



# **Cosmetic Specifications Acceptance Requirements, Process Guidelines and Corrective Action For Plastic Injection Molded Parts**

This document has been prepared by Blackfox in conjunction with AIM Processing Inc., as support to the Plastic Injection Molding Industry. The Acceptance Requirements, Process Guidelines and Corrective Actions are recommendations based on good manufacturing practices. The information contained in this manual provides recommendations only. It is the responsibility of the molder and customer to determine particular contractual arrangements.

Users of this publication are encouraged to submit criteria for consideration in the development of future revisions.

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# Acceptance Requirements, Process Guidelines and Corrective Action for Plastic Injection Molded Parts

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## Unit 1: Forward

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### 1.1 SCOPE

- This document is intended to provide specifications for Molders and their customers that identify best manufacturing practices. This specification identifies criteria for the cosmetic quality of molded plastic parts and related post molding activities.
- The process guidelines and corrective action section contains a list of problems often observed during a specific part of the molding process. The list of observed conditions is matched by a description of the cause(s) often associated with the symptom. Suggestions for corrective action are also included. Solutions may be related to the equipment, materials, or design.

### 1.2 PURPOSE

- The purpose of this standard is to provide quantitative definitions and recommended methods of inspection and measurement of the cosmetic quality attributes.
- This specification includes basic troubleshooting techniques.

### 1.3 APPROACH TO THIS DOCUMENT

- The illustrations in this document portray specific points noted in the title of each section.

- The text in this document always takes precedence over the illustrations.

### 1.4 CLASSES OF PRODUCT

- **Class 1 – General Products**  
Includes products suitable for applications where the major requirement is the function of the completed product.
- **Class 2 – Dedicated Service Products**  
Includes products where continued performance and extended life is required, and for which uninterrupted service is desired but not critical. Typically, the end-use environment would not cause failures.
- **Class 3 – High Performance Products**  
Includes products where continued performance or performance on-demand is critical, equipment downtime cannot be tolerated, end-use environment may be uncommonly harsh, and the equipment must function when required, such as life support systems and other critical systems.