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How to Plastic and Composite PELT System Calibration Panels for Non-Automotive Applications

Minimum film builds for calibration:

Topcoat	1.0 mils (25 microns)
Midcoat	0.30 mils (8 microns)
Bottom Layer	0.45 mils (11 microns)

In some cases we cannot separately measure bottom layers with thickness less than 10 microns. Minimum thickness for calibration is typically higher than minimum measurable thickness.
Note: When your target thickness for any layer is less than the minimum thickness specified above, contact BYK-Gardner's Calibration Lab to discuss potential issues prior to making panels.

Using Scrap Material for Calibration Samples

BYK-Gardner can be provided with production scrap material containing all film coatings as long as the part has NOT been repainted (repaired) and the coating film thicknesses are within the factory target specifications. You can use a PELT gauge to check for repainting. We suggest accumulating scrap material over a period of time in order to eventually build up scrap samples for all active film build combinations.

Production scrap material can be cut for shipment to BYK-Gardner using a saw, or a minimum 4" diameter hand drill hole saw. Two or three samples of each color from different locations on the production scrap material should be sent to provide the BYK-Gardner calibration lab with film build variation.

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 provide the BYK-Gardner calibration lab with film build variation.

Important Notes

- It is not necessary to mask or tape off plastic or composite samples.
- Total usable surface area should not be less than 24 square inches (155 square cm).
- The backs of panels should be labeled with the plant name, date, color name or code.
- If you have a PELT gauge, we strongly recommend using it to measure 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 calibration lab for confirmation 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

Calibration samples are utilized by BYK-Gardner to determine coating velocities for use with the PELT Gauge. To achieve the highest degree of calibration accuracy, the samples must be run through the actual production process. If necessary, samples may be sprayed manually in *production booths* (using production material) and baked in the actual production process. Lab sprayed samples should be avoided. **One copy of this form should be provided for each calibration.**

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:

**** Please fill in the layer information beginning with the first layer applied to the substrate that will be measured.****

Layer 1 (Check one)
☐ Waterborne ☐ Solventborne ☐ Other ☐ N/A

Layer properties (Check one if applicable)
☐ Solid ☐ Metallic ☐ Pearl ☐ Don't Know ☐ N/A

Coating Name ..... Coating ..... Target Thickness: .....

Supplier Name: ..... Supplier ..... Notes: .....

Layer 2 (Check one)
☐ Waterborne ☐ Solventborne ☐ Other ☐ N/A

Layer properties (Check one if applicable)
☐ Solid ☐ Metallic ☐ Pearl ☐ Don't Know ☐ N/A

Coating Name ..... Coating ..... Target Thickness: .....

Supplier Name: ..... Supplier ..... Notes: .....

Layer 3 (Check one)
☐ Waterborne ☐ Solventborne ☐ Other ☐ N/A

Layer properties (Check one if applicable)
☐ Solid ☐ Metallic ☐ Pearl ☐ Don't Know ☐ N/A

Coating Name ..... Coating ..... Target Thickness: .....

Supplier Name: ..... Supplier ..... Notes: .....

Layer 4 (Check one)
☐ Waterborne ☐ Solventborne ☐ Other ☐ N/A

Layer properties (Check one if applicable)
☐ Solid ☐ Metallic ☐ Pearl ☐ Don't Know ☐ N/A

Coating Name ..... Coating ..... Target Thickness: .....

Supplier Name: ..... Supplier ..... Notes: .....

Layer 5 (Check one)
☐ Waterborne ☐ Solventborne ☐ Other ☐ N/A

Layer properties (Check one if applicable)
☐ Solid ☐ Metallic ☐ Pearl ☐ Don't Know ☐ N/A

Coating Name ..... Coating ..... Target Thickness: .....

Supplier Name: ..... Supplier ..... Notes: .....

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

_____ _____
Name Date