

# ColorProse™

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Communicating Color Expertise To Color Professionals Worldwide

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## The More You Look, The More You See

Whether you use instrumentation, a trained and respected expert, a dedicated team or some other method, in the end, the final problem in color management and communication is deciding if a sample is acceptable with respect to color difference versus an agreed-upon standard.

Archroma prefers and recommends a combination of instrumental and visual methods to make this important color decision. A fundamental premise must be that good eyes and good instruments will arrive at the same acceptability decision whether used alone or in combination.

A second fundamental is that solid processes for acceptability decisions will drive time out of the textile/apparel supply web and, if nothing else, reduce costs and anxiety.

Throughout the supply web, confusing perceptible color differences with acceptable differences can befuddle color decisions. Individuals often have significant differences in color perception, and the psychophysical nature of human color vision affects the way we perceive color.

Our emotional state, our feelings or simply our personal tastes can affect the way we perceive color and arrive at a decision. (Ever wonder how many color decisions were affected over the

years because the evaluator was angry with the boss?)

*“Regardless of the methods employed to manage acceptability and perceptibility of colors, the importance of the buyer providing consistently uniform standards to all vendors cannot be underestimated as a fundamental starting point for efficiency and productivity throughout the supply web.”*

As much as we may hate to admit it, age influences the way we humans see color. The older we get, the redder we see as the macular pigment in the eye slowly discolors. You probably know someone in your organization who has a reputation for having “the red eye,” and the odds are that person is among the oldest in the organization.



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The age issue is so prevalent that at least one major industry commonly uses teams of younger and older evaluators to appraise and plan the “harmony” of colors across multiple substrates in an automobile interior.

Gender affects how we perceive color. Statistically speaking, women have a distinct advantage over men. Men are by far more inclined by genetics to have some degree of color deficiency. Where color decisions are important to an organization, we strongly recommend that regular color-blindness and deficiency tests be conducted among key personnel.

Critical color errors can result when those tests are not given. Properly designed, maintained, and calibrated instrumentation, of course, does not have “human” color vision/deficiency problems. Its software observer is an average of many persons, reduced to a mathematical standard. Instruments do, however, have their own set of potential problems.

In addition to emotions, age and gender, it’s interesting to notice how often unintentional oversights result in incorrect perceptibility or acceptability decisions.

You may be surprised how often you will find a color decision-maker wearing sunglasses or tinted glasses or tinted contact lenses.

It’s sad to say, but “looking at the world through rose-colored glasses” sometimes actually occurs in our industry.

You would hope, at least, that the buyer and the supplier were wearing the same colored glasses...or at least the same shade of rose!

The last significant influence in human color perception is simply that the more we look at color, the more trained our eye becomes at perceiving small color differences. There are interesting cases in the dyestuff industry from years ago where experienced professionals responsible for standardizing dyes became so adept at perceiving very small color differences that manufacturing throughput and product delivery suffered.

Persons from Production or Sales/Marketing, who evaluated standardization at best infrequently, seldom could understand or see what the Standardization specialist perceived to be a large and unacceptable color difference.

Similar incidences happen in the textile/apparel supply web between buyers and sellers, designers and color managers, mills and vendors, etc., when visual assessment alone is the rule. Just as in the dyestuff industry, coordination of visual with instrumental color evaluation restores reasonableness to the process.

Regardless of the methods employed to manage acceptability and perceptibility of colors, the importance of the buyer providing consistently uniform standards to all vendors cannot be underestimated as a fundamental starting point for efficiency and productivity throughout the supply web.

Engineered Color Standards<sup>SM</sup> from Archroma are the key to supplying buyers and sellers throughout the industry reliable and constant targets.