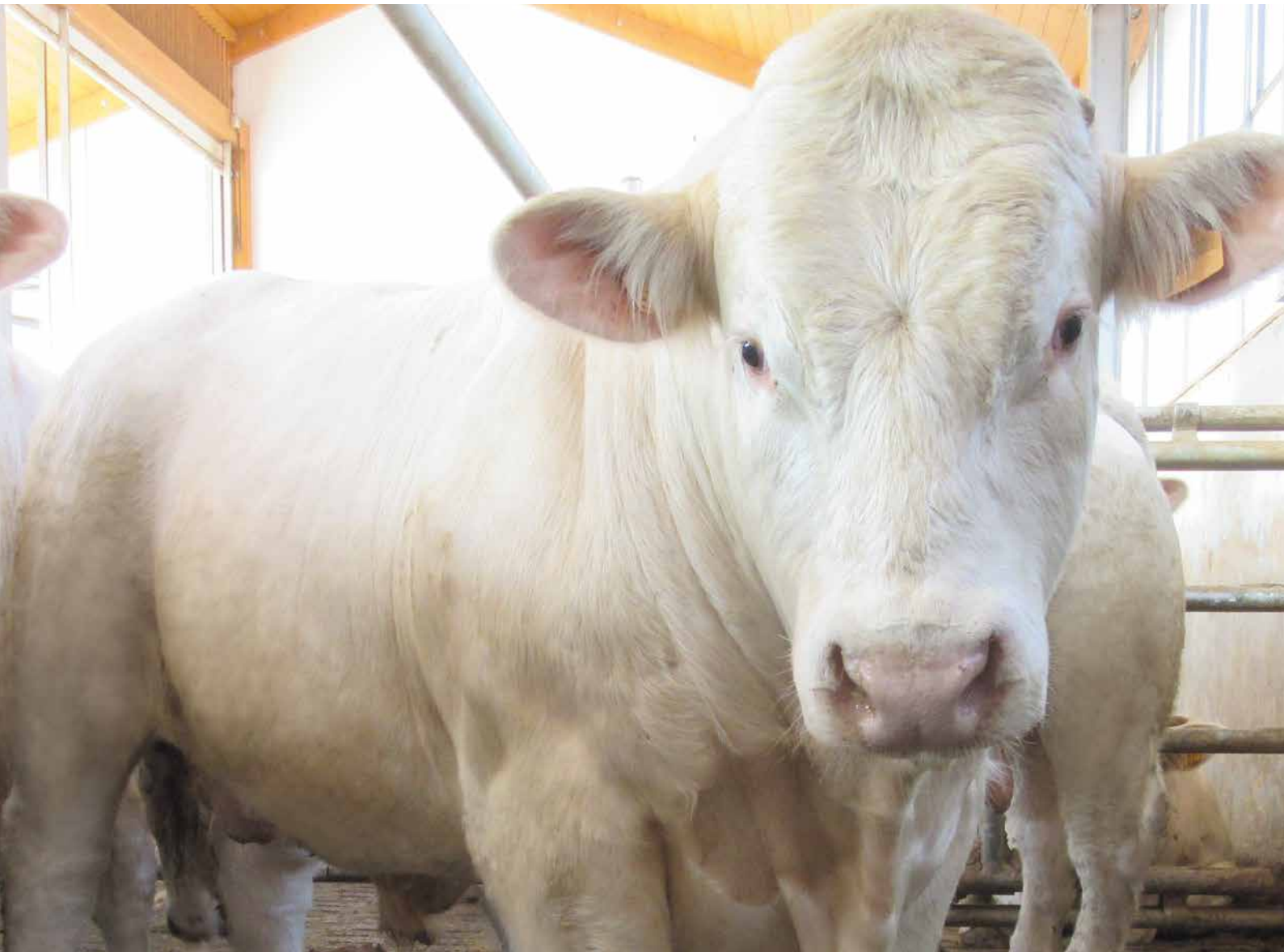


MADE IN GERMANY

K KRAIBURG

Rubber floorings for beef fattening



**Only healthy animals
bring the highest yield!**

► **animal-friendly:**

- soft
- slip-resistant
- heat insulating

► **economical:**

- enhance performance
- rugged and durable
- easy to install

K KRAIBURG

► legt die Weide in den Stall

www.kraiburg-elastik.com



► Our experience is your gain

KRAIBURG - predominant in the rubber industry

KRAIBURG has established itself as an expert specialist in the rubber business since 1947. The KRAIBURG Holding GmbH & Co. KG has a staff of more than 2,000 employees worldwide.



