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How to Make Plastic and Composite PELT System Calibration Panels

Minimum film builds for calibration*:

Clearcoat	1.25 mils (25 microns)
Basecoat	0.40 mils (10 microns)
Prime	0.45 mils (11 microns)
Conductive Prime	0.45 mils (11 microns)

*Minimum thickness required for calibration is typically higher than minimum measurable thickness. In some cases, we cannot separately measure bottom layers with thickness less than 10 microns.

Note: When target thickness for any layer is less than the minimum thickness specified above, contact BYK-Gardner's PELT Calibration Lab to discuss potential issues prior to making panels.

Using Scrap Material for Calibration Samples

Submit full build production scrap material with all film coatings painted one time (not repainted/repaired). Production scrap material can be cut using a saw, or a minimum 4" diameter hand drill hole saw. Select two or three samples of each color from different locations to ensure thickness variation.

Coating thickness should be within the factory target specifications for all layers. Use a PELT gauge to check for repainting. Accumulate scrap material over a period of time in order to build up scrap samples for all active film build combinations.

Using Panels or Plaques for Calibration Samples

If production scrap material is not available, 4"x12" (30cm x 10cm) plastic or composite panels (primed by the supplier, when applicable) can be obtained from the supplier and then coated by the plant production process. The panels can be placed on a scrap carrier, or placed on the floor of each booth, coated manually, and then placed in a production carrier for production bake.

At least two panels of each color should be submitted to ensure film build variation.

Important Notes

- It is not necessary to mask or tape off plastic or composite samples.
- Total usable surface area should be at least 24 square inches (155 square cm).
- The back of panels should be labeled with the plant name, date, and color name or code.
- If you have a PELT gauge, we strongly recommend measuring the calibration panels before sending them to ensure adequate thickness of each layer (peaks representing each layer are present). **Note: If the PELT operator is uncertain whether the panels are okay based on PELT waves, a job file can be e-mailed to the PELT calibration lab for verification, at the e-mail address below.**
- Panels not prepared to the above specifications may not be usable for calibration.

Shipping

Send PELT calibration panels to:

**BYK-Gardner USA
Attn: PELT Calibration Lab
3800 Monroe Ave, Dock 29A
Pittsford, New York 14534 USA**

Process and Product Information Sheets can be shipped with panels, faxed, or e-mailed to BYK.PELTCalibration@altana.com



PELT Gauge Calibration Sample Process and Product Information Sheet

Submitted samples will be used by BYK-Gardner to determine film build calibrations for use with the PELT Gauge. To achieve the highest degree of calibration accuracy, the samples must be run through the actual production process. Samples may be manual sprayed in *production booths* (using production material) and baked in the process (by placing panels on units). Lab sprayed samples should be avoided. **One copy of this form should be provided for each film build.**

Customer: _____ Date: _____

Prepared by: _____ Substrate: _____

If using a PO for payment, enter PO# submitted to BYK-Gardner: _____

Our lab will send an e-mail upon receipt of your samples, indicating their status and when possible, the planned completion date of your calibrations. Please fill in contact information for the person to be notified:

Contact Name: _____ E-mail address: _____

Primer/ Conductive Prime

Target Thickness: _____

Vendor code: _____ Vendor: _____

Product Name: _____ Initials: _____

Primer / Adhesion Promoter (Check one)

Waterborne Solvent borne Powder Other

Target Thickness: _____

Vendor code: _____ Vendor: _____

Prime color: _____ Initials: _____

Basecoat (Check one)

Waterborne Solvent borne Other

Target Thickness: _____

Vendor code: _____ Vendor: _____

Color code: _____ Initials: _____

Color name: _____ Solid Metallic Pearl Don't Know

Clearcoat (Check One)

Waterborne Solvent borne Powder Other

Target Thickness: _____

Vendor code: _____ Vendor: _____

Product Name: _____ Initials: _____

I certify that the submitted sample is the closest achievable representation of the actual production process.

Name

Date