eXact Job Templates ISO 12647-2:2013

Document Version History: 21 January 2016

Scope

This document describes the import of the new ISO 12647-2:2013, Fogra51 and Fogra52 job templates and the prepared PSO-M1 tool into the eXact.

Solution Summary

Printing Condition targets according to ISO 12647-2:2013

There are new ISO 12647-2:2013 target values for Offset printing for 8 different print conditions PC1 to PC8. These are based on 8 different print substrate classes PS1 to PS8 and matching colorant descriptions (color target values) CD1 to CD8.

- These are Lab values based on M1 and are available for white and black backing.
- Tolerances are based on ΔE76.
- Substrate tolerance based on ΔL Δa Δb.

There are 5 different tone value increase curves A-E defined as well depending on the print substrate class and screen ruling.

- Individual tint TVIs can be calculated by a formula.
  We will provide 40 80 and 25 50 75 options.
- The TVs are now the same for CMY and K
- The tolerance is defined in ΔTVI and mid tone spread

The 32 templates (8 print condition x2 backing options x2 TVI options) for the eXact will have the following naming convention:

- PSOPC1_W_A4080 Printing Condition 1, White backing, 40 and 80 tone value curve A
- PSOPC8_B_C255075 Printing Condition 8, Black backing, 25,50 and 75 tone value curve C

Fogra 51 and Fogra 52

Next to that you also have profiles and characteristical data for Fogra51 derived from PC1 and Fogra52 derived from PC5.

- These are also based on M1 and white backing only
- For Fogra51 there are Lab and spectral data available
- For Fogra52 only Lab data available

The 4 templates (2 Profiles x2 TVI options) for the eXact will have the following naming convention:

- Fogra51_W_A4080 White backing, 40 and 80 tone value curve A
- Fogra52_W_C255075 White backing, 25,50 and 75 tone value curve A

The spectral data for Fogra 52 has been created from X-Rite based on the Fogra 51 spectral data to match the Fogra 52 Lab values.

NOTE: The advantage of spectral data is the possibility to calculate ΔDensity and Metamerism. The function Best match now supports Lab Target values as well.

eXact Measurement Tool for M1

As the new Templates will have to use M1 as a measurement condition there is also a new eXact PSO-M1 tool prepared that you can import to your eXact and use with the new templates. This is a duplicate from the generic PSO tool just changed to M1.

References

ISO 12647-2:2013
http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=57833

Characteristical data for Fogra 51 and 52
http://www.fogra.org/index.php?menuid=316&reporeid=225&getlang=en

eXact Training
http://www.xrite.com/top_services.aspx?eventid=1375

eXact user Guide
http://www.xrite.com/documents/Manual

Requirements

- eXact Manager 1.3 3098
- eXact Standard or eXact Advanced
- eXact Firmware 2.3 2025
- eXactJobTemplates_ISO12647-2-2013.zip

Prepare your eXact

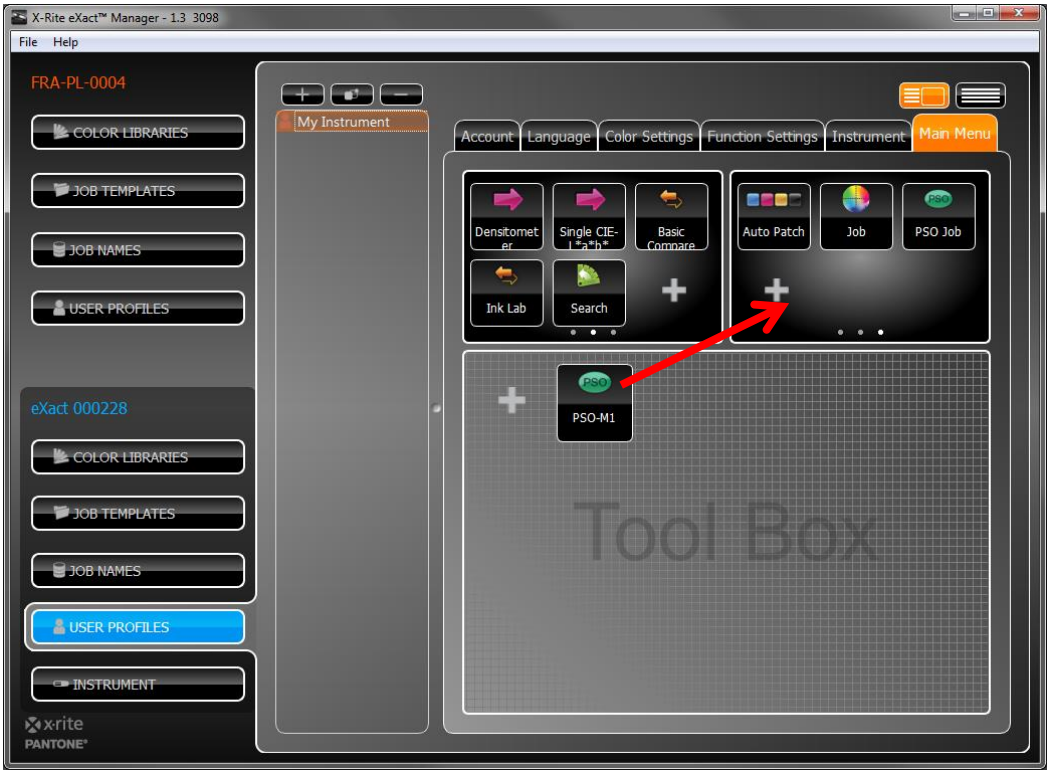
1. Start **eXact Manager** on a computer with a working Internet connection.
2. Extract the **eXact_ISO12647-2-2013.zip** file to your desktop.
3. Connect your **eXact** with **USB**.