Since 1968 we have been developing and manufacturing rubber mats for animal husbandry in Tittmoning/ Germany. Today about 200 employees exclusively concentrate on that.

High quality rubber materials

Rubber mats are subject to high stress in animal husbandry. We have been manufacturing high-quality rubber mixtures with a unique process for over 45 years. Experience will tell you that not all rubber mats are the same.



Certified quality – made in Germany

Our goal is to achieve more than just fulfilling general legal requirements, but furthermore apply environmentally friendly manufacturing processes.



To ensure our quality consistently, we are certified with the worldwide ISO 9001 standard. Our effective energy management system is specifically certified with ISO 50001.



Besides excellent manufacturing quality, product quality plays a decisive role. So we operate an in-house laboratory and test the properties of our products here. For independent attestation we also have them tested by the DLG (results at www.dlg.org).



► KRAIBURG rubber floorings for beef fattening

For every development we follow the example set by nature. Our robust floor coverings have a high dimensional stability and offer optimum comfort levels – and this for the long term. They are simple to install, easy to clean and disinfect and suitable for both new construction and renovation.

The goal is an economic solution with focus on animal health.

What do nature-oriented floors offer?

- improved surefootedness reduces the risk of injuries and animal losses
 - only healthy animals can bring high yields in a short timeframe
- less problems with getting up and lying down
 - more active animals go to the feeding place more often

What are the benefits?

- higher weight gain due to increased comfort, better energy balance and feed conversion
 - considerably shorter fattening periods
- vet and treatment costs decrease



| | | | |
|--------------------------------|--|---|----|
| Slatted floors | bull fattening | ▶ | 4 |
| | fattening of veal calves & beef calves | ▶ | 6 |
| Lying areas | | ▶ | 8 |
| Paved / concrete walking areas | | ▶ | 9 |
| Research results / practice | | ▶ | 10 |



Individually tailor-made rubber covers

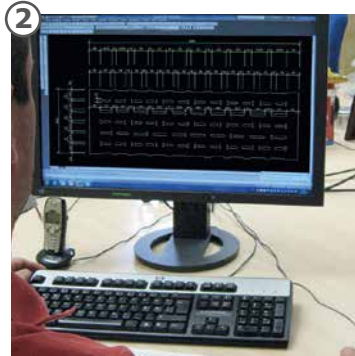
The mats are generally dimensioned according to the guidelines established by our specialists. The slatted floor must be suitable for covering with KRAIBURG mats.*

Fits perfectly!

Customisation:



slatted floor is measured



with modern CAD software the mats are individually dimensioned

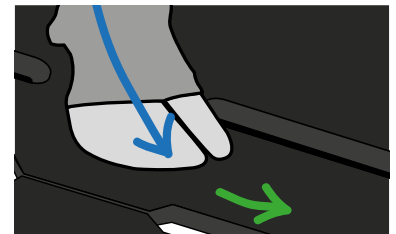


based on the CAD created drawing, the slits are cut exactly into the mats with innovative water jet technology

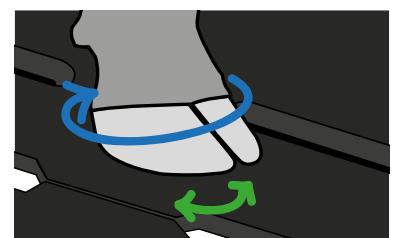


Flexible single mats with elastic fastenings:

