

## Accurate Color Measurement

Safeguards Quality and Brand Presence



The name Kärcher is synonymous with the inventive spirit that is typically Swabian. The family-run company from Winnenden, near Stuttgart, is a global market leader in the field of cleaning systems. Kärcher has achieved an increase in both turnover and the number of products sold in 2008 despite the general economic downturn, achieving the company's best ever result on both fronts. Kärcher sells its products in more than 190 countries worldwide, with local sales branches in 41 countries. The constant and intensive growth of the Kärcher group over recent years has been mainly due to the commitment of its 7000 or so employees. Employees strongly identify themselves with the company and embody its corporate culture in both their professional and private lives. As well as the many different applications in domestic households, which range from high-pressure cleaning, garden pumps and sweeping machines to steam irons, Kärcher also supply cleaning machines to industry, including vacuum cleaners, scrubber-dryers, vehicle washing systems and dry CM-2600d ice blasters. Kärcher has been using spectrophotometers supplied by Konica Minolta Sensing for checking its incoming and outgoing goods since 2005. The CM-2600d flexible and ergonomically designed portable spectrophotometer was the easiest to integrate into the company's own quality management system. It is essentially the industrial standard. It guarantees the quality of all of the related manufacturing stages during the production of the company's wide range of products, thus maintaining the corporate identity of Kärcher and its suppliers.



CM-2600d

Alfred Kärcher GmbH & Co. KG is a global leader in the field of cleaning technology. Like many groundbreaking inventions, the innovative cleaning products have been put together in Baden-Württemberg, continuously improved, efficiently marketed and have provided the company with continuous, organic growth. Today, almost 60 years after the invention of the European hot water high-pressure cleaner, the family company from Winnenden is synonymous with what is probably its most successful product in the commercial and private sectors. Many customers therefore often ask for a "Kärcher" when they are looking for a high-pressure cleaner in a DIY store. Customers are able to identify "Kärcher" systems immediately as soon as they see a selection of different cleaning systems. The compact, appealing design of the ergonomically optimized yellow high-pressure cleaners with the black components are instantly recognizable as Kärcher products. Both colors, especially the yellow, are an important recognition feature for Kärcher cleaning machines.

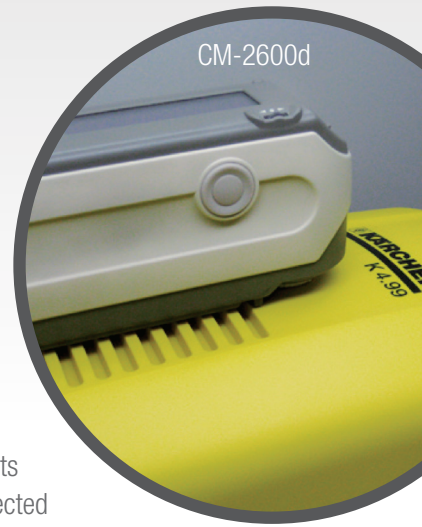


## Color: A Means of Communication

Yellow and black mean more than just the colors themselves to Kärcher, they represent the promise of performance from the entire company. They are therefore a meaningful and easily recognizable symbol. They are also an emotional bearer of corporate communication with a signaling effect. They are therefore an important constituent of the brand to Kärcher. This is because they give customers orientation when making their purchasing decisions, and not just in DIY stores and specialized trade outlets. They stand for performance, service and quality products.

Only the use of a precise color makes customers automatically think about the product and brand concerned. And what's more: the special product color is linked to its characteristics, meaning that they are also associated with it. It is more than just reflected light; color is a symbol for quality and diverts the attention to the product and the company. This therefore makes it a strategic tool for corporate identity (CI).

For this reason, our products and the stand itself look like they came out of the same mould at every exhibition that we attend, for example. Our CI is extremely important to us, and it is an essential part of our communication with customers. "Even the smallest color change would be instantly recognizable", confirms Kathrin Linkersdörfer, from the material lab at Kärcher. All color information is stored with reference samples throughout the production chain, from supply to prefabrication and final dispatch. Color consistency is maintained by means of continuous color measurements. It is important that coloring results are consistent between each stage of production and fabrication. Ergonomics, measurement validity, measuring speed and efficient data transmission are particularly important when the results are being determined in vice, service and support are also decisive when a color management system is being chosen.



## Protecting with the Industrial Quality Standard

All reliable quality management systems must have a coherent process control system, and it is particularly important for different hardware systems to work well together without problems throughout the departments at the individual production stages. It must be ensured that the measurements in a workflow are comparable, i.e. the reference values of the desktop equipment in the laboratory and the production samples that are acquired using portable equipment. Due to its quality and popularity, in 2005 Kärcher decided to use the CM-2600d portable spectrophotometer manufactured by Konica Minolta Sensing.



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“Konica Minolta Sensing has become the industrial standard in this area, a standard on which our suppliers are also reliant. The use of the CM-2600d can therefore ensure that desktop and portable manual devices operate in the same way.”

-Kathrin Linkersdörfer

However, Kärcher takes the comparability of the measurements further. Suppliers also have quality requirements to meet.

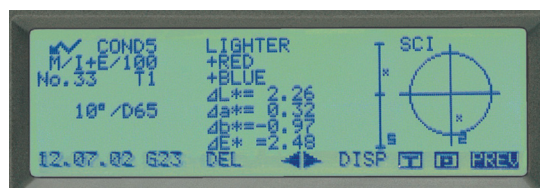
For this reason, the color values of the special yellow and black in the Kärcher corporate identity are stored as reference samples with the respective material-related formulas and are available in the form of color samplers. “At Kärcher we have our own standard for the color composition. The reference data serves as a production basis for our suppliers, so that corporate identity is maintained throughout the manufacturing process”, adds the material lab.

### Strong Features for Demanding Applications

The multitude of technical features of the CM-2600d is a major advantage. The spectrophotometer from Konica Minolta Sensing can use different standard light sources and different color systems. The measurements can be shown on the display of the CM-2600d immediately in different measuring modes, and PASS/FAIL measurements can be quickly performed thanks to stored data (set points and tolerances). “You can already see whether the color standard has been achieved whilst measurement is taking place,” says Linkersdörfer, describing the convenient handling of the spectrophotometer. In the so-called color workflow, the data that has been acquired during the PASS/FAIL measurement appears directly on the display via the serial interface without additional conversion. This speeds the process up in comparison to systems in which the measurements have to undergo further processing using special software.

There is also the ergonomic design of the spectrophotometer. Its unique navigation wheel allows the user to access the different menus of the CM-2600d both easily and intuitively. All functions are literally “to hand” and are easy to access and operate.

“The Konica Minolta Sensing measuring system is the perfect companion to our quality management system with its easy to use, portable spectrophotometers. They are an important constituent with regard to our quality and our corporate identity”, summarizes Linkersdörfer.



Color differentiation and color space graphics with evaluation



Quick and easy PASS/FAIL evaluation



CM-2600d



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