



RESULTS FROM NÜRTINGEN-GEISLINGEN UNIVERSITY, FACULTY OF EQUINE MANAGEMENT

Soft rubber mats with reduced need for bedding material in looseboxes

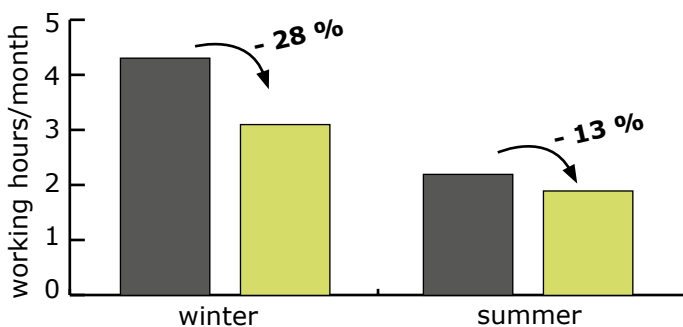


RESEARCH

The study compares looseboxes managed in the full bed system (taking out muck and wet bedding on a daily basis and maintaining the bed at around 8-10 cm with shavings) and looseboxes with soft rubber matting (approx. 3 cm profiled rubber) on which the bedding material is reduced to 1 cm. In the latter the rubber mats offer softness and heat insulation, therefore the bedding is merely necessary to absorb fluids.

RESULTS

▶ Working hours needed for maintenance of the loosebox



**Savings on working hours up to 28 %!
Leaving more time for your horse!**

▶ Profitability

Savings on bedding on rubber mats:

2062 kg / box / year without rubber mat
- 1440 kg / box / year with rubber mat

= 622 kg less / box / year

**Cost benefit of approx. 300 €
per box per year!**

+ further advantages such as reduced manure storage and disposal not taken into account!

▶ Air quality & stable hygiene

Overall, the management system using rubber mats plus reduced bedding material was drier, which constituted conclusive evidence for all results:

- concentration of ammonia: in both systems very low (far below the critical value of 10 ppm)
- particulate matter: both systems more than 150 times lower than the critical value of 4 mg/m³
- germs (enterobacteria, yeast, mould fungus): rubber mats tend to result in lower pollution

Cost per year in EURO	Full bed on concrete flooring	Rubber mats + reduced bedding material
Depreciation allowance rubber mats (10 years)	-	72
Interest rate rubber mats (5 %)	-	18
Labour costs (15 €/working hour)	645	484
Bedding material (shavings: 7,5 €/20 kg)	773	540
Amount	1418	1114
		- 304 €

Source: Prof. Dr. B. Benz et al. (2013): Weniger Einstreu bei gleichem Komfort. In: Pferde Zucht & Haltung 1/2013, S. 66ff