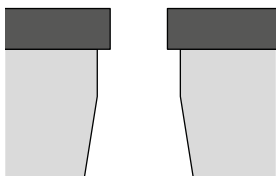
- sturdy and thick mats + patented fastening system
 - ▶ permanently stable in position and form
- allows for the necessary movement between rigid concrete and elastic rubber
- individual installation improves durability
(Flexible rubber and rigid concrete are very different materials, a fixed connection between rubber and concrete could therefore easily break.)
- single mats can easily be installed or exchanged anytime, independent of the concrete slatted floor
- the slits in the floor can be adjusted by means of rubber covers to fulfill legal requirements



when stepping down:
the mat adjusts to the movement and absorbs the impact



when turning:
the mat cushions and supports the claw as it rotates



optional:
elastic faeces-tearoff-edge enables better dung passage and hence better self-cleaning

For young cattle up to 250 kg animal weight (or up to 350 kg, if the animals are kept in the same pen for the whole fattening period) KURA S / KURA SB can be used. With higher weights we recommend LOSPA swiss / LOSPA SB for higher stress.

IMPORTANT:
Balanced feeding is a requirement for clean animals.

*Please take notice of the corresponding KRAIBURG specifications and installation instructions with useful advice and tips. You will obtain these at your local KRAIBURG dealer or at www.kraiburg-elastik.com.



LOSPA swiss

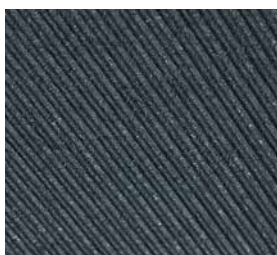


- over 30 years of experience with LOSPA
- developed in cooperation with Swiss bull fatteners

► Tailor-made for every slatted floor geometry



reinforced **grip-surface**
for high stress



stable groove profile
on lower side for high
stress



KRAIBURG fastening system:
patented rubber peg to prevent lateral
slipping – flush with the mat



Prerequisites for slatted floors:

- slit width: starting at 30 mm
- Slat widths up to 140 mm are recommended to keep the animals satisfactorily clean.

Dimensions:

thickness:
20 mm

width and length:
tailor-made

20 mm



Please take notice of the corresponding KRAIBURG specifications and installation instructions with useful advice and tips. You will obtain these at your local KRAIBURG dealer or at www.kraiburg-elastik.com.



LOSPA SB

NEW

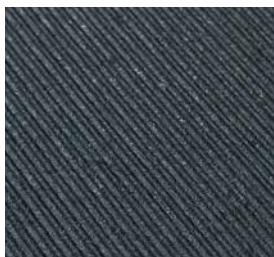


► Tailor-made for common longitudinal and transverse slats

- curved surface with approx. 5 % slope towards the slit
 - facilitates the draining of liquids and dries faster
 - increases cleanliness
 - reduces ammonia emissions
- even better surefootedness
- optimised fastening especially for high stress



reinforced, curved surface with square imprinting improves surefootedness



stable groove profile on lower side for high stress



optimised KRAIBURG fastening system: reinforced rubber peg with surrounding rim – flush with the mat



Prerequisites for slatted floors:

- slit width: starting at 30 mm
- The slats have to be the same width.

Dimensions:

thickness:
23 mm

width and length:
tailor-made

23 mm





KURA S



- ▶ Tailor-made for every slatted floor geometry
- ▶ For young cattle up to 250 kg animal weight (or up to 350 kg, if the animals are kept in the same pen for the whole fattening period)



grip-surface:
supports surefooted-
ness



stud profile for
ideal softness



KRAIBURG fastening system:
patented rubber peg to prevent lateral
slipping – flush with the mat



Prerequisites for slatted floors:

- ▶ slit width: starting at 24 mm
Slit widths starting at 30 mm are recommended to keep the animals satisfactorily clean.
- ▶ slat width within concrete element: starting at 80 mm

