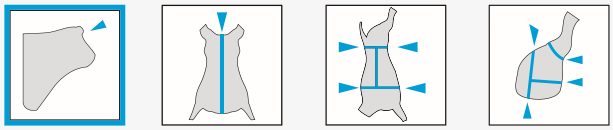
FREUND
GERMAN QUALITY SLAUGHTER-TOOLS

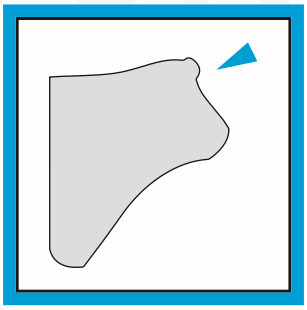
STUNNING

Electrical stunning for an efficient slaughter yield and optimum meat quality.





STUNNING





Professional 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.

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

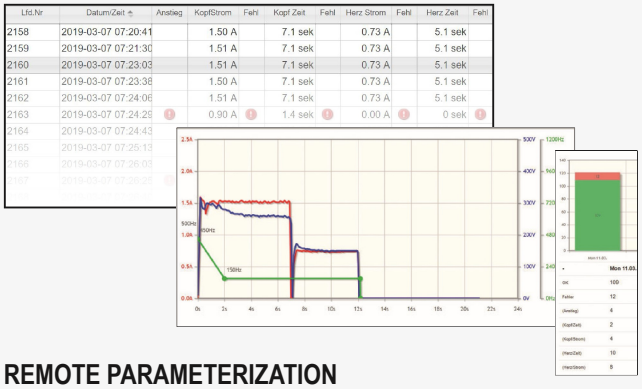
The FREUND service department supports the user by offering expert advice in all matters relating to the products.

STUN-E6

Electronic, high-frequency, constant-current, (cloud-enabled stunner for up to 100 stuns per hour

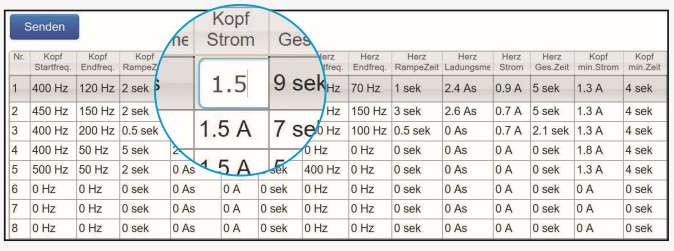
- 8 pre-installed stunning programs, individually adaptable
- Can be extended to up to 24 stunning programs
- Internal data storage for 16,000 stun sets
- LCD display with 40 characters for real time display of program number, current, voltage, frequency and stunning time
- Linear frequency ramp, without 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 connection
- Second outlet for separate heart-electrode
- Remote programming of the parameter data sets possible via web interface
- Access to stun data via the web interface with daily/weekly/monthly statistics

ONLINE STATISTICS



Lfd.Nr	Datum/Zeit	Anstieg	KopfStrom	Fehl	Kopf Zeit	Fehl	Herz Strom	Fehl	Herz Zeit	Fehl
2158	2019-03-07 07:20:41		1.50 A		7.1 sek		0.73 A		5.1 sek	
2159	2019-03-07 07:21:30		1.51 A		7.1 sek		0.73 A		5.1 sek	
2160	2019-03-07 07:23:03		1.51 A		7.1 sek		0.73 A		5.1 sek	
2161	2019-03-07 07:23:38		1.50 A		7.1 sek		0.73 A		5.1 sek	
2162	2019-03-07 07:24:06		1.51 A		7.1 sek		0.73 A		5.1 sek	
2163	2019-03-07 07:24:29		0.90 A	!	1.4 sek	!	0.00 A	!	0 sek	!
2164	2019-03-07 07:24:43									
2165	2019-03-07 07:25:13									
2166	2019-03-07 07:26:03									
2167	2019-03-07 07:26:28									

