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X-Rite Colour Management Solutions for Cosmetics

Numerous challenges and opportunities continue to exist in the global cosmetics market. Colour quality control continues to play an essential role in the development of products and buyers' preferences. X-Rite offers you the expertise and technologies needed to take full advantage of the opportunities that arise. At the right moment. Every time.

For further information, visit the website xrite.com

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X-Rite. Innovative Measurement Solutions for Colour Cosmetics.



When it comes to color, there probably isn't a more discriminating consumer than a woman who is selecting cosmetics to apply to her face, eyes, lips and nails. Women have an uncanny talent for selecting the best cosmetics that harmonize with scarves, tops, skirts, shoes and other apparel to produce a finished and stunning look.

Manufacturers of cosmetics have never been more challenged to exactly match the colors of their makeups, eyeliners, polishes and lipsticks with the latest trends in apparel, which change several times a year. To complicate these trends, more cosmetics manufacturers are offering natural mineral and iridescent makeups containing iron oxides and mica that are particularly hard to match with color standards due to the way they disperse light.

But just as demands on manufacturers have grown, so have the tools they can use to insure that their cosmetics are consistent from production batch to batch, as well as harmonizing perfectly colorwise with new lines of clothing and accessories.

X-Rite Incorporated (<http://www.xrite.com>) and its subsidiaries Pantone (<http://www.pantone.com>) and Munsell Color Services (<http://www.munsell.com>) have raised the bar in providing practical and accurate solutions that help cosmetics manufacturers to bring new products to market quickly.

The selection of colors for cosmetics often starts with Pantone, which publishes its PANTONE VIEW Colour Planner is based on the PANTONE FASHION + HOME Color System, the most widely used and recognized standard in the world that predicts the use of colors. The system forecasts as far as two years in advance what colors will be popular for men's and women's apparel, cosmetics and beauty, and other industries.

X-Rite then provides the most accurate methods of measuring and comparing colors to standards through use of affordable and sophisticated instruments that take the guesswork out of color matching in the cosmetics industry -- even in hard-to-measure situations such as the color of iridescent eyeshadows and nondrying, oil-based products like foundations and lip glosses.

The cost of purchasing accurate spectrophotometers and computer systems for colour measurement has plummeted over the past few years, thanks to advances in LED illumination sources and computing power, says Reinhard Feld, senior applications

specialist for the European, Middle Eastern and African regions of X-Rite, the world's largest designer and manufacturer of colour measurement systems. The result: relatively inexpensive, quick and easy ways to accurately measure hues of subtle colours, shimmer and sparkle of 21st century cosmetics.

"We know that some companies in the cosmetic industry now use some pretty elaborate tests to measure colours of foundations, lip glosses and other non-drying products," he says. Other cosmetic companies still rely for their quality control on the century-old method of a person simply dabbing a sample of a test cosmetic on his or her forearm, next to a standard formula of the cosmetic. This type of testing depends on the skill and experience of the individual, and it doesn't provide much data other than whether a cosmetic passes or fails the test.

"Our new instrument provides for much quicker and straightforward tests that can be used anywhere along a formulation process," Feld says. "Because the tests are quick and easy, companies will tend catch and correct mistakes much sooner than before." Unlike other spectrophotometers that require a test surface to make physical contact against a viewing port, the VS450 measures samples from a distance of about 38mm. In addition, the sample doesn't need to be dry for an accurate measurement.

The VS450 makes it possible for companies to link objective numerical data -- for instance, the degree of hue, chroma and saturation of a particular cosmetic sample -- with shop floor variables during the manufacturing process -- such as

recipe of a particular formula, temperature, or mixing time. The VS450 is portable and can load its measurements directly into a computer via a cable to analyze the data, Feld says. The VS450 is X-Rite's response to customers in the cosmetics industry that are looking for a lab-to-production solutions, says Kenneth Phillips, product manager for Non Contact Industrial Markets. "The VS450 is about twice as accurate as comparable instruments in terms of repeatability," Phillips says. "That means manufacturers can have good confidence in the data they use for monitoring their operations."

X-Rite experts can also provide information on another optical technology called xDNA that tackles the problem of accurately measuring the colour of shimmery foundations or sparkling eye shadow. Prior technology was confounded by the fact that sparkling colours and iridescence looks different under various illuminations and observation angles.

"With twice as many sensors and illuminators as other hand-held multi-angle spectrophotometers on the market, the MA98 instrument can detect characteristics of effect (sparkling) colour that the other instruments miss entirely," says Brian Teunis, X-Rite product manager whose division developed xDNA. "It's truly amazing technology."

Quality control personnel on a cosmetic production line may observe that two batches don't match properly, but prior instruments could not give measurements to help explain why the mismatch was occurring.

Consequently, companies can spend an inordinate amount of time and resources trying to determine the root cause of problems through trial and error methods.

Teunis says the MA98 instrument collects data that other instruments don't detect, and a software package called X-ColourQC[®] manipulates the data to generate easy-to-understand graphs that show unique characteristics of an effect colour.

Munsell Color Services rounds out the toolbox for cosmetics manufacturers by offering a line of tests to identify whether quality control personnel and lab technicians have deficient color vision and lighting booths that provide exact illumination to view cosmetic samples against standards.

Regardless of the application, X-Rite has the tools for cosmetic manufacturers to react quickly to new opportunities and improve the quality of their products.

For more information on X-Rite, visit the company's website at: <http://www.xrite.com>.

