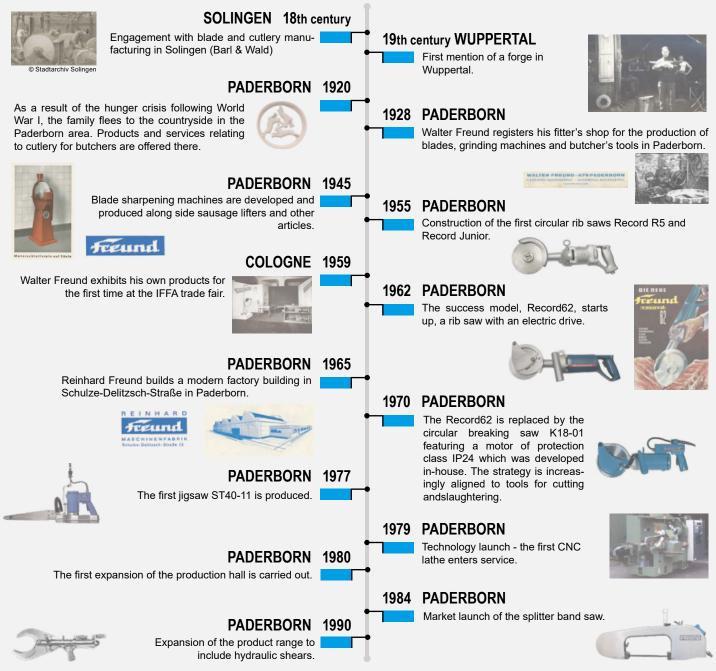








#### A FAMILY-OWNED COMPANY THAT REFLECTS THE TIMES





#### TRADITION + INNOVATION = FUTURE

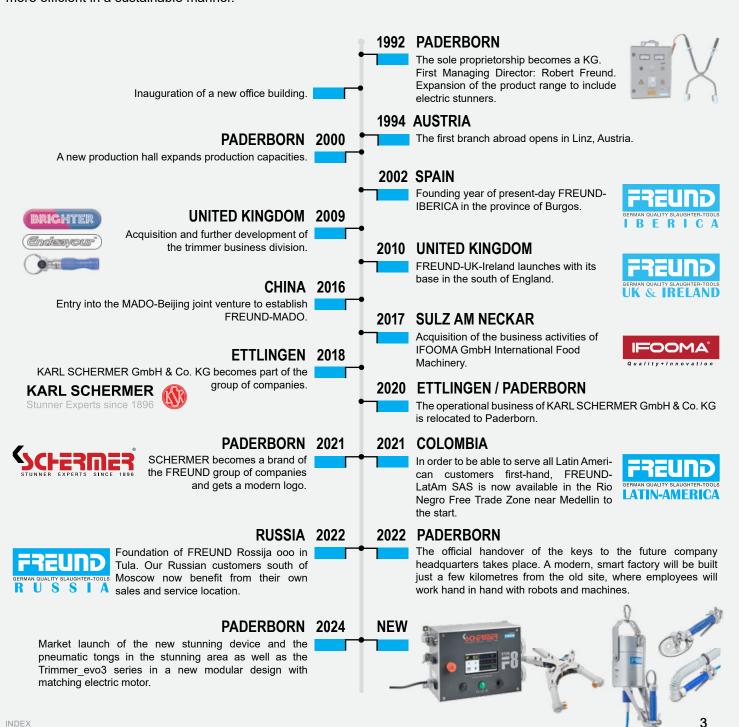
As a globally operating manufacturer of tools for cutting and slaughtering, we have made it our goal to support the meat extraction process in a way that is conducive to the well-being of the animal, socially responsible and beneficial to our customers.

Ethical animal welfare requirements coupled with a highly cost-effective procedure and optimum meat quality is what needs to be achieved.

That is why we develop and produce extremely effective and stable machines for the entire process chain. From stunning and slaughtering to cutting up and refining, we ensure that our machines make your production process more efficient in a sustainable manner. The development and improvement of our services always incorporates regular dialogue with our customers and partners in over 100 countries as well as centuries-old experience as a family-run and family-owned company.

Our FREUND in-house service department will be happy to provide you with comprehensive and expert advice and show you how you can use our services to generate the greatest benefit for your business.

Quality from a single source – For trade and industry Made in Germany.

















# STUNNING



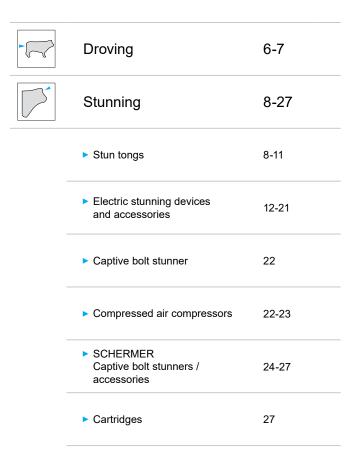
**CONTENTS** 

rofessional stunning plays a very important role in the slaughtering process.

Ethical animal welfare requirements coupled with a sustainable, cost-effective procedure and optimum meat quality is what needs to be achieved. In this regard, FREUND offers the perfect solution with an extensive product range for electrical stunning with high-frequency constant current with high-frequency constant current or constant voltage.

Programmable stunners with a recording function for transparent documentation of the on-going process and suitable stun tongs for every animal size make an efficient slaughtering yield possible.

The FREUND service department supports the user by offering expert advice in all matters relating to the products.



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# **MOVIT-M**

Animal drover / Droving aid







Swatter for effective droving in a manner conducive to the well-being of the animal

- Pain-free droving: no electric shocks, no sharp tips
- No sudden noise and contact trigger
- Reduced risk of bleeding and dead animals
- The MOVIT-M animal drover complies with the applicable animal welfare requirements



























# **KAWE 8001**

Animal drover (electronical)









Electronic animal drover for effective droving of the animal

- Electronic control, therefore no mechanical wear
- Battery-operated (2 Monocells 1,5V)\*
- Maintenance-free electronics
- Housing made of robust plastic

\*Not included in the scope of delivery due to transport regulations





































Not permissible for use in plants within a member state of the European Union (TierSchlV 1099 vom 01.03.2013)



# **KAWE 21**

Animal drover (electronical)









Electronic animal drover for effective droving in a manner conducive to the well-being of the animal

- Automatic switch-off of the current pulse after 1 second
- Electronic control, therefore no mechanical wear
- Battery-operated (2 Monocells 1,5V)\*
- Visual display
- Maintenance-free electronics
- Housing made of robust plastic
- The KAWE 21 complies with the applicable animal welfare requirements

\*Not included in the scope of delivery due to transport regulations

































Extension rod for KAWE 21 / KAWE 8001







**EXTENSION ROD / VERLÄNGERUNGSSTAB** 



- increases the user's reach
- effortless insertion
- compatible with KAWE 8001 and KAWE 21
- made of robust plastic





































Electric stun tong



Electric stun tong for for suckling pig and pig head stunning

- spike electrodes provide better skin contact and prevent slipping
- Electrode quick-change system
- Stable stainless steel design \*\* INOX / rust-free \*\*
- Robust pivot joint
- Non-slip handle
- Wear-resistant spiral cable SK









# STUN-TONG-EA STEEL

Electric stun tong

Electric stun tong for sheep, lambs & goats

- With hexagon electrodes
- Extra long spike for optimum skin contact
- Electrode quick-change system
- Stable stainless steel design \*\* INOX / rust-free \*\*
- Robust pivot joint
- Non-slip handle
- Wear-resistant spiral cable SK









7 lbs



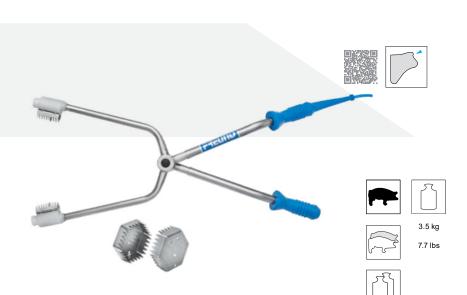
# STUN-TONG-ES STEEL

Electric stun tong

Electric stun tong for pigs and sows

- With hexagonal electrodes
- Electrode quick-change system
- Wide opening range for head and heart stunning
- Angled, ergonomic handle
- Stable stainless steel design \*\* INOX / rust-free \*\*
- Wear-resistant spiral cable

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# **STUN-TONG-EPP2**

Electric stun tong (pneumatic)







Electric stun tong, pneumatic

- Can be integrated for stunning animals in stun traps or stunning animals in restrainers
- Electrode quick-change system
- Significant relief for the user thanks to the pneumatic drive for opening and closing









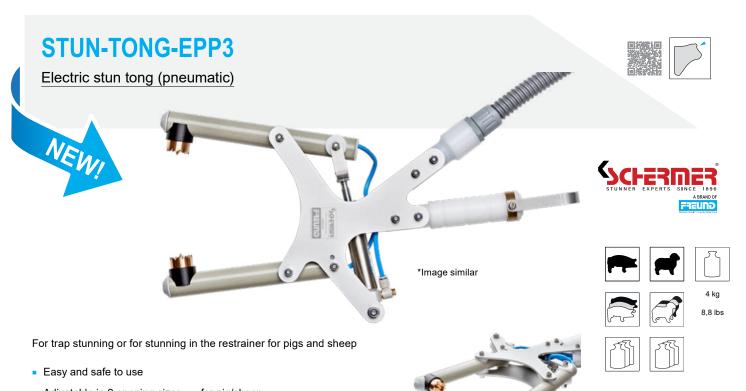


7 lbs









- Adjustable in 2 opening sizes: ▶ for pig/sheep
  - ▶ for sow
- Significant relief for the user thanks to pneumatic closing process and spring tensioner (optionally available)
- Innovative material alloy of the electrode for optimal current flow and significantly increased durability
- Prepared for use with an F-series stunning device in conjunction with an interface control box
- Can be used in combination with a manual or automatic cardiac electrode

#### OPTIONAL:

► Electrodes with long thorn for sheep and sows

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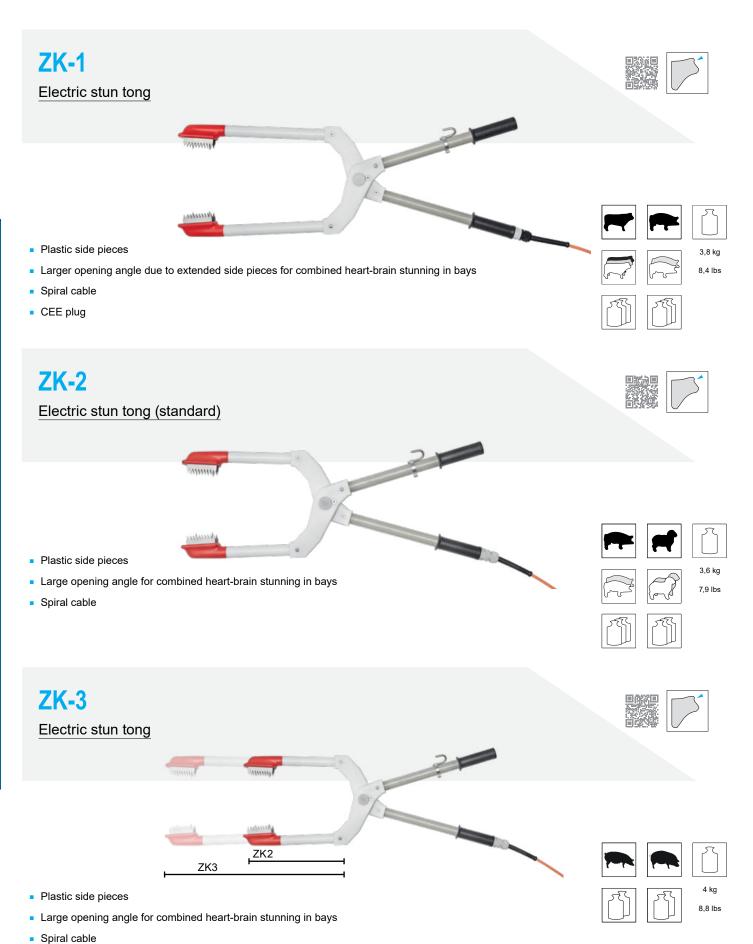
















# **ZK-4**

#### Electric stun tong













- Plastic side pieces
- Large opening angle for combined heart-brain stunning in bays
- Spiral cable

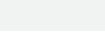


# **Z-KT**

#### Electric stun tong







- Plastic side pieces
- Spiral cable



















## STUN-F8

Stunning device, suitable for industrial use and high frequency (constant current or voltage)























1-phase







- High-frequency constant current or constant voltage electric stunning device for trap or restrainer stunning in industrial and medium-sized companies
- USB/LAN/WLAN interface for data/parameter transfer
- Stunning programs pre-installed and can be expanded to up to 25 stunning programs if required
- Predefined stunning parameters for optimal stunning effect and best possible meat quality, individually adjustable on request
- Remote parameterization of the device is possible upon customer request
- High-resolution touchscreen for setting and displaying key parameters during stunning
- Signal provision for external controls (e.g. pneumatic peripherals, PLC, signaling devices)

- Rapid current increase up to 3.5 A
- Internal storage space for approx. 1.2 million stunning sessions
- Integrated piece counter (updated daily)
- Reliable, industrial-grade electronic transformer
- Easy installation and operation for the user
- Robust stainless steel housing with wall bracket complies with the valid legal and normative requirements:
  - ▶ the current COUNCIL REGULATION (EC) No. 1099/2009 of September 24, 2009 on the protection of animals at the time of killing
  - ▶ the Regulation on the protection of animals in connection with slaughter or killing and on the implementation of Council Regulation (EC) No. 1099/2009 (Animal Welfare-Slaughter Ordinance - TierSchlV)
  - the EU Low Voltage Directive
  - the relevant VDE regulations



#### A BRAND OF



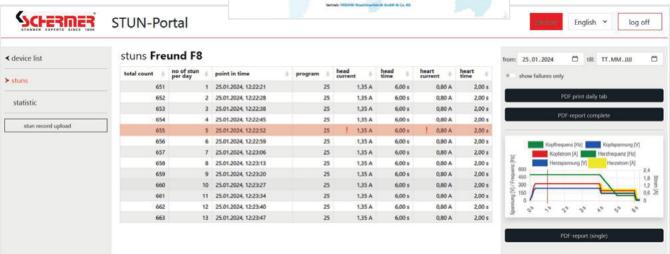


Web server for data recording and remote parameterization (for the STUN-F series)



www.schermer-stun-portal.com





#### Printable PDF view of the daily table

stuns:	13
stuns ok:	12
stuns error:	1
error rate in %:	7,6%

The figure shows an example of the daily statistics of the anesthesia carried out.

The figure shows an excerpt from the report on the anesthesia carried out.

