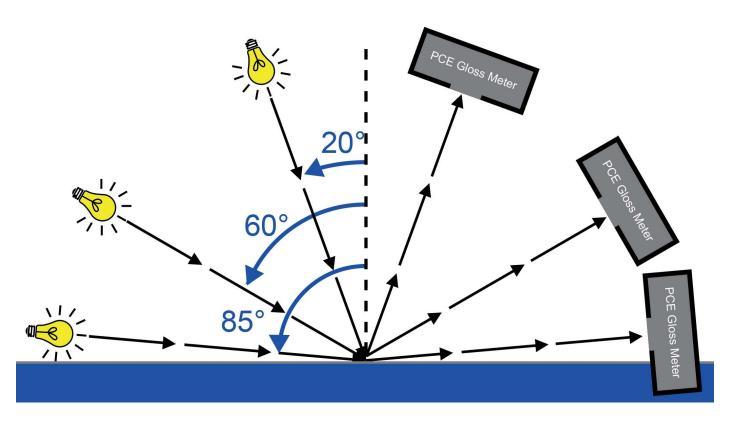
# **Gloss Meter**



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Measuring instruments have reached such a wide range of application spheres that it is hard to mention what cannot be measured in the present world. In everyday life each of us has experienced looking at the surfaces and finding them extremely shiny, or on the contrary pretty matt. Such notions as gloss has got its own explanation, different ranges and of course even a device to measure the intensity and level of it.



For the gloss to appear a few factors are determinant: light, surface and the material of that surface and of course, the angle at which the light is directed to the surface. Gloss meter helps to measure the degree of light directed at the surface, as well as the reflection and intensity of illumination, which in their turn depend on the surface (metals are more shiny and do not depend that much on the angle). The range of gloss varies from low gloss (or matte), semi-gloss or high gloss. The angle may vary a lot, and in has been accepted that 20  $^{\circ}$  (high gloss), 60  $^{\circ}$  (medium gloss) and 85  $^{\circ}$  (low gloss) degrees could be the standard measurement angles that would help to make the difference between the measurements from the lowest to the highest gloss level. The question may be – which gloss meter should be used for a particular measurement.

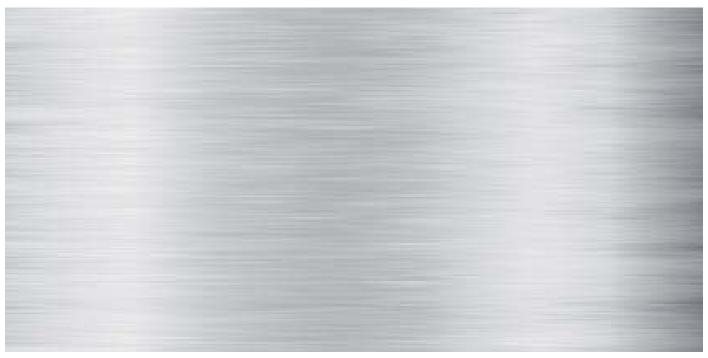
## Basics

The gloss measurement value comes in gloss units Depending on the (GU). result one may decide either the gloss meter fits or the angle should be changed. For example, the surfaces with high gloss may have more than 70 GU, in that case it makes sense to take the 20° angle for measurement, if medium or semi-gloss is measured -60°, when it goes about very



low gloss surfaces, where the measurements value will be less than 10 GU – then the gloss meter angle should be 80°.

The usefulness of the gloss meter is hard to overestimate. In reality it finds its application in various spheres, industrial production, food packages, printing etc. They are easy to maintain and to operate; in addition, there are a possibility to use not only single gloss meters, but dual and also triple which of course, widens the possibilities of measurements under different angles.



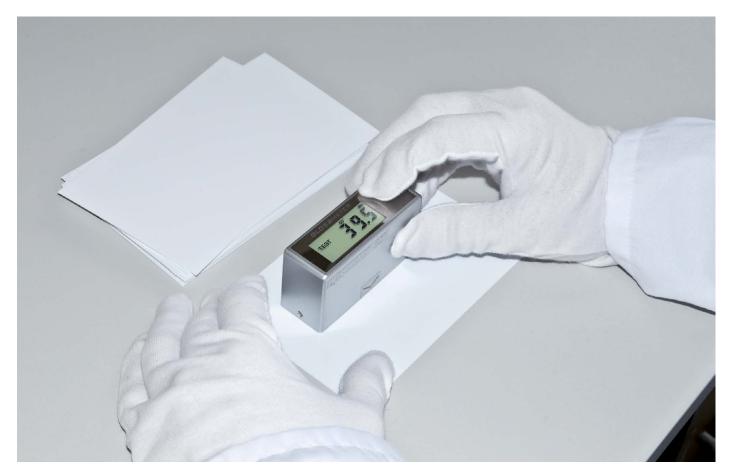
#### **Gloss meter for metals**

Gloss meter helps to check the level of gloss on all possible metallic surfaces, polished, with or without coatings etc. In general, the metallic surfaces reflect light much better and it is not that important how the light falls down on those surfaces. As a rule, 20 ° degree angle may be enough.

When some extra coating or polishing takes place, the 60 ° degree gloss meter can be used as well.

## Gloss meter for non-metallic, plastic surfaces

The range of non-metallic surfaces is incredibly wide. The light refraction is different from the metallic surfaces and as a rule their gloss is lower. The 60° (can be also different) gloss meter is often used for the non-metallic surfaces, vinyl, plastics, paper etc. In may be applied in the furniture production, toys and utensils production, automobile industry (interior of the salon), publishing industry etc.



The level of gloss may reach a tremendous level of influence on the level of the sales and demand among the customers (individual in particular). Either it is a newspaper, a magazine, a plastic box, a table or some object of everyday use, it may be very attractive to the customer or vise versa. To avoid the neglecting it is necessary to check and find the way how to influence (if necessary) the quality of the surface, in which gloss is one of the dominant parts.

## **Gloss meters for tiles**

Gloss meter finds its wide application in the ceramics and tiles production. Depending on how rough or bright the surface is, the reflected light may be either scattered and give very unclear image or be very bright. The optical effect created in such way play an important role when it goes about floor or wall tiles production and influences the choice of the customers.

determined. Spray paints have got processing viscosity of 23 seconds/DIN 4mm.