

Cosmetic Standards

Cosmetic Classes

A

Highly decorative surface defined in customer's 2D drawing, or one that will be obviously visible to the end user

B

Externally used part with the surface occasionally visible to the user; default class if no specifications given by customer

C

Internally used part with the surface only visible to the end user during maintenance activities or on bottom of product

Definitions

Rust/Corrosion: chemical reaction of exposed metal with air

Discoloration: change from the original color or inconsistent color within the same part

Scratch: visible line or mark that cannot be easily felt with a fingernail

Gouge: surface imperfection that's deeper than a scratch that can be felt with a fingernail and often has raised edges

Pit: an internal imperfection or crater inside stock material

Dent/Ding: a local material impression

Burr: a rough edge or ridge of material left on the part from the machining process

Scalloping: waviness of a surface due to the use of a rounded tool

Tooling Mark: typical machining process mark created by holding clamps that are consistent on all parts; depth of the tooling mark can be visible, but cannot be felt with a fingernail

Tool Chatter: surface roughness or waviness caused by tool vibration

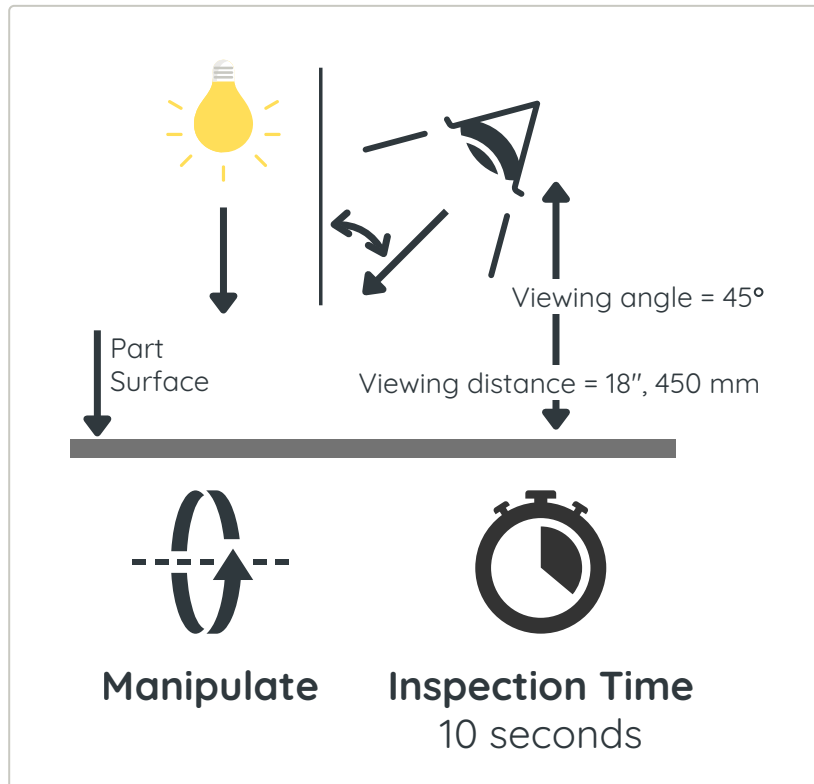
Non-uniform Gloss: areas with insufficient or excessive gloss

Loose Contaminant: any unintended substance on the part (i.e., lint, dust, grit)

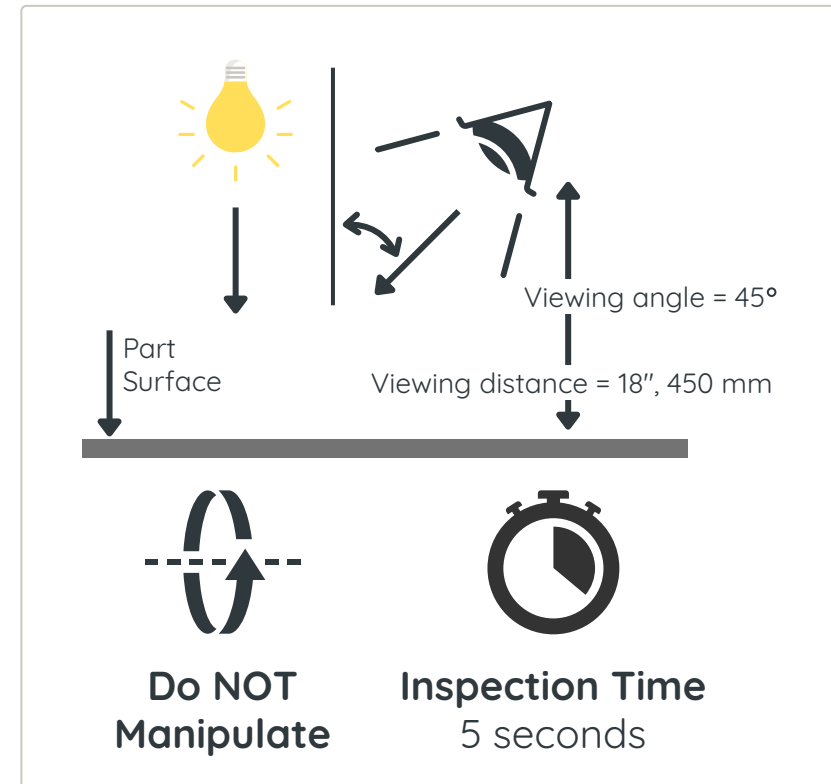
Grease/Oil: lubricant used in the manufacturing process and left on the surface

Cosmetic Standards

Class A Inspection Conditions



Class B and C Inspection Conditions



- LIGHT SOURCE = 80 - 100 foot Candles at Part Surface
- When viewing assembly surfaces that use different materials (e.g., plastic handles and fasteners on a sheet-metal panel), the cosmetic class for each material type should be applied

Cosmetic Standards

Defect Type	Class A	Class B	Class C
Rust/Corrosion	Not acceptable		
Discoloration	Not acceptable	Acceptable	
Scratch	Not acceptable	Acceptable	
Gouge	Not acceptable		Acceptable if part complies with dimensional and roughness specifications
Pit	Not acceptable		Acceptable if part complies with dimensional and roughness specifications
Dent/Ding	Not acceptable		Acceptable if part complies with dimensional and roughness specifications
Burr	Not acceptable		
Scalloping	Not acceptable	Acceptable if part complies with dimensional and roughness specifications (may require secondary finishing operation e.g., polishing)	
Tool Mark	Not acceptable	Acceptable if part complies with dimensional and roughness specifications (may require secondary finishing operation e.g., polishing)	
Tool Chatter	Not acceptable	Acceptable if part complies with dimensional and roughness specifications (may require secondary finishing operation e.g., polishing)	
Non-Uniform Gloss	Not acceptable	Acceptable	
Loose Contaminant	Not acceptable	Acceptable	
Grease/Oil	Unacceptable unless deliberately added as a protective coating for raw materials known to oxidize; must be specified in your drawing		Unacceptable unless deliberately added as a protective coating for raw materials to oxidize; not specified in drawing