In-Line Color and Gloss Measurement for the Coil Coating Industry

Colors and gloss of coil-coated products should show a high uniformity and should be conform to a standard color within small tolerances. This is especially true of those projects, which contain different batches which have to be color adjusted. The paint supplier, too, has to adjust the color with a high degree of accuracy and has to allow for the effect of the coating process on color and gloss. It is therefore necessary that during all steps of the value-added-chain color and gloss are measured with a high degree of accuracy both in the laboratory as well as during the running production process.

System Solution Requirements

- Maximum inter-instrument agreement of the measuring devices at different locations for usage of common color standards
- Non-contact and reproducible measurements at a safe distance to the coil, even under adverse production conditions
- Fully automatic operation and data exchange with the process control system
- Consideration of temperature fluctuations on the appearance of the color (thermochromism)
- Continuous display of color difference across length and width of the coil
- Logging of product quality according to color characteristics across length and width of the coil
- Software for color quality control, color formulation and color correction the laboratory
- Testing and proofing tools, testing materials and service for system control
- Project planning, consulting and training

Advantages of In-Line Measurement in the Production Line

- Avoidance of sample taking and laboratory measurements
- In comparison to sampling of random inspection, the measurements are non-destructive
- Early recognition of color deviations helps to avoid out-of-specification production
- Recognition and correction of process parameters which influence color and gloss
- Automatic and contact-free operation
- Measurement of hot material will be recalculated to room temperature to avoid thermochromism effects.

Learn more
www.ERX50.com
Advantages for the Laboratory

• Color Standards and their thermochromatic behaviour can be recognized during the run of the operation

Advantages for the Paint Supplier

• Corresponding measurements with systems of same type at the customer site
• Reduction of physical color standards due to availability of reflectance data in electronic form on a server

In-line Color Measurement with TeleFlash® 445

1) TeleFlash® 445 Spectrophotometer
2) Moving strip
3) Automatic calibration system
4) Sample and test tile holder
5) Traversing system
6) Meter counter wheel
7) Onscreen display of color/gloss trend diagrams
8) Control tower

X-Rite Services, Extended Warranty and Premium Support

Drawing on our extensive experience in the world of color, X-Rite offers the right level of services on-site or online, to support and nurture your business. Extend beyond the one year warranty with our extended warranty. With our full service contracts you can ensure your devices are well maintained, with X-Rite’s Annual Five Point Checkup, uniquely developed to keep devices performing to original specifications. With 12 global centers we make it even easier for customers to reach us. X-Rite Graphic Arts Standard (XRGA) conversion helps bring color standards and measuring consistency into the business. With our consultative approach we work to evaluate how best to integrate XRGA into your business offering you a higher consistency and reliability in your processes now and into the future.