	C		₹ME	:5						F36		AND OF
S	TUNNER	EXPER	TS SINCE	1896						THE RESERVE OF THE PERSON NAMED IN	and the same	OHT=R-TOCIS
levic		und F8							P	page:		2/2
test	total count	no of stun	point in time	program	10139	head	error	head time	error	heart	error	heart time
	651	1	25.01.2024 12:22:21	25		1,35 A		6,00 s		0.50 A		2,00 s
	652	2	25.01.2024 12:22:28	25		1,35 A		6,00 s		0,80 A		2,00 s
	653	3	25.01.2024 12:22:38	25		1,35 A		6,00 s		0.80 A		2,00 s
	654	4	25.01.2024 12:22:45	25		1,35 A		6,00 s		0,80 A		2,00 s
	655	5	25.01.2024 12:22:52	25	1	1,35 A		6,00 s	1	0,80 A		2,00 s
	656	6	25.01.2024 12:22:59	25		1.35 A		6,00 s		0.80 A		2,00 s
	657	7	25.01.2024 12:23:06	25		1,35 A		6,00 s		0,80 A		2,00 s
	658	8	25.01.2024 12:23:13	25		1,35 A		6,00 s		0,80 A		2,00 s
	659	9	25.01.2024 12:23:20	25		1.35 A		6,00 s		0.80 A		2,00 s
	660	10	25.01.2024 12:23:27	25		1,35 A		6,00 s		0,80 A		2,00 s
	661	11	25.01.2024 12:23:34	25		1,35 A		6,00 s		0,80 A		2,00 s
	662	12	25.01.2024 12:23:40	25		1,35 A		6,00 s		0,80 A		2,00 s
			25.01.2024 12:23:47	25		1,35 A		6,00 s		0,80 A		2,00 s

- If there is an existing network connection, the stunning data and the stunning parameters set on the device are automatically saved
- In offline operation, alternative data transfer via USB stick is possible
- Upon customer request, remote parameterization of the stunning device is possible via the SCHERMER Stun portal
- Recording, displaying and evaluating the stunning processes with all relevant data
- Evaluation of anesthesia data to create daily, weekly and monthly statistics directly in the portal. All statistics can be printed and/or saved (PDF)
- Extensive filter function (e.g. error rates) for analyzing the stunning data
- Additional device access with different authorizations is possible









# STUN-TONG-EPP3 F-Serie

Electric stun tong (pneumatic)









For trap stunning or for stunning in the restrainer for pigs and sheep

- Easy and safe to use
- Adjustable in 2 opening sizes: ▶ for pig/sheep
  - ▶ for sow
- Significant relief for the user thanks to pneumatic closing process and spring tensioner (optionally available)
- Innovative material alloy of the electrode for optimal current flow and significantly increased durability
- Prepared for use with an F-series stunning device in conjunction with an interface control box
- Can be used in combination with a manual or automatic cardiac electrode

#### OPTIONAL:

Electrodes with long thorn for sheep and sows









# STUN-IF1-F8 / STUN-IF2-F8

Interface control boxes (suitable for STUN-F8)











Additional devices for the STUN-F8 stunning device for controlling pneumatic components.

Available in two versions:

- STUN-IF1-F8 offers the possibility of controlling a pneumatic stun tong (e.g. STUN-TONG-EPP3 F-series)
- STUN-IF2-F8 offers the possibility of controlling a pneumatic stun tong (e.g. STUN-TONG-EPP3 F-series), as well as up to 2 pneumatic cylinders on a heart electrode (e.g. STUN-HE-PP)

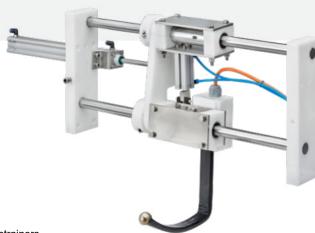
# STUN-HE-PP

Heart electrode, automatically movable













IP44

17,4 kg

38,4 lbs

- Designed for integration into stun traps and restrainers
- Enables automated heart circulation in the industrial slaughter process
- The constant, consistent process flow supports good stunning and immobilization as well as high meat quality, which depends on the stunning process
- Left/right installation position available
- Installation in existing system possible (if compatible)











# STUN-E8XXL

Stunning device (constant current & high frequency)

















28 8 lbs





Electronic, high-frequency, constant-current, cloud-enabled, stunning device for Industry. Also suitable for stunning animals in stun traps

- 8 pre-installed stunning programs, individually adaptable
- Can be extended to up to 24 stunning programs
- LCD display with 40 characters for real time display of program number, current, voltage, frequency and stunning time
- Linear frequency ramp, without abrupt gradations
- Acoustic and visual display for errors and the end of stunning
- 6 convenient buttons for program selection and programming
- Control of a heart electrode possible

- Network-compatible (Ethernet RJ45)
- Second outlet for separate heart-electrode
- Remote programming of the parameter data sets possible via a web interface
- Access to stun data via the web interface with daily/weekly/monthly statistics
- Internal data storage for additional backup

\*Image similar

- Remote control outlet for pneumatic stun tong and pneumatic heart electrode
- Stun data coupling of two stunners via master/slave control (all data of one stunning procedure in one diagram)

# STUN-TONG-EPP3 E-Serie

Electric stun tong (pneumatic)







For trap stunning or for stunning in the restrainer for pigs and sheep

- Easy and safe to use
- Adjustable in 2 opening sizes: ▶ for pig/sheep
- Significant relief for the user thanks to pneumatic closing process and spring tensioner (optionally available)
- Innovative material alloy of the electrode for optimal current flow and significantly increased
- Prepared for use with an F-series stunning device in conjunction with an interface control box
- Can be used in combination with a manual or automatic cardiac electrode

























Electrodes with long thorn for sheep



# STUNDATA SERVER

Web server for data recording (for STUN-E series)





- Automatic storage of stunning data is only possible with a network connection
- User-friendly setting options for the stunning parameters via the portal (current, frequency + the times for the stunning process and the stunning duration) for an optimal stunning result
- Recording and evaluation of stunning processes in the portal with date, time, stunning current, filterable by current date
- Optimal adaptation of the anesthesia through the ability to set various parameters (current, frequency + stun times and duration)
- Parameter settings can be saved and transferred via the Internet



https://stun.freund-germany.com/user/login

# STUN-IF1-E8 / STUN-IF2-E8

Interface control boxes (suitable for STUN-E8XXL)







Additional devices for the STUN-F8 stunning device for controlling pneumatic components.

#### Available in two versions:

- STUN-IF1-E8 offers the possibility of controlling a pneumatic stun tong (e.g. STUN-TONG-EPP3 F-series)
- STUN-IF2-E8 offers the possibility of controlling a pneumatic stun tong (e.g. STUN-TONG-EPP3 F-series), as well as up to 2 pneumatic cylinders on a heart electrode (e.g. STUN-HE-PP)



3,2 kg 7,1 lbs	IP44
7,5 kg 16.5 lbs	IP44

# STUN-HE-PP

Heart electrode, automatically movable



FREUND







- Designed for integration into stun traps and restrainers
- Enables automated heart circulation in the industrial slaughter process
- The constant, consistent process flow supports good stunning and immobilization as well as high meat quality, which depends on the stunning process
- Left/right installation position available
- Installation in existing system possible (if compatible)







IP44

17.4 ka

38,4 lbs







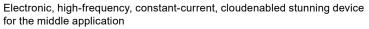




# STUN-E6XXL

Stunning device (constant current & high frequency)





- 8 pre-installed stunning programs, individually adaptable
- Can be extended to up to 24 stunning programs
- LCD display with 40 characters for real time display of program number, current, voltage, frequency and stunning time
- Linear frequency ramp, without abrupt gradations
- Acoustic and visual display for errors and the end of stunning
- 6 convenient buttons for program selection and programming
- Network-compatible (Ethernet RJ45)
- Remote programming of the parameter data sets possible via a web interface
- Access to stun data via the web interface with daily/weekly/monthly statistics
- Internal data storage for additional backup















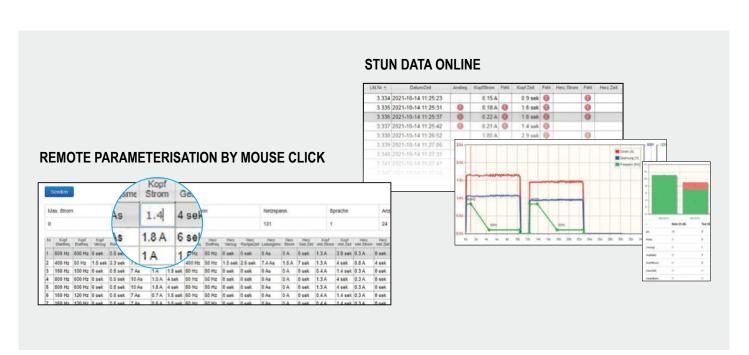
28,6 lbs



1-phase









# STUN-E4

Stunning device (constant current & high frequency)





Electronic, high-frequency, constant-current stunning device for the craft application suitable for trade

- 4 pre-installed stunning programs, individually adaptable
- Can be extended to up to 24 stunning programs
- LCD display with 40 characters for real time display of program number, current, voltage, frequency and stunning time
- Acoustic and visual display for errors and the end of stunning
- 6 convenient buttons for program selection and programming
- Network-compatible (Ethernet RJ45)
- Web interface with daily/weekly/monthly statistics



EREUND















1-phase









# STUN-CHECK-M

Test device for electric stunner







The "STUN-CHECK-M" test device checks the functions and programs (safety and stun functions) of electric stunners.

The STUN CHECK-M is used for checking the stunner, functional testing of individual programs and for checking that the tongs are working correctly (potential cable break or other damage to the tong). This is done in conformity with the legal standards







15 lbs

1-phase

400 watts 0.5 hp

www.freund-germany.com













## STUN-E-INSPECTION

#### Inspection package for electric stunners of the FREUND brand









#### Electrical safety in accordance with DIN VDE 0701/0702/EN60204-1

All our electrical machines are tested for electrical safety prior to commissioning and following modification or repair in our factory by a qualified electrician in accordance with the electrical engineering rules of DIN VDE 0701-0702/EN 60204-1 and a test badge is attached to said machines.

This test badge indicates when the next repeat inspection must take place.

#### Inspection interval:

The inspection interval for electrical machines and equipment that is used in slaughtering and cutting plants is every six months.

#### Inspection in accordance with the German Animal Protection Slaughter Regulation (TierSchIV)

With regard to all FREUND electric stunners, all relevant stunning and work safety parameters are inspected prior to initial commissioning in accordance with the applicable German Animal Protection Slaughter Regulation (TierSchIV) and the EC Regulation 1099/2009, the operational safety regulation and the accident prevention regulation.

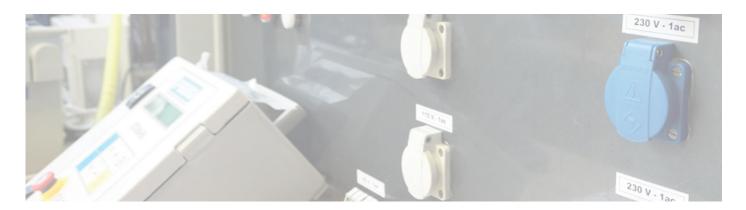
Regulation (EC) No. 1099/2009 applies to the slaughter and killing of vertebrate animals intended for the production of food and other products. It therefore contains provisions applicable to the slaughter or killing of animals kept for farming. An inspection sticker is attached to the device.

#### Inspection interval:

This inspection sticker indicates when the next annual repeat test must take place.

A replacement device (STUN-E4, E6XXL or E8XXL) can be made available for the duration of the inspection/test in accordance with the applicable Animal Slaughter Protection Regulation, operational safety regulations and accident prevention regulations.

- You give us a call on +49 5251 1659-0
- We send you a replacement device from the latest generation (premium package subject to an additional charge)
- You send us your device with the tong and we check that it complies with regulations
- Does the unit meet all test requirements, we issue a test sticker and a test certificate
- Does the unit not meet all test requirements, we put together a cost estimate for the repair work
- After the inspection/repair has been completed, you will receive your unit back.
   The replacement appliance is collected (premium package subject to a charge).











# STUN-BP1

Captive bolt stunner (pneumatic)





Pneumatic captive bolt stunner for cattle, calves and solipeds

- 2-hand safety switch
- powerful one-shot stunning
- stunning suitable for animal protection
- penetrating

















# COMP-BP1-1

Compressed air compressor





Compressed air compressor for up to 60 stuns per hour (mobile version on wheels)

- 90L tank
- 850 rpm
- incl. maintenance unit (filter, regulator, lubricator)
- 5 metre hose
- 1L oil
- ready for connection









108 kg 238 lbs

(50Hz)

5,4 hp (50Hz)



# COMP-BP1-2

#### Compressed air compressor





Compressed air compressor for up to 60 stuns per hour (mobile version on wheels)

- 90L tank
- 850 rpm
- incl. maintenance unit (filter, regulator, lubricator)
- 5 metre hose
- 1L oil
- ready for connection









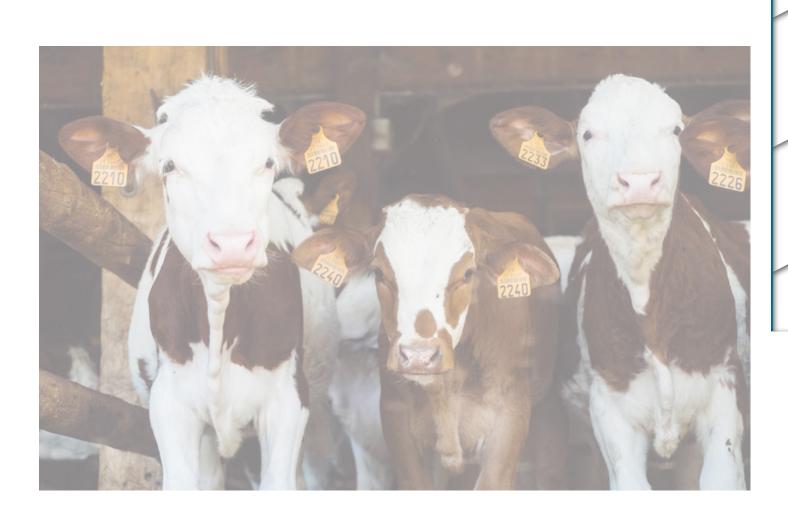
108 kg

Electric 3 Phases

4000 watts (50Hz)

238 lbs

5,4 hp (50Hz)













# **SCHERMER K SERIES**

#### Captive bolt stunner of series K









Videos on maintenance & care

Captive bolt stunner in different designs and sizes

- High penetrating power even for high slaughter throughput
- Effective trigger safety system
- Automatic cartridge ejector
- Quick-release bayonet lock
- Low wear thanks to robust design
- Low cleaning and maintenance costs
- Easy handling
- Economical high-performance cartridges, calibre .27 6.8/15 mm
- Bears a test mark from the PTB in Braunschweig



# **SCHERMER KR**

Captive bolt stunner with bolt discharge







Captive bolt stunner with bolt discharge for maximum performance.

For pigs, sheep and horses or cattle up to 1000 kg live weight

- Manual bolt return
- Bolt discharge: 85 mm
- Trigger safety system
- Maximum power performance due to undamped bolt discharge
- Only in combination with head fixation
- Calibre .27 6,8/15 mm

24

PTB tested and certified according to CIP and CE

























#### A BRAND OF



# **SCHERMER KL**

Captive bolt stunner in extended design



Captive bolt stunner in extended design particularly suitable for large animals over 1000 kg live weight such as breeding bulls and water buffaloes as well as for heavy boars

- Manual bolt return
- Bolt discharge: 125 mm
- Trigger safety system
- Elongated design with extra long bolt
- Only in combination with head fixation
- Calibre .27 6,8/15 mm
- PTB tested and certified according to CIP and CE































 Design is otherwise the same as that of captive bolt stunner type KR

# **SCHERMER KS**

Captive bolt stunner with automatic bolt retraction system



Captive bolt stunner with automatic bolt retraction system for cattle, pigs and sheep up to 650 kg live weight

- Automatic bolt retraction system
- Bolt discharge: 80 85 mm
- Trigger safety system
- Calibre .27 6,8/15 mm
- PTB tested and certified according to CIP and CE





























# **SCHERMER KK**

Captive bolt stunner in shortened design



Captive bolt stunner for calves, pigs and sheep up to 650 kg live weight

- Manual bolt return
- Bolt discharge: 75 mm
- Trigger safety system
- Easy handling when space is limited, e.g. for stunning in a transport truck
- Calibre .27 6,8/15 mm
- PTB tested and certified according to CIP and CE



























 Design is otherwise the same as that of captive bolt stunner type KR











# **SCHERMER KC**

Captive bolt stunner for concussion stunning







Captive bolt stunner for concussion stunning of cattle, calves and sheep up to 1000 kg live weight















9.7 lbs

- Trigger safety system
- Calibre .27 6,8/15 mm
- Use may be subject to national regulations and restrictions



Not permissible for stunning in plants within a member state of the European Union (TierSchIV 1099 vom 01.03.2013)





# **STUN TEST-GERÄT**

Test device for captive bolt stunners

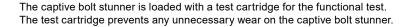
The captive bolt stunners type KR, KL, KK and KS are tested for functionality in the firing mechanism of the test device before slaughter begins.

