

**Largo  
innova**

**LargoMatch 2000 *Paint***  
***Inplant***

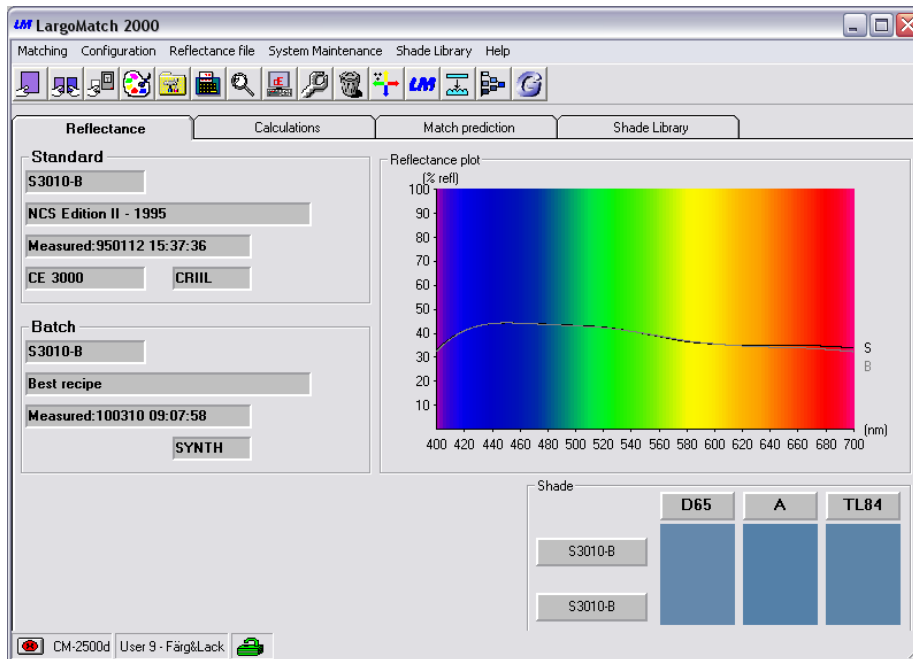
# **LargoMatch 2000**

[www.largoinnova.com](http://www.largoinnova.com)



when colour counts

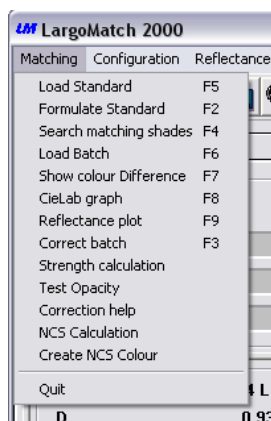
LargoMatch 2000 InPlant is a smaller version of LargoMatch 2000 designed to fulfil demands in production or at partners e.g. daughter companies or retailers. The Inplant is available in versions for Paint and Woodstain with complete colour measurement, formulation, correction and possibility to transfer formulas directly to LargoTint 2000.



For easy navigation in the software the screen has 4 main sections:

- Reflectance**, shows the reflectance curves for Standard and Batch
- Calculations**, shows chosen calculation e.g. colour difference in CIELab
- Match Predictions**, formula/recipes calculated are shown
- Shade Library**, saved data on recipes or shades/standards are shown

Just click on each tab to view information and data.



On top row you will find scroll down lists for Matching, Configuration, Reflectance file, System Maintenance, Shade Library and Help. In each list you have access to the functions by click on selected row or by the functions key e.g. F2 for matching.

The most frequently used functions you reach by the short-cuts or in the tool bar



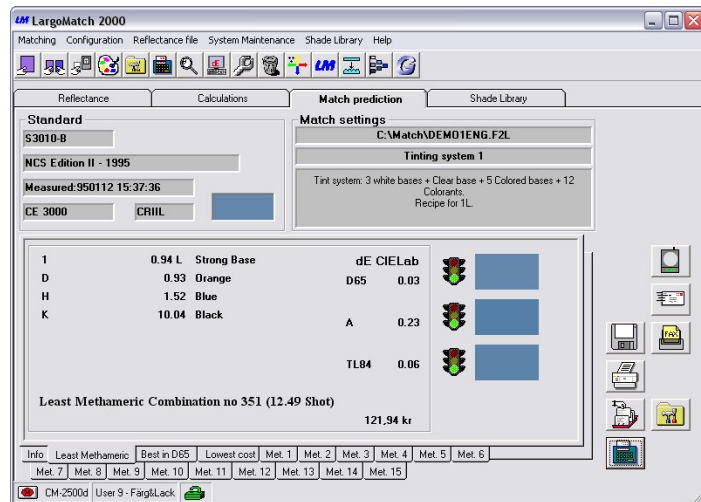
### Match Prediction

Each tab in LargoMatch 2000 full version and Inplant version is designed for easy access of information.

