

Document No: PRO-0001-PI

Revision Date: 12/2/19

Revision Level: Original

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1.0 Introduction:

The purpose of this document is to define minimum acceptable aesthetic and cosmetic standards for visual inspection of all parts. Individual part prints should denote surface requirements and specific aesthetic criteria on prints will supersede company aesthetic and cosmetic standards.

Note:

Allowable defects must not interfere with the form, fit and function of assemblies, units or affect customer installations.

2.0 General Surface Definition Guidelines:

**A maximum of 4 defects will be allowed, not to exceed .035” diameter (or corresponding area on dirt chart) must be a minimum of 12 inches apart.**

2.1 Defect Definitions:

2.1.1 Die Lines-Heavy die lines throughout part

2.1.2 Protrusion- A raised area on surface (blister, bump)

 2.1.3 Pits-Small craters on surface

2.1.4 Scratches- Shallow lines grooves

2.1.5 Flow Marks-Wavy, swirl or streaked appearance.

 2.1.6 Texture Variation-Visible variation of texture

2.1.7 Sink Lines-Depression on the surface. (exclusion if back of part has a leg)

 2.1.8 Specs- Small pieces of material stuck to surface

2.2 Color/Haze-Variation of color will be determined by X-rite color reader. Parts must be within DE of 1.5

2.2.1 Haze-Cloudiness on an otherwise transparent part.

2.2.2 Discoloration-Inconsistent color throughout the run

2.3 Bow/Twist-Applies to parts without tape.

2.3.1 Finished Goods-.015” per foot, not to exceed .050” per length

2.3.2-WIP-.00125” per inch.

2.4 Squareness

 2.4.1 Max allowed 1/32”

3.0 CONDITIONS FOR INSPECTION:

3.1 Lighting

Led lighting will be used for visual inspection. Curtain will be drawn to simulate a viewing booth.

Note #2: All final part acceptability should be decided by utilizing the light room, not on production floor.

3.2 Viewing criteria

Operator shall look at the part from a normal operating distance of 15”- 20” at an angle and height that simulates arms lengths. Either hold part vertically at arm’s length or place in fixture for viewing.

**First step**, operator starts the inspection by looking at the part straight on standing directly in front of the sample part.

**Second step**, the operator moves and looks at the sample part/unit so left-side surfaces are visible and returns to “center”.

**Third step**, the operator moves and looks at the sample part/unit so right-side surfaces are visible.