The bolt firing speed measured by 2 light barriers after triggering the shot is the measured variable for the calculated points.



# STUN TESTHÜLSE

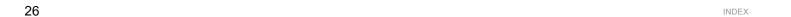
Test sleeve for ensuring constant test conditions



Constant test conditions are ensured by means of the captive bolt stunner inserted in the test sleeve. In this type of proof testing, the shot is fired into square timber. The penetration depth of the bolt is the measured value to be checked.









# A BRAND OF



# **OPTIONAL**

# Assembly lever Assembly hook Assembly nut Cleaning brush

#### Accessory set for cleaning captive bolt stunners

- Included in the purchase of captive bolt stunners
- Also available as an option

#### Test cartridges calibre .27 6.8/11 mm

 to check the functionality of livestock shooting devices before the start of slaughter in the STUN test device



#### High-performance cartridges Cal .27" 6,8/15 mm

When choosing a suitable cartridge strength, consider the following: age, weight, breed, hair coat, skin folds, sex of the animal and any head fixation.



	KR	KS	KK	KL	KC	
APPLICATIONS	RECOMMENDED CARTRIDGE CONFIGURATION					
> 1000 kg*	-	-	-			
650 - 1000 kg*		-	-	-		
300 - 650 kg*				-		
< 300 kg*				-		
	-	-	-			
				-	Observe country- specific legal position	
> 150 kg*		-	-			
30 - 150 kg*				-		
< 30 kg*				-		
				-		
<b>FR</b>				-		

<sup>\*</sup>Specified weight relates to live weight

www.freund-germany.com **f G in ©** 













# **SLAUGHTERING**



he 'Slaughtering' product group completes the FREUND machine range with the latest technology in meat processing.

These machines are characterised by a robust design coupled with the most important features for optimum, user friendly operation in day-to-day slaughtering activities.

The saws are freely configurable and can be adapted accordingly to the needs of the user.

In technical matters, the FREUND service department will be happy to advise you.

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# **STIM-E512**

Electronic stimulation device (electronical)







Fully programmable stimulation device for medium-sized and industrial companies

- Various programmes for different applications
- Better draining of blood
- Accelerated pH value drop and therefore faster onset of 'rigor mortis'
- Increased yield due to lower weight loss
- Nose clamp & overhead track connection with 10-meter cable

Benefits of low voltage stimulation (<50 Volt):

Improved product quality





























# RÜCKENMARKZERSTÖRER

Cranial insertion rod





INDEX

A - 900 mm

B - 350 mm

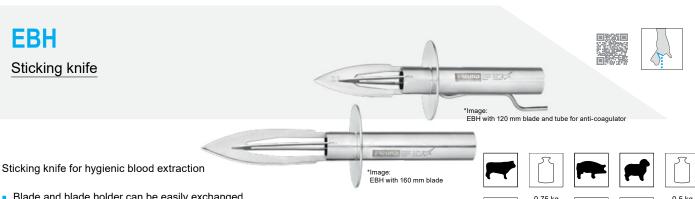
Use after stunning with captive bolt stunner if no blood withdrawal is planned

Made from plastic

30

Available in two lengths





Blade and blade holder can be easily exchanged

Cost-effective, modular design

#### OPTIONAL:

- Blade available in 2 sizes: ▶ 120 mm for sheep/pigs
  - ▶ 160 mm for cattle
- Anti-coagulator tube available for all sizes

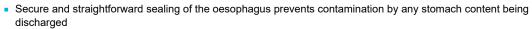


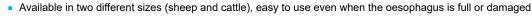


Weasand clip (oesophagus seal)









- Secure seating: no slipping out of place, no leakage, no premature release
- Bio-degradable plastic (FDA approved)
- Affordable, graduated price scale



1.65 lbs













# **RODDING STAB**

Weasand rod







- Made of stainless steel, to ensure correct placement of Weasand clip (oesophagus seal)
- Rod is guided along the esophagus in order to place a clip in front of the cardia
- Prevents the discharge of rumen fluid
- Available in 2 lengths: > 340 mm for sheep
  - > 770 mm for cattle

























# FNS9

#### Foot and neck shear







Foot and neck saw for pigs and sheep in high throughput plants

- For severing the head joint and removing the feet of halved pigs and sows by an operator
- user-friendly handling
- Also suitable for cutting the front feet of sows
- Perfect force distribution
- Excellent cut

















3 1/2 inch

87 psi

hydraulic



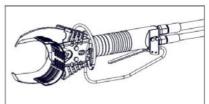


konfigurierbar in 4 Optionen:

#### Option 1:

vertical knife position

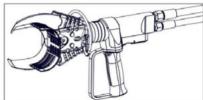




#### Option 3:

- vertical knife position
- Pistola Handle

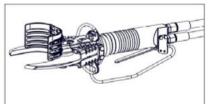




#### Variante 2:

horizontal knife position





#### Variante 4:

- horizontal knife position
- Pistola Handle

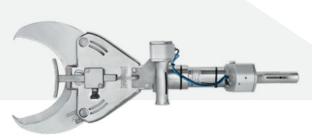






# **NS21**

#### Neck shear







Hydraulic neck saw for pigs in high throughput plants

- Adjustable handle for better ergonomics
- Two-hand safety switch
- with adjustable depth stop
- Excellent force distribution















87 psi

Electric/ hydraulic





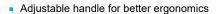


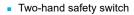
# **NS26**

#### Neck shear



Hydraulic neck saw for removing the neck of sows & boars in high throughput plants





with adjustable depth stop

Excellent force distribution













59 lbs

27 kg

10,4 inch

6 bar

87 psi

Electric/ hydraulic





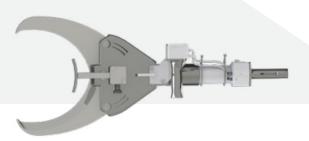






# **NS26-H1**

Neck shear







Hydraulic neck saw for removing the neck of sows & boars in high throughput plants

- Adjustable handle for better ergonomics
- Two-hand safety switch
- with adjustable depth stop
- Excellent force distribution





53 lbs









hydraulic 10,4 inch 87 psi





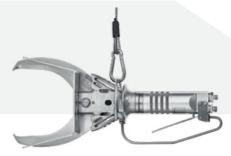






# **HDS15**

#### Head dropper and general cutting shear







Hydraulic shear for high throughput plants:

- Application in pig cutting
- Severing of complete sheep and goat heads
- Single-hand operation















12.8 lbs 6 inch

6 bar

87 psi

Electric/









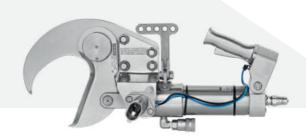






# HLS12

Horn and leg shear



Horn and leg shear for industrial slaughter chains for cattle

- With one fixed and one moveable blade respectively
- Adjustable handle for better ergonomics
- Two-hand safety switch













58.2 lbs

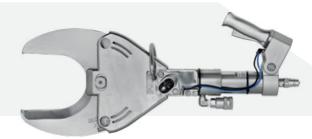
3-8 bar







Leg shear







Leg shear for cattle and sows in high throughput plants

- With two movable blades
- Two-hand safety switch
- Adjustable handles for better ergonomics









6 inch









47.6 lbs

Electric/ hydraulic



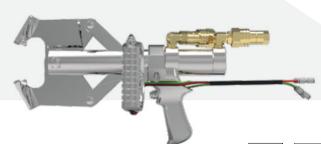






HZ7

Horn cutter







Hydraulic horn cutter for lambs in high throughput plants

Two-hand safety switch











13 lbs











# **HZ10**

Horn cutter



Hydraulic horn cutter for sheep in high throughput plants

Two-hand safety switch







4 inch







33 lbs

3-8 bar

















Horn guillotine







Hydraulic horn guillotine for the most arduous applications in high throughput plants

Pneumatic 2-hand safety switch











44-87 psi



73 lbs 4 1/2 inch











# **HBK28-06**

Circular horn and leg saw







Circular horn and leg saw for cattle in medium plants

- Mechanical motor brake MMB
- Two-hand safety switch















11 inch 4 inch

IP 65

Electric, 3-phase

1800 watts (50Hz) 2.4 hp (50Hz)





Circular horn and leg saw







Circular horn and leg saw for cattle in high throughput plants

- Two-hand safety switch
- With smooth cable GK









105 mm





2300 watts (50Hz)



68 lbs

330 mm 13 inch

4 inch

Electric, 3-phase





# **SD11**

#### Dehider







Pneumatic dehider with star-shaped blades

- Efficient, clean and safe dehiding avoids incisions, notches or holes
- Durable and low-maintenance
- Low own weight due to lightweight components





















110 mm 4 1/2 inch

3.5 bar

51 psi

410 watts

















# **BBS14**

#### Breastbone shear



Breastbone shear for sheep and goats in medium and high throughput plants

- with powerful compressed air cylinder
- with second ergonomic handle
- Flexible DL spiral hose 2.5 m













31 lbs

145 mm 6 inch

102 psi

















## **BBKM25-06D**

Circular brisket knife













3 1/2 inch





Electric,

3-phases



1800 Watt (50Hz)

1.8 hp (50Hz)

Circular brisket knife for slaughtering pigs and sheep in medium and high throughput plants

Benefits of the micro-serrated circular knife:

- Optimised hygiene and longer service life
- Clean and smooth blade cut
- Spiral cable SK
- Round handle R (D type)
- Special blade protection prevents organ cutting



#### OPTIONAL:

Upright rear handle for working position at belly height or higher





#### SK32-06L

Circular splitting saw



Circular splitting saw for slaughtering pigs and sheep in medium plants (without head)

- Mechanical motor brake MMB
- Circular saw blade, coarse tooth, rust-free KGZ320
- Spiral cable SK
- Upright handle on gear neck GH
- Water connection with spiral hose for cooling and rinsing the cutting surface











IP 65









42 lbs 12 1/2 inch

4 1/2 inch

120 mm

3-phases

1800 watts (50Hz)











2.4 hp (50Hz)

## SK52-08L

Circular splitting saw





Circular splitting saw for slaughtering pigs in high throughput plants (sows to some extent)

- Circular saw blade, coarse tooth, splitting, low-noise, rust-free KGZ520SPGA
- With smooth cable GK
- Two-hand safety switch
- Water connection with spiral hose for cooling and rinsing the cutting surface
- With 2 guide rollers for splitting from the rear







520 mm



205 mm





2300 watts

3-phases 90 lbs 20 1/2 inch 8 inch



(50Hz)











#### **BBST30-13**

#### Reciprocating breastbone saw







Reciprocating breastbone saw for slaughtering cattle & sows in small and medium plants

- Reciprocating saw blade, fine tooth, rust-free
- Spiral cable SK
- Round handle R (D type)
- Grease gun, filled
- Low dead weight





















300 mm 27 lbs 12 inch

Electric, 3-phases

950 watts (50Hz) 1.3 hp (50Hz)



Reciprocating breastbone saw







Reciprocating breastbone saw for slaughtering cattle and sows in all plants sizes

- Reciprocating saw blade, rust-free
- Spiral cable SK
- Round handle R (D type)
- Grease gun and 1 kg grease
- Control box, mounted











47 lbs



12 inch













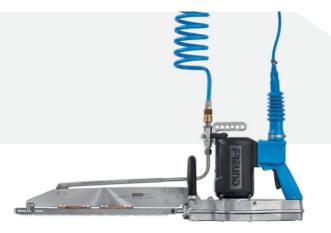
Electric, 3-phases

1300 watts (50Hz) 1.8 hp (50Hz)





Reciprocating splitting saw







Reciprocating splitting saw for up to 2 cattle, 15 pigs or 50 sheep per week

- Suitable for trade
- Smallest reciprocating splitting saw of its kind with a completely enclosed three-phase motor
- Low dead weight
- Saw blade made of rust-free steel STFZ 500 mm
- Spiral cable SK
- Round handle R (D type)
- Gun with special grease











IP 65









11.5 kg 25 lbs

500 mm 20 inch

3-phases

950 watts (50Hz) 1.3 hp (50Hz)











# SH60-03

Reciprocating splitter saw







Reciprocating splitter saw for halving up to 100 pigs or 20 cattle per week

- Suitable for trade
- Reciprocating saw blade, coarse tooth, rust-free HUGZ600SP
- Spiral cable SK
- Round handle R (D type)
- Direct connection to contactor/transformer
- Water connection with spiral hose for cooling and rinsing the cutting surface
- including grease gun











21.6 kg

600 mm







3-phases 47.6 lbs 23 1/2 inch







Electric. 1300 watts (50Hz)









#### **SB46-08**

Splitter band saw







Splitter band saw for pigs/sheep (high throughput plants) and cattle (medium plants) in a combination slaughter line

 If using a low gambrel, halving of pigs is only possible with restrictions (in such cases SB49-08)









141 lbs



460 mm

18 inch





2300 watts (50Hz)









IP 65

Electric, 3-phase

3.1 hp (50Hz)

**SB49-08** 

Splitter band saw







- Particularly suited to expansion brace slaughtering due to the low height (front: 300mm)
- Splitting of cattle is only possible with limitations for this reason







141 lbs



19 1/2 inch







Electric. 2300 watts (50Hz)

3.1 hp (50Hz)













# **SB50-08**

Splitter band saw



Splitter band saw for cattle and sows in high throughput plants











19 1/2 inch







(50Hz)



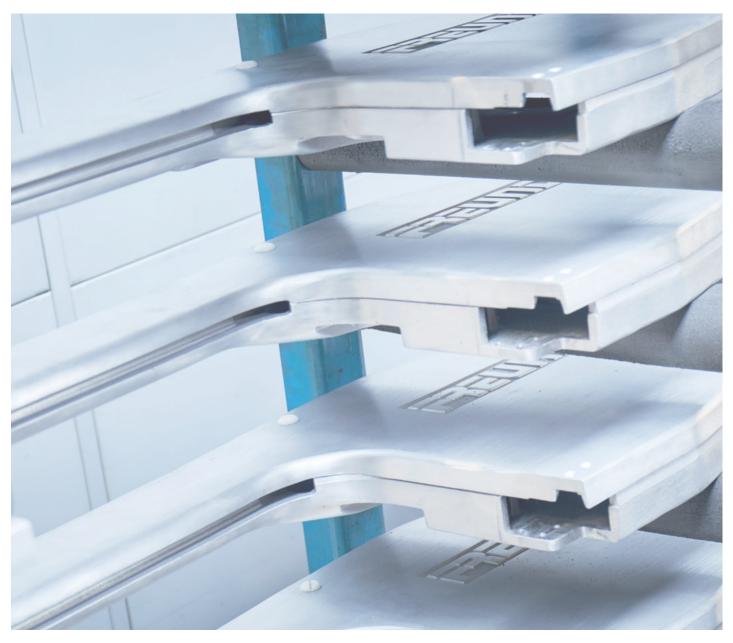












#### All BASIC models of SB46-08 / SB49-08 / SB50-08 are fitted with the following STANDARD equipment:

- Manual blade tensioning system MAN with lever blade guides HF
- Machine safety switch (cover sensor) MSS
- Water hose unit

- Inbuilt disinfection system DES-E
- 5 replacement saw blades

#### **BOOKABLE AS OPTIONAL EXTRAS for standard equipment:**

- Automatic tensioning system (hydraulic) for rapid band saw blade exchange and optimum blade tension at all times AUT with automatic band saw blade rotation for rapid band saw blade exchange with adjustable blade guides JF
- Two-hand safety switch 2HATD
- DES-PO7 inbuilt disinfection kit











# **SVSS**

Steam vacuum sanitizer system





## **SVSS**

#### Steam vacuum sanitizer system





or efficient elimination of contamination and reduction of surface germ counts on carcasses

- Vacuum suctioning of contamination such as bowel contents, hair
- Simultaneous disinfection of the surface using steam
- Significantly better germ reduction compared to cutting with blades e.g. in relation to E.coli bacteria
- Greater food safety
- Increased yield due to lower weight loss compared to trimming
- Reduced risk of cross-contamination thanks to continuous steam disinfection of the hand piece

Disinfection by means of an integrated steam supply and suctioning by means of a vacuum

No visible change to the surface of the meat

#### OPTIONAL:

- ▶ Steam generator SVG21
- ▶ Steam generator SVG28





















Electric









3-phase





# SVH-38A

suction line

Component of the SVSS

#### Steam vacuum piece

























45















#### **VSS**

#### Vacuum system





Vacuum suction system for vacuum suctioning of spinal cord, brain, leaf lard and grease residues, lungs of poultry etc.