Dimensions:

thickness:
24 mm

width and length:
tailor-made

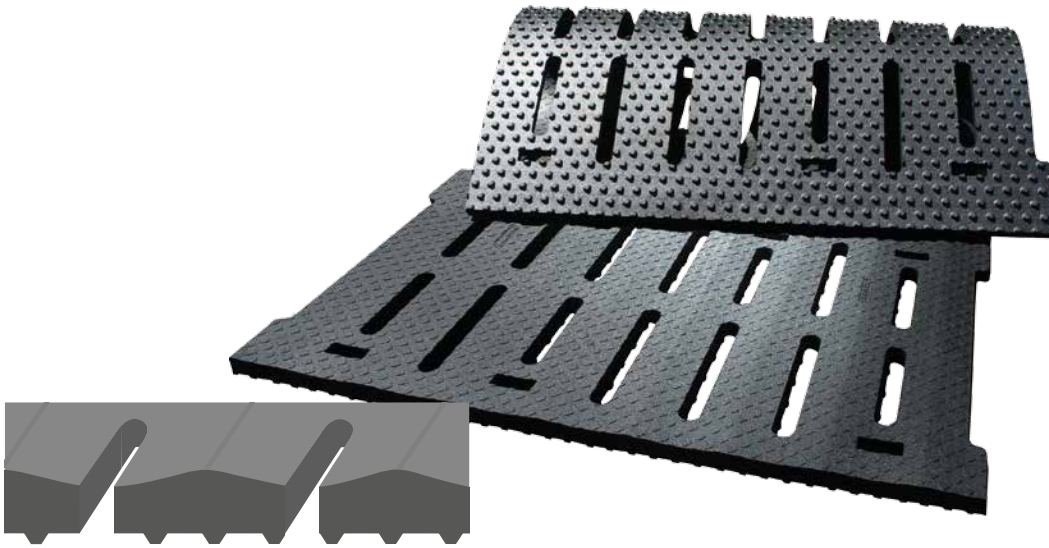
19 mm  24 mm

Please take notice of the corresponding KRAIBURG specifications and installation instructions with useful advice and tips. You will obtain these at your local KRAIBURG dealer or at www.kraiburg-elastik.com.



KURA SB

NEW



- ▶ **Tailor-made for longitudinal and transverse slits on common concrete or wooden slats**
- ▶ **For young cattle up to 250 kg animal weight (or up to 350 kg, if the animals are kept in the same pen for the whole fattening period)**
 - curved surface with approx. 5 % slope towards the slit
 - ▶ facilitates the draining of liquids and dries faster
 - ▶ increases cleanliness
 - ▶ reduces ammonia emissions
 - even better surefootedness



curved surface with square imprinting
improves surefootedness



stud profile for ideal softness



KRAIBURG fastening system:
patented rubber peg to prevent lateral slipping – flush with the mat

**Prerequisites for slatted floors:**

- ▶ slit width: starting at 24 mm
Slit widths starting at 30 mm are recommended to keep the animals satisfactorily clean.
- ▶ The slats have to be the same width.

Dimensions:

thickness:
28 mm

width and length:
tailor-made

23 mm 28 mm



KRAIBURG lying mats at a glance

- good heat insulation
- resilience and pebbled surface optimize slip resistance
- integrated soft slope to rear edge promotes drying off
- sealing lips in the rear edge of the lower side minimize soiling
- chamfer at rear edge: gentle on animal joints, no stumbling edges
- rugged, dimensionally stable, durable
- easy to clean and disinfect
- installation independent of divider arrangement



| | KKM LongLine | KIM LongLine | CALMA |
|------------------|--|--|--|
| |  <div>   </div> |  <div>  </div> |  <div>  </div> |
| softness | ★ ★ ★ | ★ ★ ★ | ★ ★ |
| special features |  <p>honeycomb profile</p> |  <p>air cushion profile</p> |  <p>air-cushion-like profile</p> |
| thickness | 30 mm | 30 mm | 30 mm |

 For further information please refer to www.kraiburg-elastik.com



KRAIBURG walking area mats at a glance

- improved surefootedness
- animals feed more frequently
- manure removal with scraper and driving on mats possible*



