

Over the years, I have learned that there is a distinct connection between quality and value. With even the simplest things like plastic film, appearance plays an important role in quality and consumer demand. Color and clarity are often the difference between deeming something as shiny, beautiful and new, or dingy, weathered, and worn. These small details make a considerable impact on consumer choice and decision making, so finding ways to enhance the level of appearance and clarity of these products takes center stage in today's high tech industry.

Plastic film is everywhere and a number of high-tech consumable goods rely on quality materials to enhance their product's appeal. From cell phone screen protectors (which have saved my phone on a number of occasions) to fancy dashboard screens of new sports cars, plastic film works to protect and enhance the look of many of the world's latest innovations.



Plastic film is used to protect a variety of high tech products. Functionality and clarity are both essential towards increasing consumer satisfaction.

Image Source: Flickr user Philip Rood

The Importance of Haze Measurement of Plastic Film

Color is known to have a significant impact on the selling power of numerous products; however products with films or coatings must also rely on clarity to increase selling power. [Haze measurement](#) provides a way to monitor clarity and visibility in products where transparency is essential to both functionality and appearance.

Slight changes in transparency or translucency can be nearly undetectable to the human eye¹, which is why haze measurement technology plays such a vital role in product development and quality control. Plastic film measurements require precise and quantifiable data for [product development to maintain both quality and consistency](#) throughout. For example, in the automotive industry, numerous parts of the car interior require protective plastic film coatings.² Maintaining visual consistency throughout is a mark of superiority when it comes to these specific design elements.



Many newer automotive design elements utilize clear plastic film to provide protection as well as aesthetic appeal. Consistency of both color and haze is essential to developing a quality product. Image Source: Flickr user Jaguar MENA

Monitoring haze in plastic film production increases productivity without compromising quality. With advanced instrumentation, real-time measurements ensure that haze values remain consistent while providing instant feedback which can alert production teams to any variations that could interfere with quality.

Simultaneous Color and Haze Measurement

Haze measurement capabilities have revolutionized the spectrophotometric industry, allowing the quantification of both haze and glare through precise geometric formulas and viewing angles. This technology made it [possible to monitor texture in relation to color](#). Understanding how texture affected color has made it possible to quantify these changes and [maintain color consistency throughout production](#) and from batch to batch. This is extremely useful in the production of plastic film, where maintaining quality while keeping up with the demand for quantity can become a real challenge.



Haze measurements affect both color and appearance. Products that depend on visual quality and clarity require the use of advanced spectrophotometric instrumentation to maintain product integrity.

Image Source: Flickr user superde1uxe

Since color and haze measurements go hand in hand, color measurement experts have been working hard to develop a product that combines both technologies into one unique, time-saving tool. This new cutting edge instrumentation allows for the simultaneous measurement of both color and appearance to increase production speeds without compromising quality.

Combining Technology and Value

The greatest challenge with new technology is to provide an affordable solution that will meet industry needs. At HunterLab, we understand these challenges and take pride in offering the latest innovations in spectral technology at an affordable price. We believe that quality and value go hand in hand in the plastic industry and we have worked hard with experts in this field to meet the challenges without compromising value. Our latest product development, the Vista visible transmission color and haze spectrophotometer was design specifically to meet this need. For more information on this new product or to learn more about haze measurement of plastic film, please [contact us](#) today.

1. "Human Vision and Color Perception" last updated November 13, 2015,

<http://micro.magnet.fsu.edu/primer/lightandcolor/humanvisionintro.html>

2. "Surface Coating of Plastic Parts:
Industry Profile," September 2001,

https://www3.epa.gov/ttnecas1/regdata/IPs/Plastic%20Parts_IP.pdf