- The equipment can be combined individually and consists of:
- Vacuum tank (rust-free in different sizes)
- Various hoses
- Hand pieces for different applications
- Vacuum pump optionally available

Optionally also available as version:

- VSS-EDF, specifically for use with rectum cutter EDF64 or EDF76
- VSS-SCR, specifically for use with spinal cord remover-trimmer SCR



## **EDF**

Rectum cutter

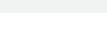






To optimally cut out the rectum of pigs and sows.

- Clean and even cut of the rear ham
- Increased yield thanks to more meat on the carcass, on the ham and less on the rectum
- Vacuum extraction of the faecal remains reduces the risk of contamination if the rectum falls into the abdominal cavity
- Internal cleaning system for blades reduces cross-contamination
- Available in various knife sizes















1 hp







#### VSS-VH38B

Hand piece for VSS vacuum suction system (optional)

Vacuum suction system hand piece with scraping edge for removing the spinal cord (from the halved carcass) of cattle, pigs and sheep



#### VSS-VH38G

Hand piece for VSS vacuum suction system (optional)



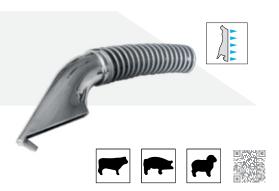
Suction handpiece with 2.2 m hose for removing the spinal cord of cattle with the carcass closed



#### VSS-VH38H

Hand piece for VSS vacuum suction system (optional)

Vacuum suction system hand piece with scraper mandrel for removing the spinal cord (from the halved carcass) of cattle, pigs and sheep



#### VSS-VH38E-2106

Hand piece for VSS vacuum suction system (optional)



Suction handpiece with 1.2 m hose for removing the spinal cord of lambs/sheep with the carcass closed



#### VSS-VH38I

Hand piece for VSS vacuum suction system (optional)

Vacuum suction system hand piece with extended nozzle for removing the spinal cord (from the halved carcass) of cattle, pigs and sheep











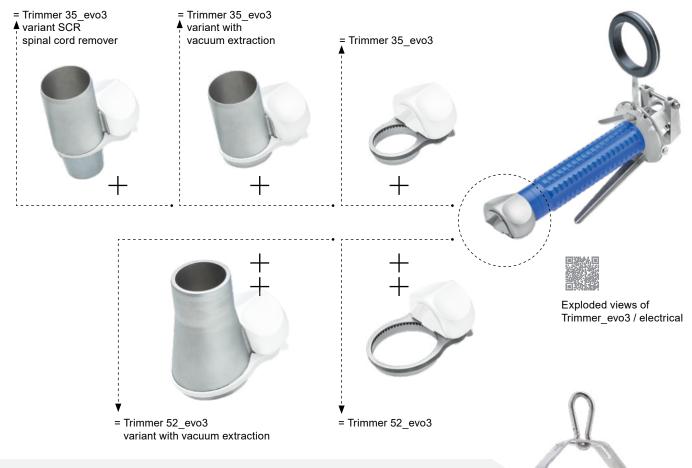


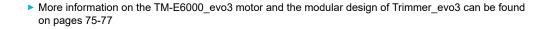
# **MODULAR DESIGN**

Trimmer\_evo3 with vacuum extraction - Examples of modular design

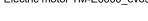














# TRIMMER 35\_evo3

Trimmer 35\_evo3 - variant SCR spinal cord remover







- Ergonomic handle
- New flexible suction and delivery hose
- 2 ring blade sizes available:
  - ▶ SCR16 for pigs
  - ▶ SCR19 for cattle
- One-hand control with the latest start-stop system
- Suitable for right & left-handed users

































# TRIMMER 35\_evo3

Trimmer 35 evo3 - variant with vacuum suction







- Ergonomic handle
- New flexible suction and delivery hose
- Ring blade types 35A or 35B for almost any application with vacuum extraction
- One-hand control with the latest start-stop system
- Suitable for right & left-handed users

































# TRIMMER 52\_evo3

Trimmer 52\_evo3 - variant with vacuum suction







- Ergonomic handle
- New flexible suction and delivery hose
- Ring blade types 52A or 52B for almost any application with vacuum extraction
- One-hand control with the latest start-stop system
- Suitable for right & left-handed users



































#### **TRIMMER 35**

Trimmer 35 - variant spinal cord remover SCR



- The modern way of removing spinal cord in which the risk material is completely isolated
- The spinal cord strand is suctioned by means of a vacuum (VSS vacuum system = accessories). The internal cutting edge separates the spinal cord without harming the spinal cord skin
- 2 ring blade sizes available:
  - SCR16 for pigs
  - ▶ SCR19 for cattle















16 / 19 mm 0.6 / 0.7



87 psi

0.3 hp



**TRIMMER 35** 

Trimmer 35 - variant with vacuum suction







- Application-optimised design
- Various blade types (straight ring blade, hook ring blade)
- Minimal downtime and servicing costs thanks to low-wear quality components
- Ergonomic handle with robust and abrasion-resistant plastic design
- Quiet operation minimises vibrations on the hand piece
- Optionally powered electrically or pneumatically





























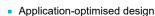
#### **TRIMMER 52**

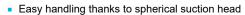
Trimmer 52 - variant with vacuum suction











- Various blade types (straight ring blade, hook ring blade)
- Minimal downtime and servicing costs thanks to low-wear quality components
- Ergonomic handle with robust and abrasion-resistant plastic design
- Quiet operation minimises vibrations on the hand piece
- Optionally powered electrically or pneumatically





















pneumatic



# **TRIMMER**

Ring blade selection & application



# FOR SPINAL CORD REMOVAL SCR16 B (hook) SCR19

#### **APPLICATION**

SLAUGHTERING	Ø 35 mm	Ø 52 mm	CUTTING	Ø 35 mm	Ø 52 mm
Trimming / vacuum suctioning tonsils in head	A P		Trimming / vacuum suctioning auricles	A 🚘	
Trimming / vacuum suctioning spinal hole	A 2 3	A	Trimming / vacuum suctioning eyes	A 🚘	
Cleaning / vacuum suctioning carcasses	A 💜		Cleaning / vacuum suctioning bones	A 🔫	
Trimming / vacuum suctioning cover fat	A	В	Deboning / vacuum suctioning long bones	A 🕎	
Trimming / vacuum suctioning chest fat	В		Removing tendons in the shoulder		В
Removing / trimming heart fat		В			
Trimming / vacuum suctioning spinal cord	В	В			
Trimming / vacuum suctioning blood vessels	В	A / B			
Trimming / vacuum suctioning leaf lard	В	В			
Trimming / vacuum suctioning filets		В			











# **BRAUSE**

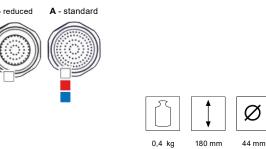
#### Spray Model "D"





SCHERMER Sprays for the food industry, agriculture and horticulture.

- High-quality processing and robust design
- Economical water consumption due to quick fastener
- Max temperature 90°C\*
- Max. water pressure 6 bar



0,9 lbs

1,7 inch

7 inch

\* Food-safe plastic complies with Regulation 10/2011 and metal connections comply with the drinking water ordinance (Trinkwasserverordnung)

		Colourd	ode:	Plastic w	hite	Plastic re	ed	Plastic b	lue	Metal
<b>DESIGNS OF Model</b>	"D"									
	HOUSING									
CC	ONNECTION	1/2	3/4	-	1/2	3/4		1/2	3/4	-
VALVE	SCREEN									
		A/B	A/B	A/B	Α	Α	Α	А	Α	А
		Α	Α	Α	Α	А	Α	Α	Α	А
		Α	Α	Α	Α	Α	Α	А	Α	А
		A/B	A/B	A/B	Α	А	А	Α	Α	А
		Α	Α	Α	Α	Α	Α	Α	Α	Α
		Α	Α	А	Α	A	Α	А	Α	А





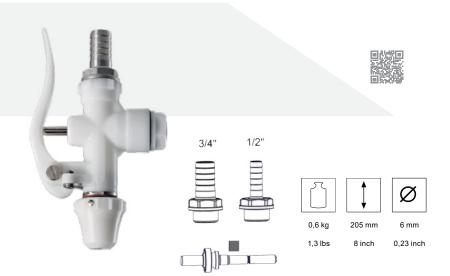


#### **BRAUSE**

Spray Modell "E"

SCHERMER spray with adjustable spray nozzle for the food industry, agriculture and horticulture

- High-quality processing and robust design
- Adjustable water outlet for jet or spray
- Max temperature 90°C\*
- Max. water pressure 6 bar

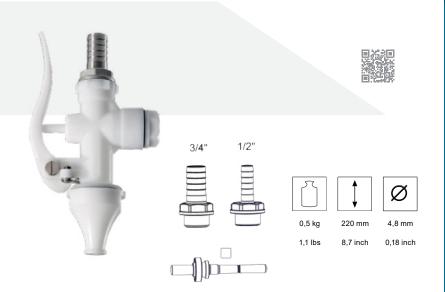


## **BRAUSE**

Spray Modell "F"

SCHERMER spray with spray nozzle for the food industry, agriculture and horticulture

- High-quality processing
- Efficiently bundled jet
- Max temperature 90°C\*
- Max. water pressure 6 bar diameter 5 mm



## **BRAUSE**



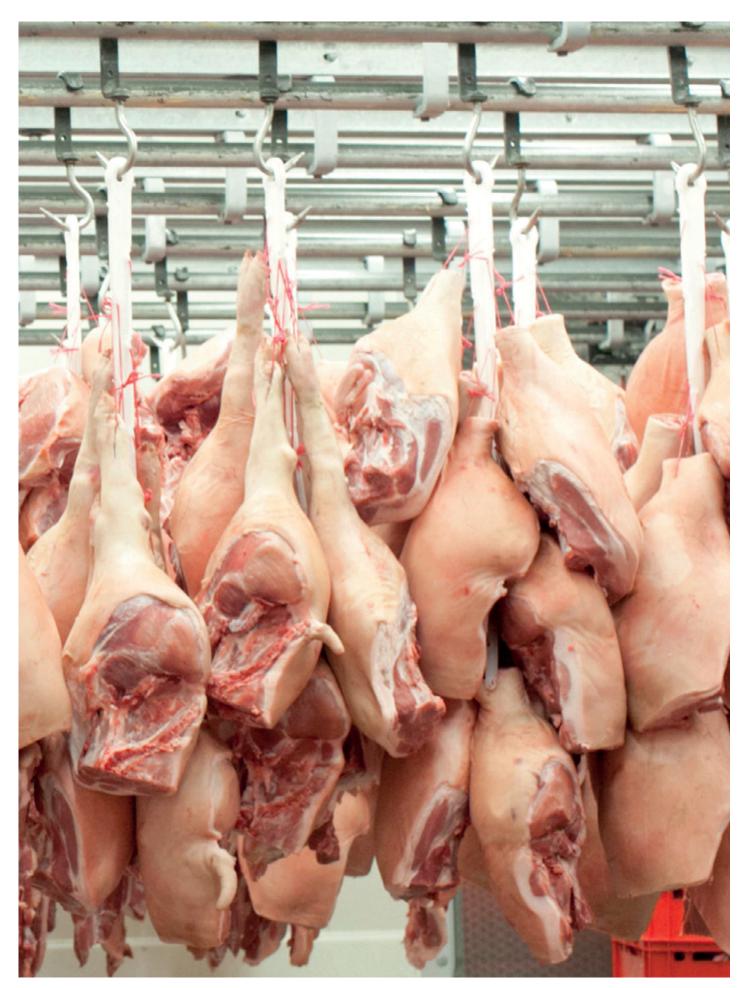
<sup>\*</sup> Food-safe plastic complies with Regulation 10/2011 and metal connections comply with the drinking water ordinance (Trinkwasserverordnung)













# PRIMAL CUTTING

# **PRIMAL CUTTING**



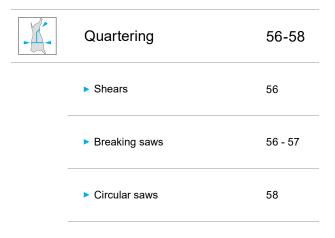
REUND circular breaking and quartering saws offer state-of-the-art technology of the highest quality.

Tailored to each application, the individual products provide the right configuration for every kind of processing.

Safety and flexibility when handling saws is just as much at the core of this product group as high-quality processing.

The FREUND service department supports the user by offering expert advice in all technical matters relating to the individual machines.

## **CONTENTS**



	Cutting	59 - 71
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	► ZKM - Circular cutting knife	62 - 65
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#### **AS28**

#### Quartering shear











Hydraulic shear for quartering cattle

- Clean and smooth cut through the backbone and back muscles
- Two-hand safety switch
- Adjustable handle for better ergonomics













71 lbs

11 inch

87 psi





# ST40-13 Quartering breaking saw







- Smallest machine of its kind with a completely enclosed threephase motor
- Breaking saw blade, fine tooth STFZ
- Spiral cable SK
- Round handle R (D type)
- Low-vibration operation thanks to the counterweights installed









28 lbs



400 mm

15 1/2 inch















Electric, 3-phases

950 watts (50-60Hz) 1.3 hp (50-60Hz)



## **ST30-11S**

Quartering breaking saw







- Breaking saw blade, fine tooth STFZ
- Spiral cable SK
- Round handle R (D type)
- Low-vibration operation thanks to the counterweights installed
- High speed (S)
- Due to the low dead weight of the machine, no spring balancer is mandatory.