REMOTE PARAMETERIZATION



Senden

Kopf Strom

Nr.	Kopf Startfreq.	Kopf Endfreq.	Kopf RampeZ				Herz Endfreq.	Herz RampeZeit	Herz Ladungsme	Herz Strom	Herz Ges.Zeit	Kopf min.Strom	Kopf min.Zeit
1	400 Hz	120 Hz	2 sek		1.5	9 sek	70 Hz	1 sek	2.4 As	0.9 A	5 sek	1.3 A	4 sek
2	450 Hz	150 Hz	2 sek				150 Hz	3 sek	2.6 As	0.7 A	5 sek	1.3 A	4 sek
3	400 Hz	200 Hz	0.5 sek		1.5 A	7 sek	100 Hz	0.5 sek	0 As	0.7 A	2.1 sek	1.3 A	4 sek
4	400 Hz	50 Hz	5 sek				0 Hz	0 sek	0 As	0 A	0 sek	1.8 A	4 sek
5	500 Hz	50 Hz	2 sek	0 As	1.5 A		400 Hz	0 sek	0 As	0 A	0 sek	1.3 A	4 sek
6	0 Hz	0 Hz	0 sek	0 As	0 A	0 sek	0 Hz	0 sek	0 As	0 A	0 sek	0 A	0 sek
7	0 Hz	0 Hz	0 sek	0 As	0 A	0 sek	0 Hz	0 sek	0 As	0 A	0 sek	0 A	0 sek
8	0 Hz	0 Hz	0 sek	0 As	0 A	0 sek	0 Hz	0 sek	0 As	0 A	0 sek	0 A	0 sek

GERMAN QUALITY SLAUGHTER-TOOLS

STUNNING

	STUN-E4	STUN-E6	STUN-E8
Dimensions H x W x D (mm)	350 x 305 x 165	400 x 300 x 200	400 x 300 x 200
Weight (kg)	9,7	13	13,1
Operating voltage (V)	115V/230V	90-260V	90-260V
Protection class	IP 44	IP 44	IP 44
Stunning current (A)	max. 2,5A	max. 2,5A	max. 2,5A
Number of stuns	< 50 / day	< 1000 / day	< 3000 / day





STUN-E4

Electronic, high-frequency, constantcurrent stunner for up to 50 pigs or 10 sows per day

- 4 pre-installed 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
- Access to stun data with daily/weekly/monthly statistics via Windows program

STUN-E8

Electronic, high-frequency, constantcurrent, (cloud-enabled) stunner for up to 720 stuns per hour

In addition to the otherwise identical technical features of the STUN-E6:

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

STUN TONGS



STUN-TONG-EP TITANIUM

Electric stun tongs made of titanium for breeding sows/ sows

- Wide opening range for head and heart current flow
- Optimised ergonomics thanks to lightweight material
- Less downtime thanks to electrode quick-change system
- Angled, ergonomic handle
- Improved cable protection in the handle with wear-resistant spiral cable

TECHNICAL DATA

Length (mm)	940
Weight (kg)	2.8



STUN-TONG-EP STEEL / STUN-TONG-EA STEEL

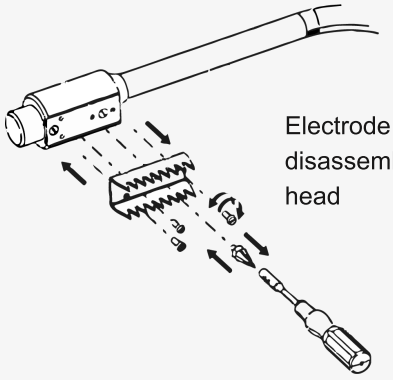
Electric stun tongs made of stainless steel for pigs/fattening pigs

- Less downtime thanks to electrode quick-change system
- Robust pivot joint
- Improved cable protection in the handle with wear-resistant spiral cable

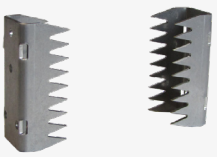
TECHNICAL DATA

Length (mm)	850
Weight (kg)	3.5

ELECTRODE QUICK-CHANGE SYSTEM

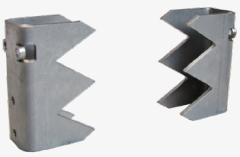


Electrode change without disassembly of the tong head



EP
(for pigs)

for:
STUN TONG TITAN
STUN TONG STEEL



EA
(for sheep)

optional for:
STUN TONG STEEL

STUNNING

STUN TONGS



STUN-TONG-EPP2

Pneumatic stun tongs for pigs

- For stunning animals in stun traps or stunning animals in restrainers
- Electrode quick-change system
- Pneumatic drive for opening and closing

TECHNICAL DATA

Length (mm)	640
Weight (kg)	3.2



STUN-TONG-EF

Electric stun fork for pigs

- For stunning animals in stun traps or stunning animals in restrainers
- Ergonomic thanks to a small, compact design

TECHNICAL DATA

Length (mm)	510
Weight (kg)	2.3

ACCESSORIES



- F3-1.6N
  balancer
  with 1.6 metre
  cable extension

  optional for:
  STUN-TONG-EF



- F6-2.5SK
  Balancer
  with 2.5 meter
  cable extension

  optional for:
  STUN-TONG-EPP2