Bosch alternator cover made of Ultramid®

Case Study

The cover that Bosch uses for the alternators of renowned car manufacturers is made of BASF's Ultramid® A3UG5 LS, a polyamide 66 (PA 66). This is the first time that this material is applied in automotive construction. The product is rendered flame-retardant without halogen or red phosphorus and it is rated V0 according to the UL 94 fire safety standard. This is the only way to properly protect the alternator while meeting the high requirements made by Bosch standard N 2580-1 governing the contents of components.

Moreover, this plastic can also be laser-written, a property that is becoming increasingly important: The logistics of large companies as well as the administration of detailed parts information often call for barcodes and data-matrix codes that can be flexibly and cost-effectively applied by means of laser technology.

The alternator cover made of Ultramid® is a serial production and is assembled at Bosch's generator plant in Cardiff, Wales, UK. Bosch manufactures this product in other regions as well, which is why the global availability is a further essential property of Ultramid®.