IP 24











6.5 kg 14 lbs

300 mm 12 inch

1-phase

860 watts (50-60Hz) 1.17 hp (50-60Hz)

















Quartering breaking saw







- Breaking saw blade, fine tooth STFZ
- Spiral cable SK
- Round handle R (D type)
- Low-vibration operation thanks to the counterweights installed
- High speed (S)









16.3 lbs





400 mm

15 1/2 inch













Electric, 1-phase 860 watts (50-60Hz) 1.17 hp (50-60Hz)









# K28-06L Quartering and circular breaking saw

Quartering and circular breaking saw for general cutting work in high throughput plants

- Long gear neck as a second handle
- Mechanical motor brake MMB
- Circular saw blade, coarse tooth, rust-free KGZ
- Spiral cable SK

#### OPTIONAL:

Two-hand safety switch





42 lbs





4 inch







Electric,

1700 watts (50Hz) 3-phase 2.4 hp (50Hz)



# K32-06L Quartering and circular breaking saw







Circular quartering saw for general cutting work in high throughput plants

- Long gear neck as a second handle
- Mechanical motor brake MMB
- Circular saw blade, coarse tooth, rust-free KGZ
- Spiral cable SK

#### OPTIONAL:

Two-hand safety switch





19 kg





120 mm







1700 watts

12 1/2 inch 4 1/2 inch

Electric, 3-phase

(50Hz) 2.4 hp (50Hz)



## **ZKM25-13PC**

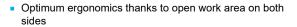
Circular cutting knife - Tabletop version

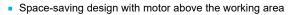






Designed for cutting poultry (chicken, fowl, turkey), small game and small pieces of pig, sheep and calf.





- Stable bevel gear with lasting durability for the circular breaking saw
- Safety devices and hygiene standard according to CE standard
- Completely enclosed three-phase motor (IP65)

























73 lbs

10 inch

3 inch

3-phase

950 watts (50Hz)/VA













1.3 hp (50Hz)







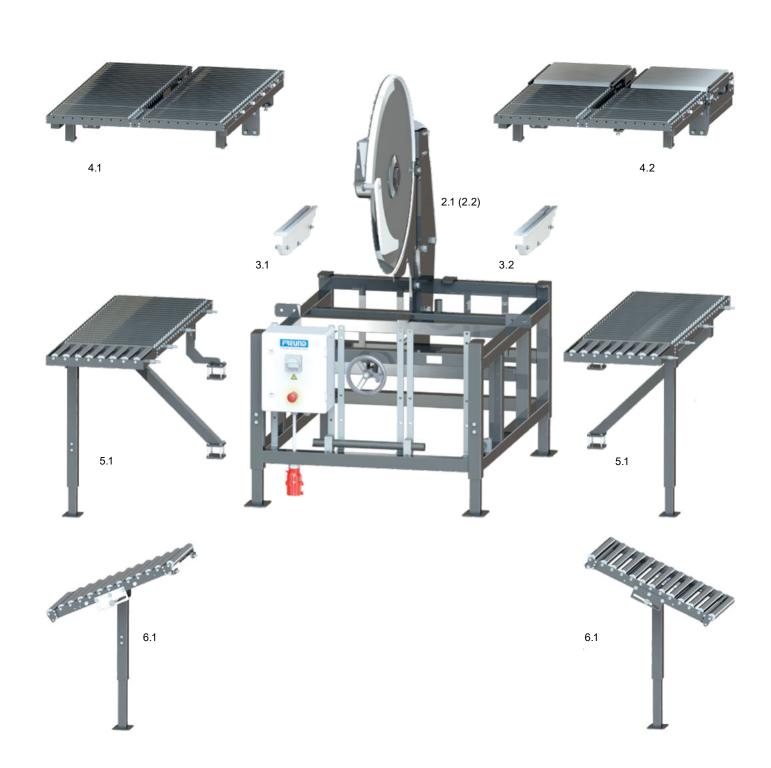






## **ZKM75-T**

Circular cutting knife as a modular table version





# **ZKM75-T**

#### Circular cutting knife as a modular table version





Circular cutting knife for low-loss coarse cutting of horizontal carcasses, e.g. on a cutting belt conveyor. Also suitable for halving sheep.







300 kg

661 lbs



750 mm

29 1/2 inch



300 mm

12 inch







 Compact unit for pre-head positioning in advance of a pig/ sheep cutting line

One operator can coarse cut up to 160 pig halves (3 cuts)

Loss-free, cleaner and hygienic cut without any smearing











(50Hz)

3-phases 3.1 hp (50Hz)

Design: Table with modular, exchangeable roller frame

Stainless steel circular knife blade \*\*INOX / rust-free\*\*

Pos.	Designation
1	ZKM75-08-T basic model
2.1	KM750S-1F circular knife for pigs
2.2	KM750S-2F circular knife for sheep
3.1	Guide insert for pigs
3.2	Guide insert for sheep
4.1	ZKM-T roller conveyors (left/right)
4.2	ZKM-T roller conveyors with conveyor belts (left/right)
5.1	Roller table attachment RTA
6.1	Buffer roller conveyor RTA
Page 65	Modular circular foot saw FK40-08 for lateral attachment









#### ZKM75-DA

#### Circular cutting knife







Circular cutting knife for low-loss coarse cutting of horizontal carcasses, e.g. on a cutting belt conveyor

- Manual lifting of the blade up to 200 mm above the cutting belt
- Space-saving suspension of ceiling or frame structure (suspended installation) in cutting equipment
- Optionally available with powerful motors:
  - 08 (2300 watts) / 190 rpm
  - 46 (3000 watts) / 190 rpm

















309 lbs

12 inch

Electric, 3-phase

2300 watts (50Hz)











3.1 hp (50Hz)

3000 watts (50Hz) 4 hp (50Hz)

#### ZKM75-DA-JHS

Circular cutting knife







Circular cutting knife for low-loss coarse cutting of horizontal carcasses, e.g. on a cutting belt conveyor

- Height adjustable up to 200 mm via the cutting belt
- Space-saving suspension of ceiling or frame structure (suspended installation) in cutting equipment
- With lateral movement option
- Optionally available with powerful motors:
  - 08 (2300 watts) / 190 rpm
  - 46 (3000 watts) / 190 rpm























Electric, 2300 watts (50Hz) 3-phase 3.1 hp (50Hz)





#### ZKM60-DA-MS

Middle splitter circular knife blade







Circular knife blade for optimum separation of pig mid-sections in belly & cutlet series

- Space-saving suspension of ceiling or frame structure (suspended installation) in cutting equipment
- Continuous cutting angle adjustment  $\pm$  15° can be set for optimum yield
- Optionally available with powerful motors:
  - 08 (2300 watts) / 190 rpm
  - 46 (3000 watts) / 190 rpm











IP 65











175 mm 7 inch

3-phase

2300 watts (50Hz) 3.1 hp (50Hz)









4 hp (50Hz)

#### ZKM95-DA

Circular cutting knife







Circular cutting knife for low-loss coarse cutting of horizontal carcasses, e.g. on a cutting belt conveyor

- Space-saving suspension of ceiling or frame structure (suspended installation) in cutting equipment
- Motor in stainless steel housing with fan cooling
- Large saw blade with a diameter of 950 mm
- Cutting depth of the circular knife blade is 340 mm
- Powerful motor (3000 watts)







210 kg

485 lbs



950 mm



340 mm

13 inch













37 inch

3-phase

(50Hz) 4 hp (50Hz)









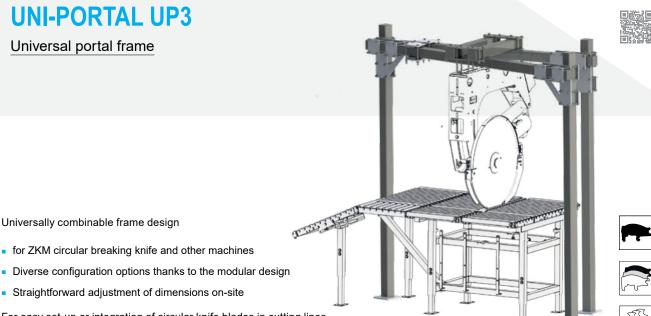
#### **UNI-PORTAL UP3**

Universal portal frame

Universally combinable frame design

for ZKM circular breaking knife and other machines

Straightforward adjustment of dimensions on-site









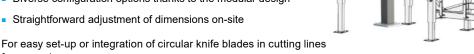








for example:



- ZKM75-DA
- ZKM60-DA-MS

#### **ZKM-T-2CB**

Cutting table with automatic discharge conveyor (foldable)







Space-saving cutting table with automatic discharge conveyor, suitable for use with ZKM60-DA-MS

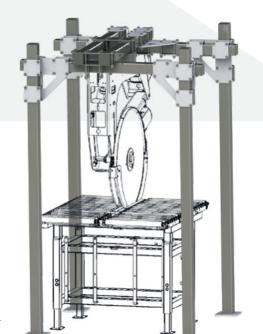
- Space-saving 1x1design principle (1000x1000 mm work surface)
- Effortless cleaning thanks to table modules at the side that can be folded up/down
- Optimised installation options thanks to easily accessible drum motors and optimised chain link belts, thereby significantly reducing installation time
- Enhanced flushing of the chain link belts
- Automatic outward conveyance of the product
- Tailored to ceiling-suspended ZKM-DA-MS and portal solutions





## **UNI-PORTAL UP4**

Universal portal frame



















- for ZKM circular breaking knife and other machines
- Diverse configuration options thanks to the modular design
- Straightforward adjustment of dimensions on-site

For easy set-up or integration of circular knife blades in cutting lines for example:

- ZKM75-DA
- ZKM60-DA-MS







#### FK40-08

Circular foot saw





- Circular saw swivel-mounted on the tabletop for optimum cleaning
- Completely encased, powerful bevel gear drive: specifically designed for use in cutting up
- Stable stainless steel design \*\*INOX / rust-free \*\*
- Left and right-hand version available respectively for installation on a table or belt (please specify)
- Including electronic motor brake
- Up to 1200 cuts per hour



















128 lbs

400 mm 16 inch

5 inch

125 mm

2300 watts (50Hz)/VA 3-phase





Saw blade revolutions: 1170/min

Cutting speed: 1470 m/min.









# K16-P4\_evo2

#### Circular breaking saw







Circular breaking saw for universal use

- Adjustable depth control
- Powerful 800W pneumatic- motor "Made in Germany"
- Stainless steel blade guard & depth control
- Even balance and force transmission protects the wrist joints
- Robust and low-wear gear unit
- Adjustable handle for better ergonomics















7 lbs

6 1/2 inch 0.6-2 inch

87 psi













## K18-01

#### Circular breaking saw







Circular breaking saw for general cutting work in medium plants

- Suitable for trade
- Integrated electronic motor brake (standstill in less than 3 seconds)
- Adjustable depth control
- Round handle R (D type)
- Spiral cable SK















1/2 -2 inch



(50-60Hz) 1-phase 1.4 hp (50-60Hz)









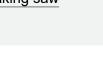






# K18-13

#### Circular breaking saw



Circular breaking saw for general cutting work in medium plants

- Integrated electronic motor brake (standstill in less than 3 seconds)
- Adjustable depth control
- Round handle R (D type)
- Spiral cable SK















11.5 kg

25.4 lbs



7 inch



15 - 65 mm

1/2 - 2 inch





















1.3 hp (50-60Hz)



**K23-03** 

#### Circular breaking saw







Circular breaking saw for general cutting work in medium plants

- Adjustable depth control 15-75 mm
- Mechanical motor brake MMB
- Saw blade stop within 3 seconds after switch-off (EU standard)
- Circular saw blades available in various designs
- Round handle R (D type)
- Spiral cable SK

























9 inch 1/2 - 3 inch

IP 65

3-phase

1300 watts (50-60Hz) 1.8 hp (50-60Hz)











Circular breaking saw







Circular breaking saw for general cutting work

- Adjustable depth control
- Mechanical motor brake MMB
- Saw blade stop within 3 seconds after switch-off (EU standard)
- Circular saw blades available in various designs
- Round handle R (D type)
- Spiral cable SK









42 lbs









9 inch



1/2 - 3 inch





3-phase



1800 watts (50Hz) 2.4 hp (50Hz)













#### K28-06

#### Circular breaking saw







Circular breaking saw for general cutting work

- Saw blade stop within 3 seconds after switch-off (EU standard)
- Mechanical motor brake MMB
- Circular saw blades available in various designs
- Round handle R (D type)
- Spiral cable SK



























4 inch

IP 65

Electric, 3-phase

1800 watts (50Hz) 2.4 hp (50Hz)











Circular breaking saw







Circular breaking saw for general cutting work

- Saw blade stop within 3 seconds after switch-off (EU standard)
- Mechanical motor brake MMB
- Circular saw blades available in various designs
- Round handle R (D type)
- Spiral cable SK















20 kg

44 lbs





120 mm

12 1/2 inch 4 1/2 inch







2.4 hp (50Hz)









#### **RTK18-13**

Rib top circular saw





For separating the loin ribs of the spinal column on the complete mid-section















3-phase

950 watts (50-60Hz) 1.3 hp (50-60Hz)

Two adjustable depth stops for

- precise cutting guide
- optimum yield
- high degree of operator safety

Horizontal cutting guide



Thin saw blade 0.8 mm for

27 lbs

6 1/2 inch 1/2 - 2 inch

IP 65

clean cuts and surfaces

- low germ counts
- less sawdust
- optimum yield

# **BCK23-03**

Circular bacon saw











Circular breaking saw with horizontal saw blade for medium & high throughput plants

For coarse cutting, cutting out the backbone of bacon half-carcasses of pigs

- Circular saw blade, coarse tooth, rust-free KGZ
- Spiral cable SK
- Round handle R (D type)
- Saw blade stop within 3 seconds after switch-off (EU standard)
- Mechanical motor brake MMB





13 kg

29 lbs





9 inch

75 mm 3 inch



3-phase

















# SRC34-H5\_evo2

Spare ribs cutter







For optimum separation of the ribs (loin or back ribs) of split backbone

- Up to 2000 items/hour with trained personnel
- Clean, smooth and even cut
- Optimum extraction of the meat thanks to an additional extraction plate
- Consistent yield (practically no meat loss)
- Longer shelf life of the product thanks to better hygiene (hardly any sawdust)
- Safe working
- Laterally integrated conveyor belt for the ribs
- Low space requirement
- Transport rollers for a quick change of location













(50Hz)

13 1/2 inch

(50Hz) 3.0 hp

- High degree of stability for the guides thanks to being locked via the tension lever
- Quick payback time due to the attractive price/ performance ratio
- Circular knife blade can be re-sharpened
- Quick and easy to clean



# RTC34

#### Rib Top Cutter







- High performance with up to 1500 cutlet strands per hour
- Circular knife blade technology
- Automatic cutting guide and ejection as well as outward conveyance of the portions
- Consistent precise cuts, less bone removal
- Less bone dust
- Good level of adjustability, including quick adjustment of the cutting depth
- Easy maintenance and cleaning
- Proven SRC drive technology
- Highly robust design
- Increased operator safety



573 lbs



13 1/2 inch







Electric, 2800 watt 3-phase (50Hz)

3.0 hp (50Hz)







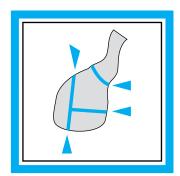








# **TRIMMING**



**CONTENTS** 

n modern meat processing, the type, efficiency and quality of the tools used have a significant influence on the quality of the end product and on the achievable yields.

It is not uncommon for high demands to be placed on such tools. This can result in maintenance-related downtimes and considerable servicing costs.

