

## Datacolor MATCH Textile Feature Points Explained

### Default Feature Package for Datacolor MATCH Textile 5

- **Fast correction - 1 point**

With fast correction the system provides a tool to correct dyeings without having a stored recipe. This feature could be of great benefit for shades that are out of tolerance in Lab or Production, when dyeings are made with recipes that were not previously entered into the Datacolor MATCH Textile system and/or the dye concentrations already used as unknown or suspected to be incorrect. Datacolor MATCH Textile calculates a theoretical starting recipe for the standard and the correction is based on this recipe or upon the concentrations entered by the user.

- **Manual recipe input - 1 point**

This option provides a fast and easy way to input existing recipes, i.e., recipes that were not calculated within Datacolor MATCH Textile. Also this option offers a highly sophisticated and unique graphical correction option. Using 3-dimensional graphics in color space, the user can easily see the effects of concentration adjustments on each dyestuff. This feature is quite useful in making small corrections more economical to just within the limits of customer's tolerances.

- **Min / max dyestuff limits - 1 point**

The software offers the ability to specify for all dyestuffs the concentration range allowable for recipe calculations. This feature is useful when dyers and colorists have particular knowledge of dye behaviors at various concentrations.

- **Additional effects for substrate / process deviations - 1 point**

With this feature the user has the ability to take into account variations in the actual substrates or processes being used in the lab or plant. The user may define different substrate deliveries to consider differences in color and/or dye behavior of the delivered goods. The color of the delivered substrate is taken into account for the new recipe calculations, and the user has the additional opportunity to define a strength or dye-ability factor (effect) for that substrate delivery. For blends the effects could be set for each fiber in the blend. For blends, each fiber can be handled separately for color and dye-ability effect. With the function of 'special composition', small deviations in the percentage of each fiber in a blend could be set.

For all products such as dyes and chemicals, it is always possible to set a strength factor to account for deviations from the standards. For recipes, only the amounts of product would be adjusted, the concentrations for the formulations remain unchanged.

- **Batch matching and speed matching for a range of standards - 1 point**

For match prediction of a large numbers of different standards on a given quality (style), i.e., seasonal shade cards are to be matched, this option offers a quick and easy way. The standards are "batched" for matching and the matching routine takes each standard, calculates recipe tables, stores the tables, and proceeds with the next color standard, etc.

**Default Feature Package for Datacolor MATCH Textile 10****All features above plus:**

- **Advanced Smartmatch® - 5 Points**

The exclusive Datacolor Smartmatch® Expert system technology takes full advantage of past dyeing experiences and self-adjusts for changes in dye behaviors in combination with other dyes, changes in the dyeing processes, changes in the substrates, and changes due to other factors in dyeing. This technology has been proven to reduce the number of lab dyeings required to achieve a commercially acceptable color match.

The new and automated Smartmatch® housekeeping feature offers faster and easier buildup of populations for given dyestuff combinations. The separation of the Smartmatch® points is done by using the information on different used processes and all other dye dependent factors.

**Default Feature Package for Datacolor MATCH Textile 15****All features above plus:**

- **Multi-Illuminant Matching - 2 Points**

This feature provides simultaneous recipe calculation for up to 4 illuminants with optimization of the recipe to achieve lowest metamerism possible. Standard formulation routines calculate recipes based upon primary and secondary illuminants, however this feature expands the number of illuminants and applies a higher level optimization.

- **Multi color matching - 1 Point**

With this feature, multiple standards may be defined for the different fibers in a blend, for example non-union blends and space-dyed yarns. The system calculates individual recipes, based on the different dyestuff classes and the different standard colors.

- **Resorting of recipe tables – 1 Point**

The recipe tables are sorted according to the user-defined criteria such as dE, or cost. This feature allows the user to re-sort the recipe table quickly and easily by clicking on the displayed field without having to edit the criteria fields. For example the re-sort can be done on dE, dL\*, Price, Metamerism, Sensitivity Value, Average CIELAB result.

## **Default Feature Package for Datacolor MATCH Textile 20**

### **All features above plus:**

- **Sensitivity values - 1 Point**

Datacolor MATCH Textile calculates a new value, called sensitivity which provides information about how colorimetrically-sensitive a recipe is to minor concentration changes. This evaluation could be useful for estimating the required lab accuracy, but more importantly is an indication of how consistent a recipe will run in production. For example, the changes in concentrations of the dyes are simulations of weighing errors, dyestuff quality variability, or any other variable that changes the “effective concentrations” of the dyes.

- **Automatic build up of dyestuff groups - 3 Points**

A new feature in Datacolor MATCH Textile is the ability to include technical data in the database of dyes within a dyeset. This technical data may be in the form of fastness ratings such as washfastness, lightfastness, perspiration, crocking. This automatic build feature allows the user to define the customer’s requirements with respect to performance (or fastness) and Datacolor MATCH Textile will automatically group the dyes together that meet this requirement.

- **Fixed relations of dyestuffs pairs – 1 Point**

In some applications there are requirements that a pair of dyes must be used together at a fixed ratio to each other. This requirement is specified and used in the calculation of the new recipe. This is useful for meeting specifications for lightfastness for example, or to meet certain chromaticity values as specified by the customer. In other cases, a ratio of two dyes is needed to meet reflectance requirements in a particular region of the spectrum such as military fabrics in the Infrared region.

## **Default Feature Package for Datacolor MATCH Textile 25**

### **All features above plus:**

- **Advanced Lab Process – 3 Points**

This feature provides for the creation of complex lab recipes including all chemicals, chemical tables and procedures or instructions to prepare a “ready to use” printout for the laboratory.

- **Advanced data view designer - 2 Points**

This feature provides the user with the ability to create reports and printed lists from the database by using an editor called the DataView Designer. The user designs the output and saves the design as a template to be called when accessing the database for monitor or printer output.