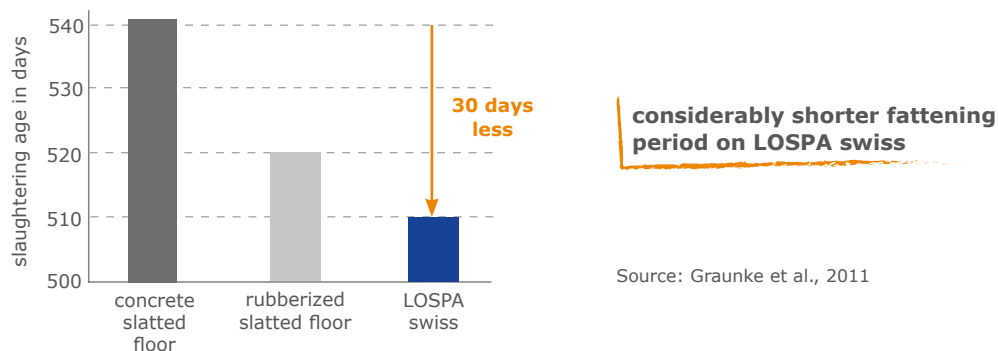
| | KARERA P | KURA P | profIKURA P |
|-------------------------|---|--|---|
| |  |  |  |
| special features | Basic product: simple and solid mat <ul style="list-style-type: none"> ■ meets the fundamental requirements for an animal-friendly walking alley mat | The proven "allround-talent": <ul style="list-style-type: none"> ■ animal-friendly softness and certified grip ■ optional with pediKURA®-abrasion zones | All in one product - on all walking areas in the cattle house: <ul style="list-style-type: none"> ■ animal-friendly softness ■ improved grip ■ optimized claw abrasion |
| |   <p>quad-surface multisquare profile</p> |   <p>grip-surface stud profile</p> |   <p>optiGrip-surface stud profile</p> |
| thickness | 21 mm | 24 mm | 24 mm |
| general features | KRAIBURG fastening system on paved / concrete floor: rounded off and countersunk    | | |

*Please take notice of the corresponding KRAIBURG specifications and installation instructions with useful advice and tips. You will obtain these at your local KRAIBURG dealer or at www.kraiburg-elastik.com.



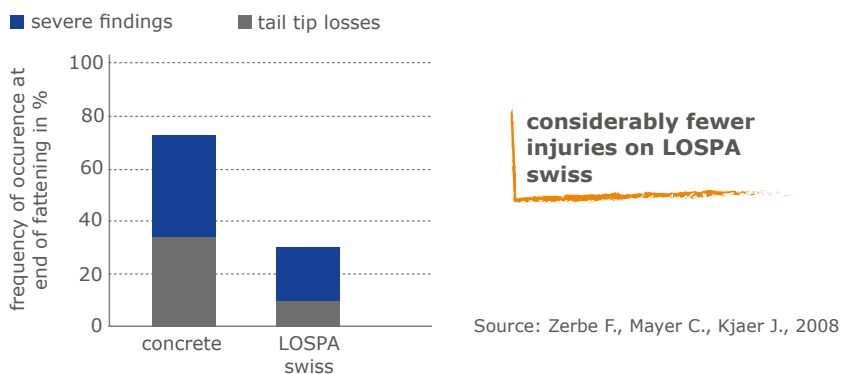
Weight gain / fattening period

Comparing concrete slatted floor - rubberized slatted floor - LOSPA swiss rubber cover