For match prediction the standard used for recipe is shown with name, number, date of measurement, type of spectrophotometer, its settings and the shade.

The Match settings give you an overview of which and kind of database used, how many bases and colorants, Contrast Ratio etc within it.

To improve the utilization of pigments and colorants it is possible to pre-select, lock, lock out and group them for availability when predicting recipes.



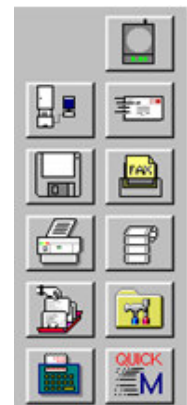
The recipe it self is present in the left part with the number/code, amount and name of the component. On the right hand you find the colour difference in selected colour difference equation and illuminant. The traffic lights symbolise a good or poor match. To the right the shade is visualised in each light source for standard and recipe.

### Result flaps

Info	overview with number of combinations tested and the results
Least Metameric	the least metameric recipe
Best in XXX	best recipe in illuminant 1, default setting D65
Lowest cost	best recipe considering to cost
Met 1 ....15	the best following recipes depending on chosen setting "Recipe after match" in Match tolerances

### Icons

When a match prediction is done, icons appear on right side of screen with icons for choices you have for the calculated recipe. Depending on settings in set up and database file you can create Lab-recipe in grams, transfer it to LargoTint 2000, send it via E-mail or as a fax. Save displayed recipe in selected shade library or Print a list or label. Test any of the combinations inside the set tolerance, Go to Set up for changing matching setting, Match loaded standard with selected database or Make a QuickMatch (useful when database has a large numbers of colorants e.g. >25, to find out if you can match the shade).



### Batch correction

If a correction on predicted recipe is needed you may use Production Correction which calculates additions to an existing batch (common when deviations have been caused by the production method or temporary raw material deviations) or Laboratory Correction where a new recipe is calculated based on the outcome of the loaded batch.

It is possible to create own macros for different functions in the tool bar. Very useful default macros are the calculator which brings you step by step thru the match prediction (Load standard, Select database, Calculate recipe) and the adjustable wrench for correction (Load standard, Load batch, Correct).



In LargoMatch 2000 and the Inplant-version we work with different file format depending on what kind of information you want to save.

### Reflectance File

A data file where measurement data can be stored, together with a number and a name to identify the sample, pigment concentrations (for database samples), sample contrast ratio (if measured) and sample gloss information (if measured). The current settings of the spectrophotometer being used, the spectrophotometer model, and the date and time for the measurement are saved as well.

### Database File

This file contains all information needed about your products base and colorants (format .F2L). Can only be created in the full version of LargoMatch 2000. **In the Inplant-version there is no possibility to create a new database file, add new or delete existing parts in it.** The user can only change prices and specific gravity on existing components.

### Shade library

The shade library file can be created in two different formats, **.LRF** for measurement data only, tolerance on dE, tinting system recipes, production recipes, waste paint information, production batch statistics or **.LRT** with extended sample information e.g. individual tolerances on dL, da, db, dc and dh.

The user of LargoMatch 2000 InPlant would need database (.F2L files) from e.g. main R&D lab to predict own formulas. If the main lab supplies a shade library with standard recipes the user can by them self add new recipes or correct already existing. The user may create own shade libraries if wanted.

### More features in LargoMatch 2000 and InPlant:

**Colour difference** CIELab, CIELch, CIE94, ANLAB Lab, ANLAB Lch, HUNTERLAB Lab, HUNTERLAB Lch, CIE Luv, JPC 79, FMC2, DIN99, CMC (1:1), CMC (2:1) with individual setting of L:c  
**Index** CIE Whiteness index, CIE Yellowness Index, CIE Tint  
**Illuminants** D65, C, A, TL84, CWF, WWF, NFL, TL83, CR84  
**Observer** 2° and 10° standard  
**Plot** CIELab graph, reflectance curves, K/S, Log K/S

**Strength calculation/adjustment** for control of colour strength at XYZ or Absorption max and, if needed, calculate polymer or pigment additions for strength correction

**Test opacity** showing Contrast ratio (C.R.) calculated on the Y-value or, if system is configured for measuring databases, the C.R. calculated at the wavelength with least hiding

feature for compensate the colour differences caused by gloss difference, demands a spectrophotometer with a movable gloss-trap

**Texture correction** when comparing plain sample with textured

**Search matching shades**, measured or entered values for XYZ, CIE Lab or CIE Lch

**Keyboard input** of reflectance values or recipes

**Synthesise sample** creates shade from selected database by entering a recipe

**Option** (special licence, demands correlation of spectrophotometer in use)

**NCS calculation** for exact NCS code and closest NCS standard on loaded standard

**Create NCS colour** calculates and create a recipe for any NCS colour code (without a physical sample)

