Tech Sheet

Color Control Capabilities

Rev. 1/20

In an effort to maintain our position as leaders in technology in our industry, DuraTech Industries incorporates the sophistication of a spectrophotometer to guarantee our customer's color tolerances.

Color Match Programs

- Combinatorial match from 3 to 5 colorants per formula from a field of colorants.
- Variable input/output modes (dry, paste, and volumetric).
- Designed for specific industry applications.

Batch Correction Programs

- Automatic add allows system to calculate adjustment from colorants in initial formula.
- Manual add allows user to manipulate the colorant or combination of colorants in the data base.
- Reformulation provides new formula when required, based on performance factors of colorants.

Color Quality Control

- **Color Difference Measurement:** Measurement and plots can be generated in a wide variety of formats.
- **Strength Comparison Adjustment:** Colorant strengths can be compared and adjusted. Surface gloss is automatically compensated for.
- **Pass/Fail Evaluation:** Samples can be rapidly checked against standard tolerances, with pass or fail displayed on the screen.
- **Special Index Calculation:** Yellowness, whiteness, brightness and chromaticity can be evaluated in terms of many different indices.
- **Light fastness:** Users may select an AATCC Gray Scale option to assess samples for light-fastness.





- **Different Illuminant/Observers:** Multiple daylight illuminations can be used to check color.
- **Reflectance Readings:** Light reflecting off of material surface is measured.
- **Shade Sorting:** Samples can be quickly measured and classified by "555" method or metric hue angles.
- **Statistical Analysis:** Overall quality performance can be assessed through statistical programs and reports generated by the system.
- **Plot Display and Printout:** A wide variety of plots may be displayed on the screen or printed.

Our spectrophotometer is a tool that will make color control easier and more accurate. To enable our ink technicians to dramatically reduce pre-press time, our lab also includes:

- Digital viscometer
- Digital scales
- Hand-held portable spectrophotometer
- Xrite 4 spectro densitomter
- Digital glossmeters (20, 60, 85 degrees)
- Digital densitometers
- MacBeth observation booth with four different light sources
- Spectra radiometers for reading transmitted colors

Our full-time ink technicians have a thorough knowledge of our processes and are trained in problem solving techniques. They are tested twice yearly for color acuity. The ink manufacturers we work with are also required to supply a certificate of compliance with every ink order. Together, these factors allow for total color control.

Ultraviolet Hard Coats and Textures

DuraTech has been providing UV hard coats and texture coats to our customers for many years. As a company dedicated to changing with technology and staying on the leading edge of our industry, we are constantly evaluating our current and potential customer's needs, as well as, what is safe for our employees and environment.

What this means to our customer is a much wider selection of textures and much improved durability on both textures and hard coats, through a process that is environmentally safe and extremely consistent.