For this reason, developers of modern trimmers have the task of creating a product that is not only powerful and economical, but also low-wear and therefore cost-efficient. This is exactly the approach that we take here at FREUND.

With our latest Series 2 trimmers and the newly developed Trimmer\_evo3, we have created products wich - thanks the use of proven components and high-quality materials - are a low-maintenance and therefore cost-saving alternative to the trimmers widely available on the market

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# TRIMMER\_evo3

New quality Trimmer\_evo3







- The "fat-free variant" reduces the number of foreign bodies
- Improved powertrain offers: ➤ stress-free coupling of the motor and handpiece
  - higher flexibility & service life
  - fewer failures
- Low maintenance costs thanks to low-wear quality components
- ▶ Parts diagram can be accessed via FREUND Assistance (FA)

74

NOTE: Sharpening of suitable blades only with the TSM-E1 trimmer sharpener







# TRIMMER 52\_evo3

Trimmer 52 evo3 - variant with vacuum suction



















- Ergonomic handle
- Flexible suction and delivery hose
- Ring blade types 52A or 52B for almost every application
- One-hand control with the latest start-stop system
- Suitable for right- and left-handed people





















# TM-E6000\_evo3

Electric motor





- "Soft start" and "quick stop" of the rotating blade in conjunction with the rest position of the stainless steel handpiece holder for the highest safety standard
- 2-hand operation, maximum operator control/safety
- Engaging and disengaging the drive train, faster, easier and according to the highest safety standards
- extremely robust and waterproof thanks to the completely closed aluminum housing
- The hygienic design allows for easy cleaning and problem-free use in wet/damp environments (e.g. in slaughterhouses, on deep-sea fishing frigates, etc.)
- NOTE: Motor can only be used in conjunction with Trimmer\_evo3















550 Watt

0.5 hp

75

- EU standard technology stable supply chains reduce the risk of delivery bottlenecks
- Available in 2 versions: 230V or 115V











# FEEL THE NEW POWER IN PERFECTION

Our new Trimmer\_evo3 are a cost-saving alternative, designed with durable, robust components to provide excellent performance with low maintenance costs.

We present a variable modular system with quality components that offers advantages such as higher productivity, higher yields, more profits and improved

safety. The new system minimizes the need for spare parts and maintenance and service are more customerfriendly.

Thanks to the new ergonomic shape of the new series, comfortable, fatigue-free and more efficient work is guaranteed.

# TRIMMER evo3 FEATURES

Modular construction Trimmer evo3

#### Depth control

- uniform cutting depth (individually adjustable)
- higher yield due to reduced rejects
- in 2 stainless steel versions DCF(FET) / DCS(SKIN)

#### Multifunctional grease ring

 Various versions, including with/without grease nipples, with hand strap holder or with grease bushing (also suitable as a hand strap holder)

#### Thumb support

- Ergonomically designed for fatigue-free work
- Infinitely adjustable for right- and left-handed users
- significant increase in user safety

#### One-hand switch

- Low-vibration one-handed operation with start-stop safety system
- Separate grip and functional areas
- perfectly balanced by mass in the rear area
- Stop to counteract the force of pulling movements
- Binding the hand strap and vacuum hose holder

#### Trimmer handle

- hygienic and abrasion-resistant
- 2 versions (cylindrical/ergonomic) in 2 sizes (S/M)

#### Connection unit

- High flexibility & lightweight
- Longer service life thanks to reinforced inner core (special fiber fabric) and vibration reduction









### **STANDARD VERSION**

Handle cylindric M (middle)

Strap

S (small)

	∅ (mm)	35	52	69	90	128
One hand switch cp		•	•	•	•	•
Frame		small	small	small	large	large
Bearing (plastic)		•	•	•	•	•
Pinion		small	small	small	large	large
Steeling device					•	•
Quick release		•	•	•	•	•
Handle ergonomic EM (middle)		•	•	•	•	•
Blade		A (straight)	A (straight)	A (straight)	C 45°	C 45°
OPTIONAL						
Blade SCR16		•				
Blade SCR19		•				
Blade A (straight)		•	•	•	•	
Blade B (hook)		•	•		•	
Blade C (flat/short/serrated)				C / C serrated	C 30°	C 30°
Blade D (flat/short)						•
Depth control					DCF/DCS	DCF/DCS
Hose adapter and hose bracket vacuum hose	for	•	•			
Bearing (bronze)		•	•	•	•	•
Grease ring w/o grease bush		•	•	•	•	•
Thumb support (plastic)		•	•	•	•	•
Handle ergonomic ES (small)		•	•	•	•	•









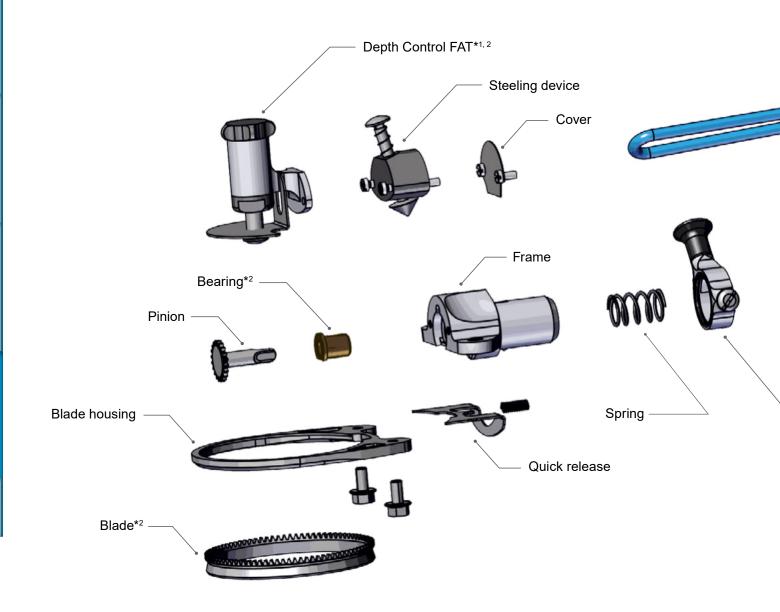




# TRIMMER\_evo3

Exploded view of one of the possible variants for TRIMMER E90\_evo3





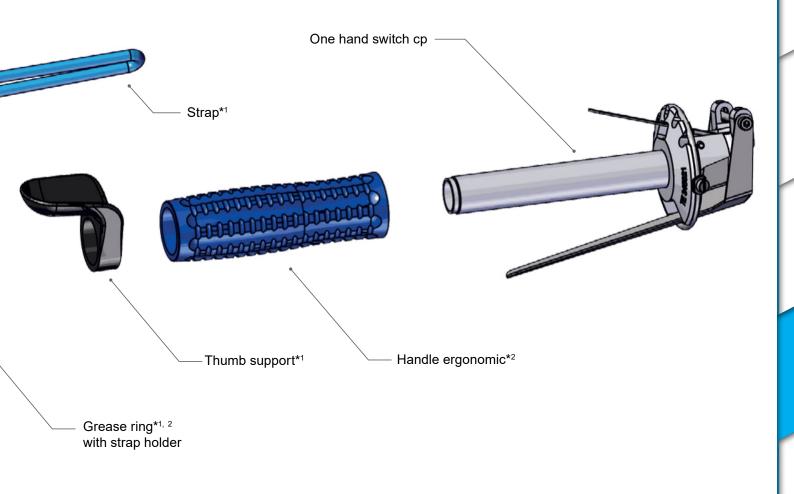
\*1 optional / \*2 available in various versions



Exploded views of Trimmer\_evo3 / electric







\*Figure shows one of the configuration options

The spacer ring can be used as a placeholder for a grease ring or thumb support











# TRIMMER\_evo3

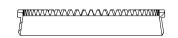
Ring blade selection





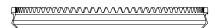
#### **RING BLADE SELECTION**

Туре	$\emptyset$ (mm)	35	52	69	90	128
A (straig	ht)	•	•	•	•	
B (hook)		•	•		•	
C (short	flat/serrated)			•	•	•
D (long f	lat)					•



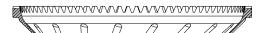


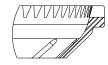


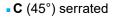


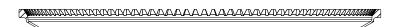


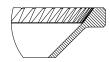




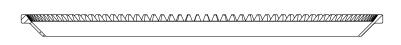


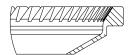




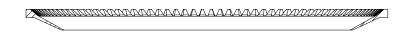


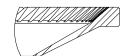
























# TRIMMER\_evo3

Ring blade application





#### **APPLICATION**

$\varnothing$ (mm)	35	52	69	90	128	
Deboning / cleaning						
Bones	Α	Α				
Heads	Α	Α	A/C	Α		
Chicken thighs	Α	Α				
Ribs from belly	Α					
Removal						
Cheeks			A/C	Α		
Chicken breast		В		В		
Spinal cord		A/B				
Remaining skin			С	С	С	
Veins and glands	Α	Α				
Pig eyes	Α					
Pork fillet			Α	Α		
Lean meat from fat			С		С	
Tuna				С	С	
Degreasing / trimming						
Skins				С	С	
Warm fat trimming				С	С	
Hard fat trimming				В	D	
Ham / shoulder / cutlet			С	B / C	С	
Slicing						
Salmon	В		A/C		С	
Gyros / doner kebab				С	С	











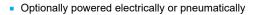




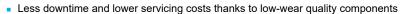
























- Ergonomic handle with robust and abrasion-free plastic design
- Patented quick-change blade system for toolless trimmer blade change
- Significant improvement of user safety thanks to optional start-stop safety system
- Quiet operation minimises vibrations on the handle
- Four different measurement types A, B, C and D in diameters Ø 35, 52, 69, 90 and 128 mm
- Optionally available with depth control in different user-oriented designs





Videos on maintenance & care

# PNM<sub>2</sub>

#### Pneumatic-motor

















1.3 lbs



87 psi



Pneumatic



- Handle with integrated pneumatic-motor for compressed air operation with 6 bar
- new PNM2-D34 handle with 34mm diameter for better handling
- Can be used with FREUND Trimmers (except Trimmer evo3)
- Start-stop safety system with stop lever
- Non-slip handle
- Available with pneumatic connecting kit including service unit and couplings (recommended)



Trimmer - variant with vacuum suction







- Application-optimised design
- Easy handling thanks to spherical suction head
- Various blade types (straight ring blade, hook ring blade)
- Minimal downtime and servicing costs thanks to low-wear quality components
- Ergonomic handle with robust and abrasion-free plastic design
- Quiet operation minimises vibrations on the handle
- Optionally powered electrically or pneumatically



















2 inch

pneumatic









0,5 hp

# **TM-E6001 EF2\_evo2**

Electric motor

- Integrated handles suspension
- adjustable to 6500rpm
- Less downtime thanks to low-wear operation
- Compact and lightweight aluminium housing
- Hygienic design
- Handles and trimmers (except Trimmer\_evo3) can be used individually

#### Connection unit EF2

Enables conversion from EF1 to EF2 (Part-No. 028-010-015)















From defatting degreasing of meat, poultry and fish products to precision cutting of wafer-thin salmon slices - with our optionally electrically or pneumatically powered trimmers, we offer you the right tool for the diverse requirements of your plant.

At the same time, the modular design of our trimmers gives you the option of choosing from four different blade types in five diameters (35, 52, 69, 90 and 128 mm) and countless optional features such as an ergonomic thumb rest, depth control in a robust and hygienic stainless steel design and many other features.

#### TRIMMER FEATURES

The right machine for every application

Trimmer modules

#### Depth control

- Even cutting depth (individually adjustable)
- Higher yield thanks to lower number of rejects
- Especially suited to cutting & filleting salmon and kebab in variant DCS (plastic) and DC2S (stainless steel)
- Especially suited for degreasing hard and cold meat in variants DCF (plastic) and DC2F (stainless steel)

#### Thumb rest

- Ergonomically shaped to enable fatigue-free working
- Freely adjustable for right- and left-handers
- Significant increase in user safety

#### Trimmer handpieces

- Ergonomically shaped, abrasion-free and hygienic
- Optimal handling thanks to different handle shapes
- Available in handle diameters 31, 34 and 38 mm

#### Connecting kits EF1 / EF2 / ADAPTIVE

- Low-maintenance thanks to integrated coupling sleeve
- Compatible with all FREUND hand pieces
- Also available as a special ADAPTIVE version to enable further use of your existing trimmer motor<sup>1</sup>





<sup>1)</sup> compatible with common trimmer motors



### **OPTIONS**

Q	⊘ (mm)	35	52	69	90	128
A (straight)		•	•	•	•	
B (hook)		•	•		•	
C (short flat)					•	•
D (long flat)						•
Depth control					DCF / DCS	DCS /DC2F / DC2S
Pinion gear and Bushing		Small	small	small	large	large
Thumb rest		•	•	•	•	•
Grease cup		Small/large	small/large	small/large	small/large	small/large
Steeling device only					•	•
Pneumatic-motor PNM2		•	•	•	•	•
Start-stop safety system		•	•	•	•	•
Grease fitting and vacuum suction	system	•	•			





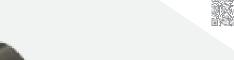








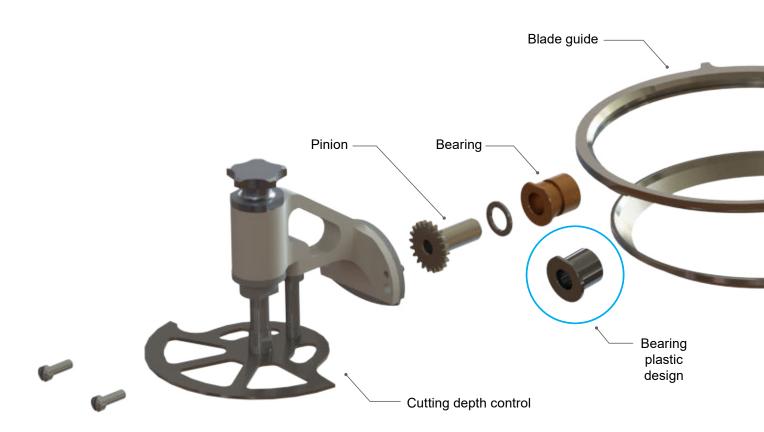
#### Bearing plastic design





- all saleable trimmer handpieces can be be equipped with the newly configurable plastic plain bearing
- available without an extra charge
- high endurance
- additional lubrication of the pinion is not necessary
- the daily greasing of the plain bearing is no longer necessary
- minimal weight reduction of the handpiece
- the handpiece is supplied without grease nipple and grease bushing (a blind plug is fitted)

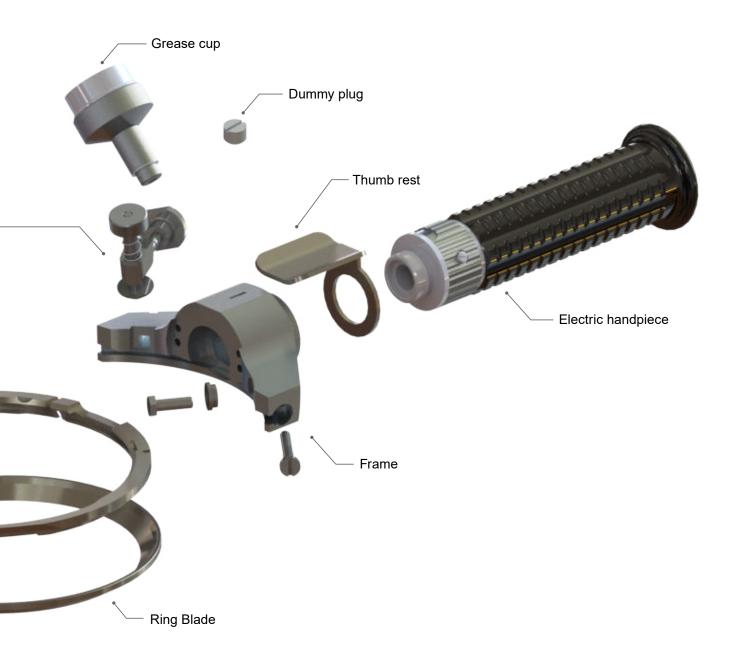
Extractor



Exploded view TRIMMER ø 35mm variant with vacuum extraction, elektrisch und pneumatisch

















