

Case Study

Air intake manifold made from Durethan® BKV 30 HTS



Fig. 1 Air intake manifold

Durethan® BKV 30 HTS from LANXESS is a highly stabilized resin for use in components subjected to high temperatures, such as the air intake manifold from [Poschmann Union](#) shown in Fig. 1.

A characteristic of this resin is its increased resistance to thermal oxidation, which reduces the formation of microcracks on the surface. It also imparts long-term resistance to aggressive gases and media such as fuels, lubricants and combustion products.

The impact-resistant, **High-Temperature-Stabilized (HTS)** polyamide also exhibits very good mechanical properties even when used at constant service temperatures of 150 °C (with peaks up to 190 °C) and subjected to fluctuating compressive stresses.

Material: Durethan® BKV 30 HTS

Manufacturer: Poschmann Union, Germany

Industry: Automotive

The air intake manifold shown here has a bursting pressure resistance of over 6 bar. It is produced by assembly injection molding. This is an injection molding process in which the individual components are positively and inseparably interlocked with the basic resin.

Durethan® BKV 30 HTS boasts not only exceptional resistance to heat and chemicals, but also an excellent surface quality. Thanks to the good coatability of this material, individual components in the engine compartment can be made to stand out.

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