

Case Study

External door handle for Jaguar X-type made from Durethan® DP BKV 60 H2.0 EF 900116



Material: Durethan® DP BKV 60 H2.0 EF 900116

OEM: Jaguar

Molder: Huf Hülsbeck & Fürst GmbH & Co. KG,
Germany

Industry: Automotive

[Huf Hülsbeck & Fürst GmbH & Co. KG](http://www.huf-huelsbeck.com) develops and manufactures competitive, high-quality products for the automotive industry worldwide, incorporating the very latest standards and technologies. Its core skills lie in die casting, injection molding, surface treatment, coating and assembly. With an average of 100,000 car keys and ID transmitters, 60,000 external door handles and 24,000 steering locks, Huf is one of the leading manufacturers in the sector. The company works closely with customers such as Jaguar when developing its products. The part illustrated above is a door handle for the Jaguar X-type.

Vehicle door handles, in the form of either hinged or pull handles, have to satisfy a wide range of requirements. Mechanical, electronic, safety and other features need to be taken into account during the manufacturing process.

Huf opted for the LANXESS plastic Durethan® DP BKV 60 H2.0 EF 900116 for the coated door handle for the Jaguar X-type. This 60 % glass fiber reinforced plastic from LANXESS ticks all the right boxes. The product combines a high glass fiber content with excellent mechanical properties (flexural strength 350 MPa, tensile modulus 20,000 MPa) and an impressive surface quality.

Further benefits of Durethan® DP BKV 60 H2.0 EF 900116 include:

- outstanding coating and electroplating properties
- flowability corresponding to the 30 % GF general-purpose product
- excellent dimensional accuracy thanks to low shrinkage
- minimal distortion and high dimensional stability.



Durethan® is a registered trademark of LANXESS Deutschland GmbH

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee, and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

Developmental Product

Any product designated as a developmental product is not considered part of the LANXESS Corporation line of standard commercial products. Complete commercialization and continued supply are not assured. The purchaser/user agrees that LANXESS Corporation reserves the right to discontinue this product without prior notice.

Typical Properties

Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

Health and Safety

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling LANXESS products mentioned in this publication. Before working with these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets (MSDS) and product labels. Consult your LANXESS Corporation representative or contact the Product Safety and Regulatory Affairs Department at LANXESS. For materials that are not LANXESS products, appropriate industrial hygiene and other safety precautions recommended by their manufacturer(s) must be followed.

Regulatory Compliance

Some of the end uses of the products described in this brochure must comply with applicable regulations, such as the FDA, NSF, USDA and CPSC. If you have any questions on the regulatory status of any LANXESS engineering thermoplastic, consult your LANXESS Corporation representative or contact the LANXESS Regulatory Affairs Manager.

Regrind

Where end-use requirements permit, regrind may be used with virgin material in quantities specified in individual product information bulletins, provided that the material is kept free of contamination and is properly dried (see maximum permissible quantities and drying conditions in product information bulletins). Any regrind used must be generated from properly molded/extruded parts, sprues, runners, trimmings and/or film. All regrind used must be clean, uncontaminated, and thoroughly blended with virgin resin prior to drying and processing. Under no circumstances should degraded, discolored, or contaminated material be used for regrind. Materials of this type should be discarded. Improperly mixed and/or dried regrind may diminish the desired properties of a particular LANXESS product. It is critical that you test finished parts produced with any amount of regrind to ensure that your end-use performance requirements are fully met. Regulatory or testing organizations (e.g., UL) may have specific requirements limiting the allowable amount of regrind. Because third party regrind generally does not have a traceable heat history or offer any assurance that proper temperatures, conditions, and/or materials were used in processing, extreme caution must be exercised in buying and using regrind from third parties. The use of regrind material should be avoided entirely in those applications where resin properties equivalent to virgin material are required, including but not limited to color quality, impact strength, resin purity, and/or load-bearing performance.

Color and visual effects

Type and quantity of pigments or additives used to obtain certain colors and special visual effects can affect mechanical properties.

Note:

The information contained in this publication is current as of August 2008. Please contact LANXESS Corporation to determine if this publication has been revised.

© = LANXESS Corporation 2008 | Pittsburgh, PA 15275 | SCP Business Unit | all rights reserved

<http://us.durethan.com>

Page 2 of 2 - this document contains important information and must be read in its entirety | Edition 26.08.2008 | TI 2006-043 US