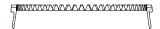
#### Ring blade selection





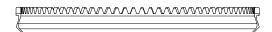
#### **RING BLADE SELECTION**

Ту	pe	$\emptyset$ (mm)	35	52	69	90	128
Α	(straight)		•	•	•	•	
В	(hook)		•	•		•	
С	(short flat)					•	•
D	(long flat)						•



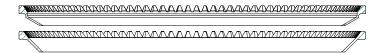


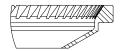






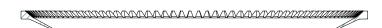














■ **D** (long flat)











# Ring blade application





#### **APPLICATION**

$\varnothing$ (mm)	35	52	69	90	128
Deboning / cleaning					
Bones	Α	Α			
Heads	Α	Α	Α	Α	
Chicken thighs	Α	Α			
Ribs from belly	Α				
Removal					
Cheeks			Α	Α	
Chicken breast		В		В	
Spinal cord		A/B			
Remaining skin				С	С
Veins and glands	Α	Α			
Pig eyes	Α				
Pork fillet			Α	Α	
Lean meat from fat					С
Tuna				С	С
Degreasing / trimming					
Skins				С	С
Warm fat trimming				С	С
Hard fat trimming				В	D
Ham / shoulder / cutlet				B/C	С
Slicing					
Salmon			Α		С
Gyros / doner kebab				С	С



















# TRIMMER IN THE FISH INDUSTRY









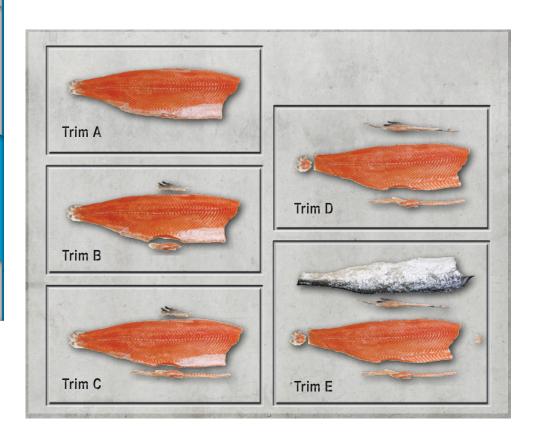








# TRIMS FROM A-F EFFECTIVE CONTROLLED MAXIMUM YIELD



# **SUITABLE FOR ALL** TYPES OF TRIM!

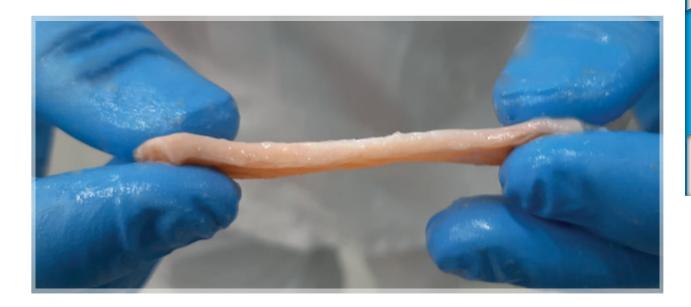
With our trimmers you can perform any trim with high yields on the fillet. Winter damage can be removed effectively, cleanly, quickly and with minimal loss.

With a choice of electrically pneumatically operated trimmers, we offer you the right hand tool for the diverse requirements on your farm.





# CLEAN & TIDY CUT DUE TO DEPTH CONTROL





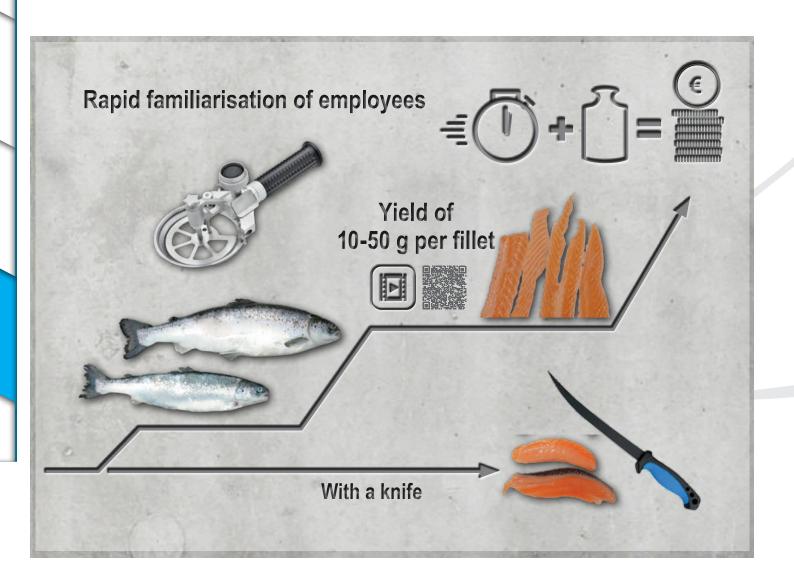






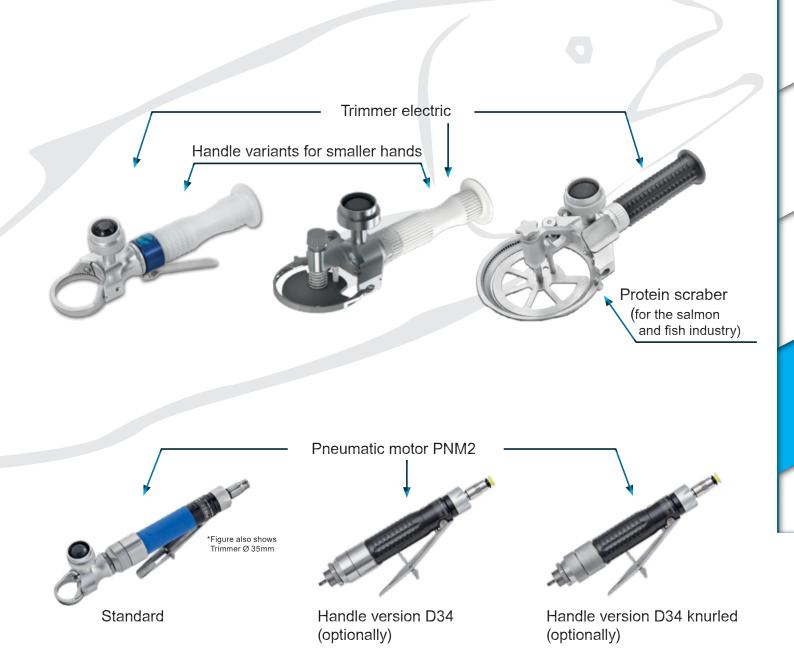


# **MORE PROFIT** THROUGH HIGHER YIELD!





# TRIMMER ELECTRIC OR PNEUMATIC













# TSM-E1

#### Trimmer sharpening machine



\*Figure: Standard variant with steeling device for blades Ø 69 -128mm









13.8 kg 30 lbs

Electric.

(50 Hz)

Trimmer sharpening machine for optimum sharpening results

- Precise sharpening of suitable trimmer blades for all FREUND trimmers in all diameters
- Quick clamp device in two different sizes enables rapid insertion of the trimmer blade with minimal installation effort
- Spring-loaded deburring lever prevents contact being too forceful
- Pre-coated precision grinding disc enables optimum sharpening results while, at the same time, ensuring the maximum service life for the grinding unit
- Integrated overload display indicates potential overload
- Compact aluminium housing with stable design
- Drive with up to 8000 rpm

OPTIONAL: ▶ Steeling device for Ø 35 and 52 mm available



# **SCHÄRFSTAHL**

Sharpening steel





- Precision resharpening of trimmer blades of type A 35 / 52 / 69 mm and trimmer blades of type B,C and D 90  $\stackrel{\cdot}{/}$  128 mm
- Significant improvement of surface thanks to fine removal of material from the blade
- Increased service life for trimmer blades thanks to improved surface
- Design made of resistant chrome/vanadium alloy tool steel







0.8 lbs

248 mm

9.8 inch

12.9 mm 0.5 inch

# SCHÄRFSTAHL-HAKEN

Sharpening steel hook





- Precision resharpening of trimmer blades of type A 35 / 52 / 69 mm and trimmer blades of type B,C and D 90 / 128 mm
- Significant improvement of surface thanks to fine removal of material from the blade
- Increased service life for trimmer blades thanks to improved surface
- Design made of resistant chrome/vanadium alloy tool steel







0.2 lbs

7.5 inch

6.5 mm 0.25 inch

# SCHÄRFSTAHL FÜR ARBEITSTISCHE

Sharpening steel for work tables





- Precision resharpening of trimmer blades of type B, C and D 90 / 128 mm
- Significant improvement of surface thanks to fine removal of material from the blade
- Increased service life for trimmer blades thanks to improved surface
- special design enables clamping in screwing device and attachment to work table
- Design made of hardened chrome/vanadium alloy cold work steel





0.6 lbs 6.3 inch 0.37 inch











## HSK8-P5

Hand-Skinner (pneumatic)







- Quick coupling system with bayonet lock
- Exhaust air outside the working area
- The quietest machine in use on the market

















0,89 hp







0,14 inch









- Blade quick-change system for tool-less blade change
- High degree of operational safety

Powerful pneumatic-motor "Made in Germany"

Maintenance-friendly:

- Easy disassembly
- All parts of the roller are individually replaceable

- Easy cleaning thanks to the hygienic design
- No dead spaces where dirt can accumulate
- Stable design
- With stainless steel safety guard
- Stainless steel scraper
- Low-noise operation
- Suitable for right- and left-handers





Videos on maintenance & care

# HSK8-P3\_evo2

Hand-Skinner (pneumatic)



Direct compressed air connection to the motor





















3,5 mm 0,14 inch

0,43 hp







# TECHNICAL SUPPORT

#### **OPTIMUM PLANNING**

Excellent service is an important factor for customer loyalty—all of us at FREUND embody this belief. Whether it's maintenance, complaints or repairs—efficient service processes not only ensure satisfied customers, but also set us apart from the competition thanks to the comprehensive and meticulous technical service we offer.

#### **PROFESSIONAL SERVICE**

The basis for optimum service is the precise planning and handling of all our service offers. Based on a history of your existing machines, our team members are highly knowledgeable when it comes to your FREUND machines. In compliance with statutory requirements, you will receive a test certificate after any repair work.



#### ARRANGING AN APPOINTMENT

When a service request is received, our service team members immediately see which equipment is available and when. In order to keep your production downtime to a minimum, we offer you rental equipment of equal value during the repair period. Service lives are lengthened and downtimes are minimised, which has a positive impact on the life of FREUND machines and ensures a faultless production process. Our collection service will also save you time and effort and guarantees secure packaging for the transport process.

#### **SERVICING**

Special tools and decades of industry experience allow for flawless repair work in accordance with technical requirements. Only original parts and auxiliary materials are used - all of which have been approved via our in-house quality control. Thanks to the updates that are directly accounted for in the repair process, your product always complies with the latest technological standards.

Lower your operating costs via regular maintenance and repairs.

#### **DIVERSE SERVICE PORTFOLIO**

Multiple tasks can be entered for a service order. Such tasks are assigned to our service team. Our qualified employees provide professional advice and support, which is carried out in a skilful manner, on time and carefully according to our company philosophy.

You can reach our technical service via the following channels.:

Phone: +49 5251 1659-46
E-Mail: service@freund.eu

NDEX 99



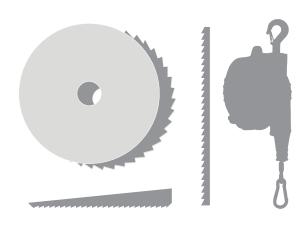








# **OPTIONAL ACCESSORIES**



# **CONTENTS**

Option	nal accessories	100 - 106
	Circular saw blades	101
	Breaking saw blades/ reciprocating saw blades/ band saw blades	102 - 103
	Circular knife blades	103
	Spring balancers	104 - 105
	Disinfection cabinets/ disinfection pools	106



### Circular saw blades (optional accessories)



	Ø	AF	PPLICATI	ON	M	<b>→  </b>	_	
ТҮРЕ	mm			Ħ	Q	mm	TYPE	PART NO.
Fine tooth	٩		•	•	120	1.1	KFZ160	220-000-011
Fine tooth	160		•	•	120	8.0	KFZ160	220-000-012
Coarse tooth			•	•	60	8.0	KGZ160	220-005-014
Fine tooth			•	•	120	1.3	KFZ180	220-000-004
Coarse tooth		•			90	1.3	KGZ180	220-005-003
Special tooth	180	•	•		14	1.3	KSZ180	220-010-004
Special tooth, low-noise		•	•	•	120*	1.2	KSZ180GA	220-000-506
Hard metal circular saw blade		•	•		30	1.4	KHZ180GH	220-100-001
Fine tooth	٩	•	•	•	150	1.5	KFZ230	220-000-005
Coarse tooth		•			110	1.5	KGZ230	220-005-000
Coarse tooth, low-noise		•	•		60	1.5	KGZ230-60GA	220-005-550
Special tooth	230	•	•		18	1.3	KSZ230-16	220-010-050
Special tooth, low-noise		•	•	•	120*	1.7	KSZ230GA	220-000-507
Hard metal circular saw blade		•	•		36	1.7	KHZ230GA	220-100-003
Fine tooth	٩	•	•		200	1.5	KFZ280	200-000-006
Coarse tooth		•			140	1.6	KGZ280	220-005-005
Special tooth for horns and legs	280	•			18	2.2	KSZ280H	220-010-006
Special tooth, low-noise		•	•		144*	1.7	KSZ280GA	220-000-508
Hard metal circular saw blade	9	•	•		40	1.7	KHZ280GA	220-100-005
Coarse tooth		•			160	1.6	KGZ320	220-005-006
Special tooth, low-noise	320	•	•		144*	1.7	KSZ320GA	220-000-509
Hard metal circular saw blade		•	•		40	1.7	KHZ320GA	220-100-006
Special tooth for horns and legs	o for	•			28	2.2	KSZ320H	220-010-008
Hard metal coarse tooth for horns	HBK33-08	•			40	2.2	KHZ320HGA	220-100-010
Coarse tooth for splitting	Ŷ		•		100	1.2	KGZ400SPGA	220-006-001
Special tooth for splitting	400		•		180*	1.7	KSZ400SPGA	220-000-512
Hard metal coarse tooth for splitting			•		52	1.6	KHZ400SPGA	220-100-013
Hard metal coarse tooth			•		52	2.2	KHZ400GA-FK	220-100-014
Special tooth, low-noise	FK40-08		•		64	1.2	KSZ400-64GA	220-000-515
Coarse tooth for splitting			•		130	1.2	KGZ520SPGA	220-006-002
Special tooth for splitting	520		•		272	1.3	KSZ520SPGA	220-000-513
Hard metal coarse tooth for splitting			•		60	1.6	KHZ520SP	220-100-012











