

Insight on Color

Vol. 19, No. 8

Hitching Using EasyMatch OnLine

Those companies that make both on-line and laboratory measurements of the same product may find it helpful to hitch their SpectraProbe XE to their laboratory instrument to ensure that the measurements are comparable. The instructions below demonstrate how to use EasyMatch OL to hitch the SpectraProbe XE to a lab instrument, in this case the LabScan XE.

- 1. Measure your ideal product standard using the LabScan XE and record the results.
- 2. Open EasyMatch OL.
- 3. Choose **Product Setup** from the **Run** menu.
- 4. Select the product setup you wish to alter. The selected setup will be shown in bold type.
- 5. On Page 1, select the color scale, illuminant, and observer of the LabScan XE measurement that you recorded. In this example, we will use CIELAB and D65/10°.



6. Click the tab to go to Page 2.



Applications Note

7. Define the standard type as Numeric, then enter appropriate values for the product standard as described in the *Applications Note* entitled "Establishing a Numeric Standard in EasyMatch OnLine."



- 8. To determine the offset correction, subtract the values listed in the Product Standard row on this screen from those obtained from the LabScan XE in Step 1. For example, if the product standard values from the LabScan XE were:
 - $L^* = 65.07$

a* = 1.22

b* = 1.95,

and the product standard values entered in the EasyMatch OL product setup are as shown in the picture above, your offset would be calculated as follows:

Offset = Color value from reference instrument (LabScan XE) - Color value from secondary instrument (SpectraProbe XE)

 L^* Offset = 65.07 - 62.21 = 2.86

 $a^* \text{ Offset} = 1.22 - 0.49 = 0.73$

- b^* Offset = 1.95 1.98 = -0.03.
- 9. Enter the offset values calculated in Step 8 into the OffSet Correction row of the product setup screen.



Default	Page1 Page	2 Page3	Page4	Page5		
- default Tutorial	Product Standard, Tolerances and Corrections					
	Numeric	•	<< Re	ead Standard		
	CMC Auto-Tolerance					
		L×	a*	b*		_
	Standard	62.21	0.49	1.98		
	OffSet	2.86	0.73	-0.03	0	
	Contraction	Center-Standard Tolerance		Cross Shading Tolerance		
		Upper	Lower	Upper	Lower	
	L×	1	1	2	2	
	a×	1	1	2	2	
	b*	1	1	2	2	
	dE*	1	1	2	2	

10. Click Save and then Done. The product setup will be sent to the support unit.

Now, when you next start a run using this product setup, the values reported from the SpectraProbe XE will be automatically adjusted so that they display exactly as if the product were read with the LabScan XE. Hitching these two types of instruments together generally works well, as they have the same geometry $(0^{\circ}/45^{\circ})$ and have many common components. Instruments with different geometries should not be hitched together.

In order to ensure that the hitch remains valid, HunterLab recommends checking for SpectraProbe XE drift weekly using the check tile test. This can be done using the **Secondary Calibration and Check Tile** command in the **Calibration** menu. The LabScan XE green tile should also be checked weekly.

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