
Kalmar Group Standard

KGS 60130

Part
Method Standards
Name
Paint Gloss

Group
Requirements for Suppliers

1 Scope

This Kalmar Group Standard, hereinafter referred to as KGS, describes how the gloss shall be measured on KALMAR products.

ISO 2813 or ASTM D523 shall be consulted for more in depth knowledge.

2 Purpose

The purpose of this KGS is to minimize the variety of gloss.

3 Responsibilities

Supplier Developer Engineer - for the purpose of informing relevant suppliers about this KGS and making sure that the measurement is done according to the instructions.

4 Definitions

Gloss - Optical property of a surface, characterized by its ability to reflect light specularly

GU - Gloss Unit

5 References

ISO 2813 Paints and varnishes – Determination of gloss value at [...]

ASTM D523 Standard Test Method for Specular Gloss

6 Procedure description

Gloss is a visual perception caused by looking at surfaces. The method of measuring gloss is suitable for non-textured coatings on plane, opaque substrates.

For different viewing angles the gloss perception can vary widely. For example, matte surfaces can appear glossy under grazing incidence of light and low viewing angle, because under these reflection conditions a lot of light is reflected directionally and also the intensity of diffusion is low.

6.1 Equipment

A gloss meter shall be used to measure the gloss of the surface. It shall be calibrated at least once every six months.

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6.1.1 Choosing the correct angle for gloss measurement

If the measuring result with the gloss meter is between 10-70GU, the coating is defined as *semi-gloss* and should be measured using the 60° angle on the glossmeter. If the result is less than 10GU, the coating is defined as *low gloss* and should be measured using the 85° angle on the glossmeter and if it is greater than 70GU, the definition of the coating is *high gloss* and should be measured using the 20° angle on the glossmeter.

Gloss Range	60°	Notes
High Gloss	>70GU	If measurement exceeds 70GU, change test setup to 20°
Semi-gloss	10 - 70GU	
Low Gloss	<10GU	If measurement is less than 10GU, change test setup to 85°

6.2 Repeatability

When using glossmeters with small measuring areas, a higher number of single measurements distributed over the surface might be required.