NEW VEGETABLE BOX: LIGHTER & GREENER

Utilization of renewable raw materials

The use of renewable raw materials in combination with lightweight construction should increase the resource efficiency in the transport of the boxes. Through targeted optimization of the material properties and a material-appropriate design, we want to achieve a higher useful internal volume as well as a reduction in tare weight.

The current vegetable crates are made from polypropylene (PP). We continue to use this as the base polymer, but substitute a high proportion of the polypropylene with wood fibers. In addition to economic and ecological advantages, such as the lower price, the fibers also have a high strengthening and stiffening effect, which improves the material properties of the box: wall thicknesses are thereby reduced, weight is saved, and more useful internal volume is achieved. In order to achieve optimum material performance, requirement-specific additives are introduced during the material-manufacturing process.

Simulation for optimization

In addition to material development, we also optimize the design of the box using the latest simulation tools. The simulation of injection molding and strength is thereby an important accompanying tool for the optimization of production time and product quality.