

## A designfabrik project: Wästbergs lamp Winkel w127 made of Ultramid®

### Case Study

From the collaboration between BASF designfabrik®, the renowned lamp manufacturer Wästberg and designer Dirk Winkel the table lamp Winkel w127 has emerged. The designer lamp is made of Ultramid® S Balance, which possesses not only exceptional engineering properties, but is to a large extent bio-based. Thanks to its – for a polyamide – relatively low moisture uptake, this material exhibits very good dimensional stability and is highly chemical-resistant.

BASF presented the engineering plastic for the first time at the plastics fair K 2007. Especially the glass fiber-reinforced grade is very strong, stiff and heat resistant. In sum, all of these properties support the functionality of the Winkel w127.

To ensure that the lamp satisfied all requirements in terms of performance and aesthetics at the same time, it was designed using Ultrasim®, the universal simulation tool from BASF. Through this computer simulation, engineers knew how to optimize the position of the injection points so as to minimize the warpage of the different lamp components. Moreover, they found an elegant solution for placing the injection points at concealed locations, e.g. inside the joint of the lamp's arms.

