

# smart-chart 8.3.1

## **Released March 2023**

#### What's new?

- New and optimized color equations for BYK-mac i
- spectro2guide: Averages of check zones can be displayed
- Support of new color2view family members
- Support of new accessory for color control of plastic pellets with color2view
- Import of color2view standards from third party software OnColor, Cyberchrome
- spectro2profiler: Switch off texture measurement to only measure color
- Data Analysis: Layout of data table can be saved
- User Group Management
- New firmware for BYK-mac i, spectro2guide, color2view, spectro2profiler, wave-scan 3

## New and optimized color equations for BYK-mac i

dESuzuki: Weighted color equation with updates based on visual perception studies

New: dEcomb2

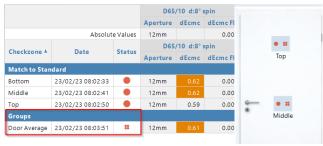
dEcombined offers the benefits of the latest developments for solid colors (dE2000) and effect colors (dEAudi). It has been used by major companies and based on their experience further improvements were done. These improvements are implemented in the new color equation dEcomb2:

- S-factors for achromatic colors are shown for L\*a\*b\*. By changing to "Manual input", they can also be edited.
- Application factors are optimized for high chromatic colors for -15° and 15° measurement angle. This applies especially for solid colors and brings the measurement results in even better agreement to visual perception. Also here, when changing to "Manual input" the application factors can be edited.

Individual tolerances are applied     Calc Method   Calculated Tolerances   • from   BYK-maci 23mm (7030)   S-No: 1156058 •     -15°   Lab •   SL 3.52   Sa 0.4   S b 0.59   ka 1.2   kb 1.2   r 0     15°   Lab •   SL 3.01   Sa 0.38   S b 0.56   ka 1.2   kb 1.2   r 0     25°   Lab •   SL 2.52   Sa 0.28   S b 0.42   ka 1.2   kb 1.2   r 0     45°   Lab •   SL 1.54   Sa 0.28   S b 0.42   ka 1.2   kb 1.2   r 0	
-15* Lab SL 3.52 Sa 0.4 Sb 0.59 Ka 1.2 Kb 1.2 r   15* Lab SL 3.01 Sa 0.38 Sb 0.56 Ka 1.2 Kb 1.2 r   25* Lab SL 2.52 Sa 0.28 Sb 0.42 Ka 1.2 Kb 1.2 r	
150 Lab SL 3.01 Sa 0.38 Sb 0.56 Ka 1.2 Kb 1.2 r   250 Lab SL 2.52 Sa 0.28 Sb 0.42 Ka 1.2 Kb 1.2 r	
25° Lab SL 252 Sa 0.28 Sb 0.42 S ka 1.2 S kb 1.2 S r 0	Tol Factor 100 🟮 %
	Tol Factor 100 🚦 %
45° Lab V SL 1.54 Sa 0.28 Sb 0.42 Ka 1.2 Kb 1.2 F	Tol Factor 100 💲 %
	Tol Factor 100 🗘 %
75° Lab SL 0.99 B Sa 0.28 Sb 0.42 B ka 12 kb 12 F 0	Tol Factor 100 🗘 %
110° Lab SL 0.73 Sa 0.28 Sb 0.41 S kb 12 kb 12 r 0	Tol Factor 100 🟮 %

#### spectro2guide: Averages of check zones can be displayed

 In the Organizer not only the panel match can be defined, but also check zones can now be grouped. This allows displaying an average of defined check zones or the complete object in the data table as well as schematic.







#### Support of new color2view family members:

• The recently launched members color2view X (variable apertures) and color2view X Pro (optimized for jetness measurement with variable apertures) are implemented.

#### Support of new accessory for color control of plastic pellets with color2view

 New calibration procedure to measure plastic pellets with glass cup or automated sample rotator

#### spectro2profiler: Switch off texture measurement to only measure color

 The instrument can be set-up to only perform color measurement without taking images for 2D/3D data. This might be needed within the supplied chain of an automotive maker. But please be aware if the algorithm "None" is

selected images are not taken and cannot be retrieved afterwards.



#### Data Analysis: Layout of data table can be saved

 Layout of data table in "Scorecard and Trend" can be saved with a name and protected by a password. They are stored in the Standard Management database bykmaindb.sdf and can thus, be easily shared within production sites and suppliers.



#### **User Group Management**

• When the Standard Management database bykmaindb.sdf is hosted on a SQL server, the User Groups defining the access permission of smart-chart modules are stored there as well. This allows easy user management.

#### **Bug Fixes:**

- Standard Management
  - When standards are protected by a password now also the information about the Lab shift is protected
  - Tolerance input for XYZ / xyY is expanded to four digits. This is of importance for "Jetness" measurement for black colors
- smart-lab
  - When catalog names are defined for parameter 1 5 they are displayed correctly in the data table and print-out
  - color2view keeps information such as aperture size and traceability when being loaded into smart-lab or send to the instrument
- General
  - Printout works with Edge 111.0.1661.41 and does not require Google Chrome anymore. Google Chrome caused problems at some key accounts as it was no longer allowed being installed.



## New Firmware included with smart-chart 8.3.1

To support the new smart-chart functions, also new firmware versions are needed.

## BYK-mac i: Version 9.86

Modifications for dESuzuki and new color equation dEcomb2

### spectro2guide: Version 2.4.1.19510

- Absolute measurement: sample name is displayed correctly
- Browse function for organizers on the instrument is working
- Full support of color2view digital standards

## color2view: Version 2.2.0.20043

- Calibration with glass plate for measurements with sample rotator is added
- Aperture changes for color2view X models is added
- Display of aperture size for standard and current measurements in smart-chart data table

## spectro2profiler: Version 1.4.2.1872

• Possibility to only perform color measurement without taking images for 2D/3D data

## wave-scan 3: Version 1.3.3.20227

- WiFi functionality is an optional accessory. It can be activated by entering an activation code.
- The initial selection of parameter 2 (= color) in an organizer is always correct now
- Browse function for organizers on the instrument is working









