



F-860-001 Visual Inspection Guidelines for Cosmetic Surfaces

Date:

5/24/2024

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For components or assemblies, cosmetic inspection shall use the Time and Distance Inspection process described below. If flaws are noticeable as per this specification, the product does not conform, and the product will be placed on hold pending disposition.

Cosmetic Class Codes- The cosmetic class codes use letters “A” through “D”.

Class A - generally the top or front, the most often viewed surface (High visibility).

Class B - generally the front edge and sides of a part. Not viewed as often as an “A” surface but easily seen by user.

Class C - generally the back and bottom surface.

Class D - generally internal surface. Normally, D surfaces are not inspected for cosmetic attributes. Where necessary, D surface inspection will be specified as an exception.

Viewing Conditions - Parts and products shall be inspected under the following conditions. (The dimension, degree angle, and lighting are approximations.)

Standard viewing condition

Lighting intensity - Quality decisions of cosmetic acceptability will be made under lighting conditions between 80-120 foot candles.

Viewing Angle - Viewing will take place with direct overhead lighting. The viewing angle is dependent on surface classification.

In every case, parts will be held such that the light is NOT REFLECTED directly to the viewer.

Class A surface- Hold part 30° from the horizontal plane.

Part is in direct line with your eyes.

ROTATE part 30° to the right and to the left.

Class B surface- Hold part 90° from the horizontal plane.

Part is in direct line with your eyes.

DO NOT Rotate the parts.

Class C surface- Hold part 90° from the horizontal plane.

Part is NOT in direct line with your eyes

Part is held 45° below the plane of your eyes.

DO NOT rotate the part.

Viewing Distance

Class A surface-18 inches

Class B surface-24 inches

Class C surface-30 inches

Inspection interval (time)

Surface area	A Surfaces	Non-A surfaces
<4 in ² (2” x 2”)	2 sec.	1 sec.
4-16 in ² (4” x 4”)	4 sec.	2 sec.
16-64 in ² (8” x 8”)	6 sec.	3 sec.
64-144 in ² (12” x 12”)	8 sec.	4 sec.
>144 in ² (12” x 12”)	10 sec.	5 sec.