

Cubicle flooring: is there a golden way?

If the maintenance condition of deep bedded cubicles deteriorates, this influences the lying behaviour, the lying position and the total lying time of the cows (Reiter et al., 2006). If farmers do not have enough time to maintain deep bedded cubicles, an elevated cubicle with soft rubber mats is a good alternative. The choice of the cubicle system should be individually adapted to the farm operation, the free work capacity and the availability of bedding material.



Cows readily accept well-maintained deep bedded cubicles. However, comfort is very much **dependent on the maintenance condition**. Often, not enough time and effort can be invested in maintaining a level and continuous mattress, and the lying times quickly decrease. In addition, the animals often lie very hard at the front or even on concrete, which can lead to **injuries on the carpal joints**.

Excessively hard flooring in elevated cubicles combined with too little or no bedding can promote injuries on the tarsal joints. It is still common practice not to litter rubber flooring. However, to keep skin and hair dry, it is necessary to cover the mats with a thin layer of **absorbent bedding**.

The **type of bedding is also crucial**. Lime alone dries out the skin too much, coarse sawdust acts like sandpaper. Chopped straw or milled straw, for example, is ideal. A mixture of chopped straw/milled straw and bedding powder, which have been **tested** by the DLG for **skin compatibility**, is also recommended.

Elevated cubicles must be equipped with the right rubber flooring that meets the **softness requirements** of dairy cows. In the end, the amount of bedding and work required is significantly lower. The system is also more forgiving of **periods of inadequate cubicle maintenance**, in contrast to the deep bedded cubicle, because it offers the animals reliable comfort even on such days and thus ensures **constant lying times**.

KEW Plus has been one of the softest mattress systems on the market for almost 20 years. Due to its three-layer composition, it achieves a thickness of 6 cm and a sinking depth of over 4 cm. Already 15 years ago, in the course of a diploma thesis at the University of Applied Sciences in Bingen (Büch, 2006), it was shown that there are no noteworthy differences between a straw-manure mattress and KEW Plus with regard to lying and choice behaviour as well as softness (sinking depth). A steady improvement in joint health with KEW Plus could also be confirmed even then (Mathis, 2006).