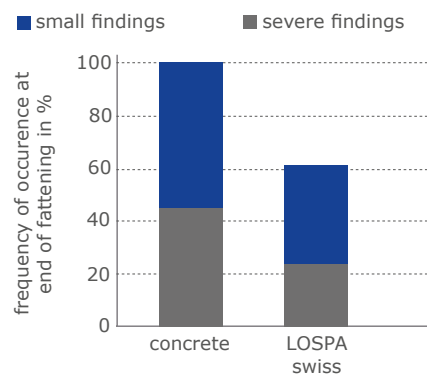


Less injuries

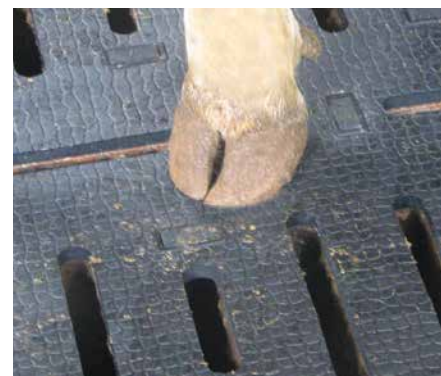
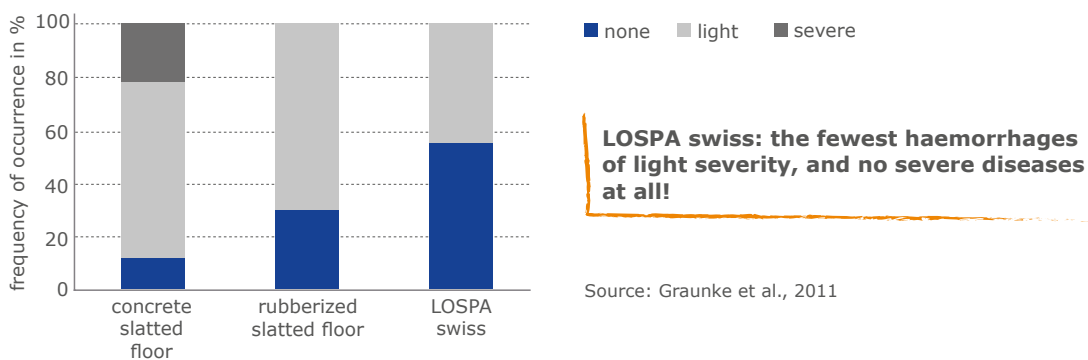
Tail tip injuries



Percentage and severity of carpal joint injuries

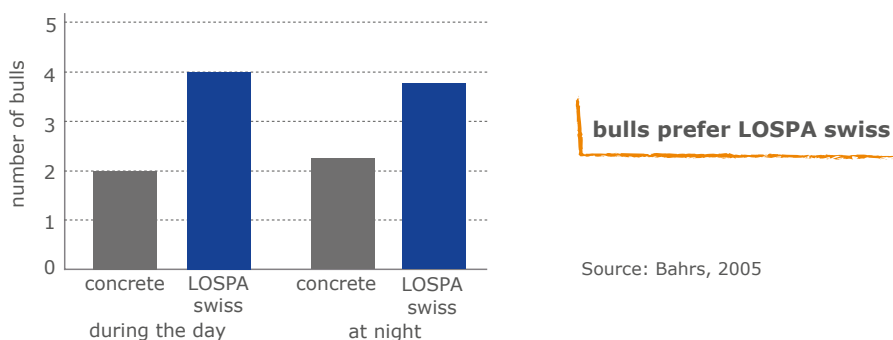


Claw damages: haemorrhages (sole and white line)



