

## Press Release

### Objectively measure mottling of effect coatings - with the new cloud-runner

**Geretsried/Germany, March 16, 2011:** BYK-Gardner, producer of complete QC solutions for measuring color, appearance, and physical properties of paint and plastic, is introducing the portable "cloud-runner" to efficiently measure mottling at the paint line.

Metallic and effect finishes are of great popularity in the automotive industry. The orientation of the effect pigments (e.g. alu flakes) is very critical and is dependent on the "robustness" of the paint formulation as well as variations of process parameters.

Thus, irregular spots of varying lightness, also called mottling or cloudiness, may occur. These patches are most obvious on light metallic colors. Typical causes can be a disorientation of the metallic flakes and / or film thickness variations of the basecoat.

Mottling is a very undesirable effect which is especially noticeable on large body panels. Therefore, the surface quality needs to be analyzed over a large sample area. Up to now mottling was evaluated mainly visually and so the perceived results have been strongly dependent on the auditor and the different light conditions.

Production control as well as process optimization require objective measurement data, which furthermore allow defining tolerances. BYK-Gardner has developed a new portable solution to quickly scan the surface of a large area. The cloud-runner objectively measures the lightness variation at different detection angles simultaneously, as the visibility of mottling is also dependent on the viewing angle. The measurement signal is filtered in different mottling sizes and a "Mottling index" is calculated. The higher the measured value the more obvious is the mottling effect. Thus, target values can be specified for batch approval and process control.

Due to the new scroll-wheel, the cloud-runner is very easy to operate. The large display offers enough space for all statistic data. The recorded measurement series can be transferred to a PC via a docking station, which also serves for charging the battery. The new software smart-chart offers flexible analysis functions and enables professional documentation of the measured quality.

More information is available from BYK-Gardner GmbH, P.O. Box 970, 82534 Geretsried, Germany. By fax: +49-8171-3493140, the free service no. 0-800-gardner (0-800-4273637) or at [www.byk.com](http://www.byk.com).

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### About BYK Additives & Instruments:

BYK Additives & Instruments is one of the world's leading suppliers in the additives and instruments sector.

Approximately 87% of our sales are generated by foreign countries. Our major export markets are Europe, the United States, and the Far East.

Additives are chemical substances that are used in small quantities to improve product properties such as scratch resistance or surface gloss. Manufacturing processes are also optimized through the use of additives.

The coatings, printing inks, and plastics industries are some of the main areas of application of BYK additives. Yet in paper surface finishing, or the production of adhesives and sealants as well as construction chemistry, BYK additives are also improving the product properties and production processes. In 2009 BYK extended its portfolio with raw materials for the production of mold release agents for aluminum die casting.

BYK Instruments can quantify the quality of color and gloss and the physical properties of paint, plastic and paper products.

Instruments from BYK are predominantly used for quality control.

BYK Additives & Instruments is a member of ALTANA, Wesel. ALTANA develops and produces high-quality, innovative products in the sector of specialty chemicals.

BYK Additives & Instruments employs around 1,200 people worldwide, 25% of whom work in research and development departments or technical laboratories.

**This press release is also available on the internet at: [www.byk.com/press\\_releases](http://www.byk.com/press_releases).**

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