Engine hood covers made from Basotect® TG for Toyota Lexus flagship series LS

Case Study

Toyota equips its Lexus LS series with Basotect®
The Toyota Motor Corporation, Toyota, Japan, is using BASF's melamine resin foam Basotect® TG for its Lexus flagship LS series engine hood covers. This is the first Basotect® TG application produced in Japan for the Japanese automotive industry. The product, the thermoformable version of the well established Basotect®, persuades the car maker due to its superiority as a lightweight material, its outstanding sound absorption and high thermal resistance. Those qualities have been spotlighted in order to reduce gasoline consumption and CO_2 emissions as well as to maximize comfort.

Outstanding in sound absorption
Basotect® has earned an excellent reputation for acoustic insulation. Thanks to its opencell, fine structure, the sound absorption values at the medium and high frequency ranges are very good. This acoustic insulation feature fulfills the demands of Toyota's concept of "superior silence". With a density of approximately 9 kg/m3, Basotect® is lighter than glass wool, felt, and other fibrous materials usually employed as engine hood covers. It therefore helps to reduce vehicle body weight.

For automakers, improving safety performance in cases of car collisions is a crucial issue. Due to their higher flexibility, covers made of Basotect® TG allow the production of engine hoods that offer optimized protection to pedestrians. In this way, car makers can better meet the more stringent requirements to pedestrian protection.