

## Case Study

### Coolant pipe in Durethan® DP AKV 30 X HR EF



Figure 1 Coolant pipe

**HEYCO** has made a name for itself as an expert module and system supplier for the automotive industry and its suppliers. The company's product range extends from bodywork components and modules through to heat-resistant components for the engine control system. Specially-tailored polymers are used in all the different areas.

One example is the coolant pipe shown in Fig. 1, which is made of Durethan DP AKV 30 X HR EF by the WIT process (Water Injection Technology). This easy-flow, heat- and hydrolysis-stabilized thermoplastic was developed specially for this particular application. It contains 30 % special glass-fiber mix and is highly suited to the WIT process. The pipe, which is 65 cm long, incorporates a large number of

**Grade:** Durethan® DP AKV 30 X HR EF

**Manufacturer:** HEYCO-WERK  
Heynen GmbH & Co. KG, Germany

connections which are subject to stringent dimensional requirements. It has a cross-section in excess of 3 cm, which is flattened at certain points to fit the installation space, without hindering the flow of coolant.

The following characteristics are specified for this application:

- high long-term resistance to cooling water, even when exposed to elevated temperatures and pressures
- high stability in the WIT process
- good surface finish on both the inside and outside
- very good melt displacement behavior

---

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

Trial Products (grade designations beginning e.g. with the codes DP, TP, KL or KU):

These are sales products at the developmental stage (trial products). For this reason, no assurances can be given as to type conformity, processability, long-term performance characteristics or other production or application parameters. No definitive statements can be made regarding the behavior of the product during processing or use. The purchaser/user uses the product entirely at his own risk. The marketing and continued supply of this material are not assured and may be discontinued at any time.