Breaking saw blades / reciprocating saw blades / band saw blades (optional accessories)



#### **BREAKING SAW BLADES**

TOOTHING	LENGTH [MM]	TYPE	PART NO.
Fine tooth	300 ှ	STFZ 300	222-000-002
Coarse tooth	300	STGZ 300	On request
Fine tooth for breastbone	315	STFZ 315 BB	222-000-510
Fine tooth	400 9	STFZ 400	222-000-003
Fine tooth	500	STFZ 500	222-000-011

#### **RECIPROCATING SAW BLADES**

TOOTHING	LENGTH [MM]	TYPE	PART NO.
Fine tooth for breastbone	300 ှ	HUFZ 300 BB	223-000-001
Coarse tooth for breastbone	300	HUGZ 300 BB	223-005-007
Fine tooth for splitting	600 ှ	HUFZ 600 SP	223-000-102
Coarse tooth for splitting	600	HUGZ 600 SP	223-005-102

#### **BAND SAW BLADES** FOR TABLE BAND SAWS

for FREUND model	TYPE	PART NO.
TBS19KT	BA6/1750X16	225-200-002
TBS23KT	BA6/2170X16	225-200-022
TBS28FT / ST	BA6/2430X16	225-212-004
TBS40FT / ST	BA6/315X16	225-200-001





Band saw blades / circular knife blades (optional accessories)



#### BAND SAW BLADES FOR SPLITTER BAND SAWS

- Packaging unit: 5 items per box
- Minimum purchase quantity: 20 items per size



for FREUND model	TYPE	PART NO.
SB 46-08	BA 46 FA	224-010-004
	BA 46 GA	224-011-004
	BA 46 GC	224-011-204
SB49-08	BA 49 FA	224-010-006
	BA 49 FC	224-010-206
	BA 49 GA	224-011-006
	BA 49 GC	224-011-206
SB 50-08	BA 50 FA	224-010-005
	BA 50 FC	224-010-205
	BA 50 GA	224-011-005
	BA 50 GC	224-011-205
QUALITY	PITCH	TOOTHING
FA	8 mm / 3 tpi	Standard 8 mm
FC	10 mm	Cleaning tooth
GA	8 mm / 3 tpi	Standard 8 mm
GC	10 mm	Cleaning tooth

For band saw blades for machines of other manufacturers, please contact our sales team by calling +49 5251 1659 -46



#### **CIRCULAR KNIFE BLADES**

For FREUND model	TYPE	PART NO.
BBKM / ZKM 25	KM250WHT-2F	230-250-006
SRC 34	KM345WD-1F	230-345-001
ZKM 60	KM600WHT-1F	230-600-009
	KM600WHT-2F	230-600-010
ZKM 75	KM750-WHT-1F	230-750-017
	KM750-WHT-2F	230-750-018
ZKM 95	KM950-WHT-1F	230-950-004











Spring balancers - special hygienic design for the food industry



#### **SPRING BALANCERS WITH CABLE EXTENSIONS UP TO 2,0 M**

TYPE		CABLE E	XTENSION	BALANC	ING RANGE	WEIGH	IT, GROSS	PART NO.
		m	ft	kg	lbs	kg	lbs	
F14-2SK	S	2,0	6,5	10 - 14	22 - 31	7	16	920-426-100
F18-2SK	S	2,0	6,5	14 - 18	31 - 40	8	18	920-430-100
F22-2SK	S	2,0	6,5	18 - 22	40 - 49	8	18	920-431-100
F25-2SK	S	2,0	6,5	20 - 25	44 - 56	8	18	920-432-100
F30-2	S	2,0	6,5	25 - 30	56 - 67	12	26	920-436-000
F35-2	S	2,0	6,5	30 - 35	67 - 78	12	26	920-437-000
F45-2	S	2,0	6,5	35 - 45	78 - 100	13	28	920-438-000
F55-2SK	S	2,0	6,5	45 - 55	100 - 122	13	28	920-439-100
F65-2	S	2,0	6,5	55 - 65	122 - 143	14	30	920-440-000
F75-2		2,0	6,5	65 - 75	143 - 165	15	32	920-441-000

#### **SPRING BALANCERS WITH CABLE EXTENSIONS UP TO 2,5 M**

TYPE	CABLE E	XTENSION	BALANC	ING RANGE	WEIGH <sup>*</sup>	r, gross	PART NO.
	m	ft	kg	lbs	kg	lbs	
F4-2,5 S	2,5	8	2-4	4-9	3	7	920-414-001
F6-2,5SK S	2,5	8	4-6	9-13	4	9	920-415-102
F8-2,5SK S	2,5	8	6-8	13-18	4	9	920-416-101
F10-2,5SK S	2,5	8	8-10	18-22	4	9	920-417-101
F14-2,5SK S	2,5	8	10-14	22-31	4	9	920-418-101





# SPRING BALANCERS WITH CABLE EXTENSIONS UP TO 3,0 M

TYPE		CABLE E	EXTENSION	BALANC	ING RANGE	WEIGH	T, GROSS	PART NO.
		m	ft	kg	lbs	kg	lbs	
F20-3SK	S	3	10	15-20	33-44	19	42	920-470-100
F25-3		3	10	20-25	44-56	20	44	920-471-000
F35-3	S	3	10	25-35	56-78	21	46	920-472-000
F45-3	S	3	10	35-45	78-100	24	53	920-473-000
F50-3	S	3	10	40-50	89-111	24	53	920-474-000
F60-3	S	3	10	50-60	111-133	25	56	920-475-000
F70-3	S	3	10	60-70	133-156	27	60	920-476-000
F80-3		3	10	70-80	156-178	28	62	920-477-000
F90-3	S	3	10	80-90	178-200	29	64	920-478-000
F100-3	S	3	10	80-100	178-222	29	64	920-479-000
F115-3		3	10	100-115	222-253	40	88	920-480-000
F130-3		3	10	115-130	253-260	40	88	920-481-000
F140-3		3	10	130-140	260-308	43	95	920-482-000
F150-3		3	10	140-150	308-330	46	100	920-483-000
F160-3		3	10	150-160	330-352	49	108	920-484-000
F180-3		3	10	160-180	352-396	50	110	920-485-000











Disinfection cabinets / disinfection pools (optional accessories)



DISINFECTION CABINETS	TYPE	FOR FREUND MACHIN	IES	PART NO.
	DES-K01	BBH30-03	BBST30-13	913-501-502
		FNS9P	HDS15	
		FNS9	K18-13	
		FS6		
	DES-K02	BBK23-03	K23-03	913-506-003
		BBK28-06D	K23-03L	
		BBKM25-03	K23-06	
		HBK28-06	K28-03	
		HLS12	K28-03L	
		HZ7	K28-06	
		HZ10	K32-06	
		LS15		
		PFK23-03		
		SK28-03L		
		SK32-06L		
	DES-K03	SH60-03	SST50-13	913-503-502
		ST40-13		
	DES-K04	SB46-08	SB49-08	913-505-002
		SB50-08		
	DES-K05	LS15	NS21	913-509-00
		NS26	AS28	
	DES-K06-ROD			913-508-002
	DES-K07	HBK33-08	SK40-08L	913-510-000
		SK52-08L		
	DES-K08	HG12		913-511-000
DIGINIFECTION DOOL O				

#### **DISINFECTION POOLS**

TYPE	FOR FREUND MACHIN	ES	PART NO.
DES-B01	VH38B	VH38I	913-101-220
	VH38E	SVH38A	
	VH38G	SVH38B	
	VH38H	SD11	



NOTES	











Accessory set for cleaning captive bolt stunners	27	OPTIONAL
Animal drover / Droving aid	6	MOVIT-M
Animal drover (electronical)	6	KAWE 8001
Animal drover (electronical)	7	KAWE 21
Band saw blades / circular knife blades (optional accessories)	103	OPTIONAL
Bearing plastic design	86	TRIMMER
Breaking saw blades / reciprocating saw blades / band saw blades (optional accessories)	102	OPTIONAL
Breastbone shear	37	BBS14
Captive bolt stunner for concussion stunning	26	SCHERMER KC
Captive bolt stunner in extended design	25	SCHERMER KL
Captive bolt stunner in shortened design	25	SCHERMER KK
Captive bolt stunner of series K	24	SCHERMER K SERIES
Captive bolt stunner (pneumatic)	22	STUN-BP1
Captive bolt stunner with automatic bolt retraction system	25	SCHERMER KS
Captive bolt stunner with bolt discharge	24	SCHERMER KR
Circular bacon saw	69	BCK23-03
Circular breaking saw	66	K16-P4_evo2
Circular breaking saw	66	K18-01
Circular breaking saw	66	K18-13
Circular breaking saw	67	K23-03
Circular breaking saw	67	K23-06
Circular breaking saw	68	K28-06
Circular breaking saw	68	K32-06
Circular brisket knife	38	BBKM25-06D
Circular cutting knife	62	ZKM75-DA
Circular cutting knife	62	ZKM75-DA-JHS
Circular cutting knife	63	ZKM95-DA
Circular cutting knife as a modular table version	61	ZKM75-T
Circular cutting knife - Tabletop version	59	ZKM25-13PC
Circular foot saw	65	FK40-08
Circular horn and leg saw	36	HBK28-06
Circular horn and leg saw	36	HBK33-08
Circular saw blades (optional accessories)	101	OPTIONAL
Circular splitting saw	39	SK32-06L
Circular splitting saw	39	SK52-08L
Compressed air compressor	22	COMP-BP1-1
Compressed air compressor	23	COMP-BP1-2
Connection unit EF2	83	TM-E6001 EF2_evo2
Cranial insertion rod	30	RÜCKENMARKZERSTÖREF
Cutting table with automatic discharge conveyor (foldable)	64	ZKM-T-2CB
Dehider	37	SD11
Disinfection cabinets / disinfection pools (optional accessories)	106	OPTIONAL
Electric motor	75	TM-E6000_evo3
Electric motor	83	TM-E6001_evo2
Electric stun tong	8	STUN-TONG-EP STEEL
Electric stun tong	8	STUN-TONG-EA STEEL
Electric stun tong	8	STUN-TONG-ES STEEL
Electric stun tong	10	ZK-1
Electric stun tong	10	ZK-3
Electric stun tong	11	ZK-4
Electric stun tong	11	Z-KT
Electric stun tong (pneumatic)	9	STUN-TONG-EPP2
Electric stun tong (pneumatic)	9	STUN-TONG-EPP3
Electric stun tong (pneumatic)		STUN-TONG-EPP3 F-Serie





Electric stun tong (pneumatic)	16	STUN-TONG-EPP3 E-Serie
Electric stun tong (standard)	10	ZK-2
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Exploded view of one of the possible variants for TRIMMER E90_evo3	78	TRIMMER_evo3
Extension rod for KAWE 21 / KAWE 8001	7	EXTENSION ROD
Foot and neck shear	32	FNS9
Hand piece for VSS vacuum suction system (optional)	47	VSS-VH38B
Hand piece for VSS vacuum suction system (optional)	47	VSS-VH38G
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Hand-Skinner (pneumatic)	98	HSK8-P5
Head dropper and general cutting shear	34	HDS15
Heart electrode, automatically movable	15	STUN-HE-PP
Heart electrode, automatically movable	17	STUN-HE-PP
High-performance cartridges Cal .27" 6,8/15 mm	27	OPTIONAL
Horn and leg shear	34	HLS12
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Horn cutter	35	HZ10
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Inspection package for electric stunners of the FREUND brand	21	STUN-E-INSPECTION
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Interface control boxes (suitable for STUN-F8)		
Leg shear		
Middle splitter circular knife blade		
Modular construction Trimmer_evo3		
Neck shear		_
Neck shear		
Neck shear		
New quality Trimmer_evo3		
Pneumatic-motor		
Quality trimmer		
Quartering and circular breaking saw		
Quartering and circular breaking saw		
Quartering breaking saw		
Quartering breaking saw		
Quartering breaking saw		
Quartering shear		
Reciprocating breastbone saw		
Reciprocating breastbone saw		
Reciprocating splitter saw		
Reciprocating splitting saw		
Rectum cutter		
Rib top circular saw		
Rib Top Cutter		
Ring blade application		
Ring blade application		<del>-</del>
Ring blade selection		
Ring blade selection		<del>_</del>
Ring blade selection & application		
Sharpening steel		•
Sharpening steel for work tables		
Sharpening steel hook		
Spare ribs cutter		SRC34-H5 evo2

#### www.freund-germany.com









Splitter band saw	42	SB46-08
Splitter band saw	42	SB49-08
Splitter band saw	42	SB50-08
Spray Model "D"	52	BRAUSE
Spray Modell "E"		
Spray Modell "F"		
Spray Modell "H"	53	BRAUSE
Spring balancers - special hygienic design for the food industry		
Steam vacuum piece	45	SVH-38A
Steam vacuum sanitizer system		SVSS
Sticking knife		EBH
Stunning device (constant current & high frequency)		
Stunning device (constant current & high frequency)		
Stunning device (constant current & high frequency)		
Stunning device, suitable for industrial use and high frequency (constant current or voltage)		
Test cartridges calibre .27 6.8/11 mm		OPTIONAL
Test device for captive bolt stunners		
Test device for electric stunner		
Test sleeve for ensuring constant test conditions		
Trimmer 35_evo3 - variant SCR spinal cord remover		TRIMMER 35_evo3
Trimmer 35 evo3 - variant with vacuum suction		TRIMMER 35 evo3
Trimmer 35 - variant spinal cord remover		TRIMMER 35
Trimmer 35 - variant with vacuum suction		TRIMMER 35
Trimmer 52 evo3 - variant with vacuum suction		TRIMMER 52_evo3
Trimmer 52_evo3 - variant with vacuum suction		TRIMMER 52 evo3
Trimmer 52 - variant with vacuum suction		TRIMMER 52
Trimmer evo3 with vacuum extraction - Examples of modular design		MODULAR DESIGN
Trimmer modules		TRIMMER FEATURES
Trimmer sharpening machine		TSM-E1
Trimmer - variant with vacuum suction		TRIMMER 52
Universal portal frame		UNI-PORTAL UP3
Universal portal frame		UNI-PORTAL UP4
Vacuum system		VSS
Weasand clip (oesophagus seal)		WEASAND CLIP
Weasand rod		WEASAND ROD
Web server for data recording and remote parameterization (for the STUN-F series)		
Web server for data recording (for STUN-E series)		
NOTES		



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					GERMAN QUALITY SLAUGHTER-TOOLS		
ANIMAL S	PECIES			CUT	TING SYMBOLS	PAGE	
Cattle F	Pig S	heep Fish	Pol	ultry Calf		Droving	6-7
ANIMALS PER WEEK						Stunning	8-27
Trade				ustry		Stimulation	30
1 - 20 21 - 500						Bleeding	31
1 - 10		101 - 5 00		> 5 000		Weasand clip	31
CARCASS (DEAD) WEIGHT						Feet/neck	32
		5				Neck	33
<	< 200 kg		kg	> 400 kg	12.32	Horns/legs	34-36
	< 80 kg 80 - 120		kg > 120 kg			Horns	35
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TECHNICAL DATA  Weight (of the tool)			ΙP	Protection class		Dehiding	37
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Stroke  Ø Diameter				of cable  Saw blade		Primal cutting	59-71
Diameter  →   ← Saw blade thickness				teeth		Trimming	73-98



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- Installation manuals for our machines/devices
- SRC technical information
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