Preference behaviour

Preference behaviour: preferred location in pens partially covered with rubber

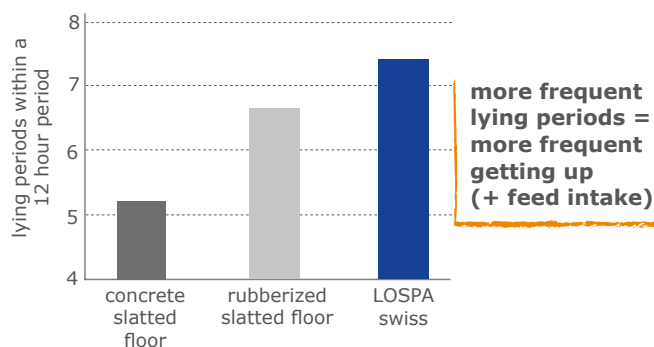


LfL Grub, Germany



Lying behaviour

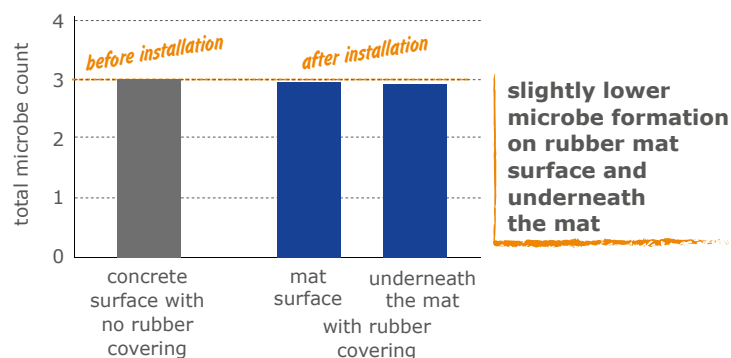
Lying periods: comparing concrete slatted floor - rubberized slatted floor - LOSPA swiss rubber cover



Source: Graunke et al., 2011

Hygiene

Microbe climate in animal housing: comparing concrete slatted floor - rubber cover



Source: Reiter, Partes, Koßmann, 2006

Impressions from practice

Field report: LOSPA swiss and LOSPA SB



Oliver Engeli, Engishofen, Switzerland, has a bull fattening farm with 350 animals. He keeps his bulls in fully-slatted pens, which have been covered since 1999 with KRAIBURG slatted floor coverings made of rubber.

"First we covered half within the pens with LOSPA. There we could observe a clear preference for the soft lying areas. So lower rank animals were not discriminated, I did soon cover the pens completely. So all animals benefit from the improved heat insulation and feel visibly more comfortable.

Getting up is easier due to improved slip resistance and is gentle on the carpal joints. With soft floors animal culling due to injuries from falling practically does not happen anymore. The animals are more vital and active, even the daily weight gain has improved in the average of many years. The investment has, besides animal welfare, paid off under the aspect of economic efficiency."

Since 2016 he has equipped some of the pens with the new LOSPA SB mats with curved surface:

"The advantages that I could already observe with the LOSPA swiss mats also became apparent by means of the curved LOSPA SB mats. The surefootedness has improved further. The floor as well as the animals are very clean and dry."



Field report: KURA S and KURA SB



The Efings, Bocholt, Germany, manage a calf fattening farm with approx. 2,000 feeding places. The calves are kept in fully slatted pens. In 2011, 950 feeding places were covered with KURA S. Since 2016 some of the pens have been equipped with the curved KURA SB mat.

"The KURA SB mats lie very well on the slatted floor. Although we have already been very happy with KURA S, the cleanliness of the animals has improved further on KURA SB. All in all the mats seem drier and cleaner. Furthermore the calves have a good surefootedness due to the special surface and the sinking in of the claws."





LOSPA swiss, LfL Grub, Germany



LOSPA swiss, Jennissen Farm, Heinsberg, Germany



LOSPA SB, Kobold Farm, Langenpreising, Germany



KURA SB, De Koning Farm, Lunteren, Netherlands



Installation – easy and fast

The guidelines to correct installation can be found in the installation instructions!

You will obtain these at your local KRAIBURG dealer or at www.kraiburg-elastik.com.



Tolerances

| | |
|-------------------|-------------------------------------|
| Thickness: | length + width: |
| +3/-2 mm | +/- 1.5 % |
| | (DIN ISO 3302-1 tolerance class M4) |

The tolerances also apply within the mat and when installed.

The products presented here should only be used for the mentioned applications. Technical specifications are subject to alterations. All sales are subject to our General Terms and Conditions. Legal basis is the German version of the document.

Your KRAIBURG dealer:



KRAIBURG manufacturer guarantee

| | |
|------------------------------------|----------|
| LOSPA swiss / SB, KURA S / SB : | 5 years |
| KURA P, profiKURA P, KARERA: | 5 years |
| KKM LongLine, KIM LongLine, CALMA: | 10 years |

More detailed information is available on request.



English

09/2016

www.kraiburg-elastik.com



Gummiwerk KRAIBURG Elastik GmbH & Co. KG
Göllstraße 8 • 84529 Tittmoning • GERMANY
Tel: +49/86 83/701-303 • e-mail: info@kraiburg-elastik.de