NOTE: You might need to register your device if you have not done it before. The software will guide you through the registration process.

NOTE: Make sure your eXact Manager and eXact Firmware Versions are up to date. The Software will prompt you to upgrade if necessary.

4. Click on **User Profiles** on the device section in eXact Manager.
5. Select the user profile you want to amend and select the **Main Menu** tab.

6. Go to File -> Import Tools and import the file **PSO-M1.xjbt.** The tool is now available in your Tool Box window.



7. You can now drag and drop the tool to all user profiles you want to amend.

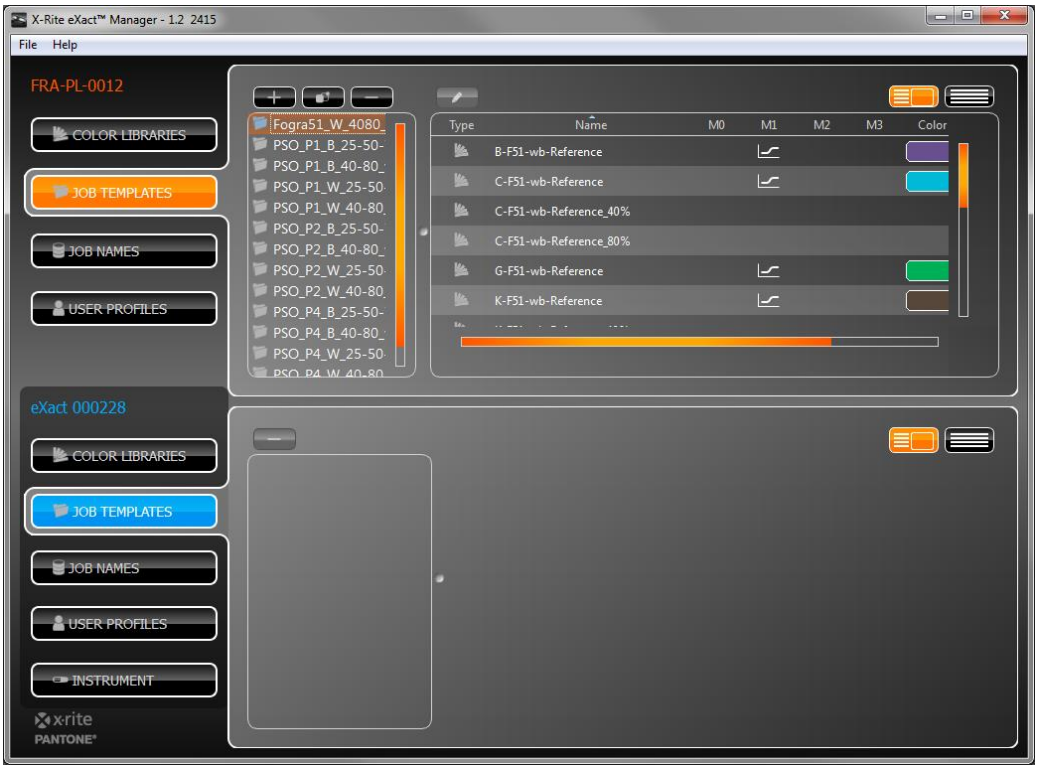
Your eXact should now show the new Tool PSO-M1:

NOTE: If you have an eXact Standard you can only have one user profile, eXact Advance allows multiple user profiles. It is recommended to also store and maintain your user profile(s) in the local section of your eXact Manager to be able to load the same profile onto other eXacts you might have in use.

Import the Libraries

1. Click on **Job Templates** on the local PC and the device section in eXact Manager.

2. Drag and drop **any .cxf file** from the extracted folder on your desktop to the local **Job Template** section in the eXact Manager or go to File -> Import Job Templates and import the relevant .cxf file for example Fogra51_W_4080.cxf



3. Select all **Job Templates** that you want to use on your eXact and drag and drop them to the Job Template section on your eXact.

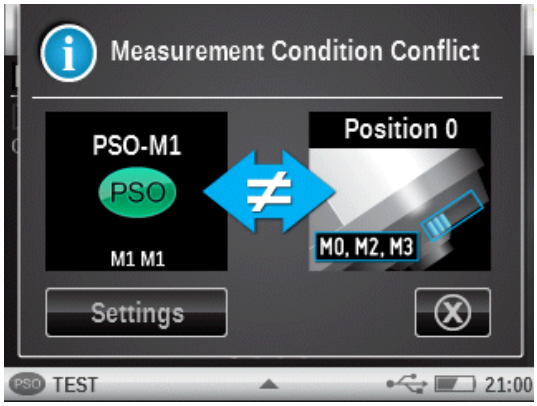
4. **Disconnect** your eXact from the eXact Manager Software.
5. You can now use the Job Templates on your eXact.

Use the Job Templates

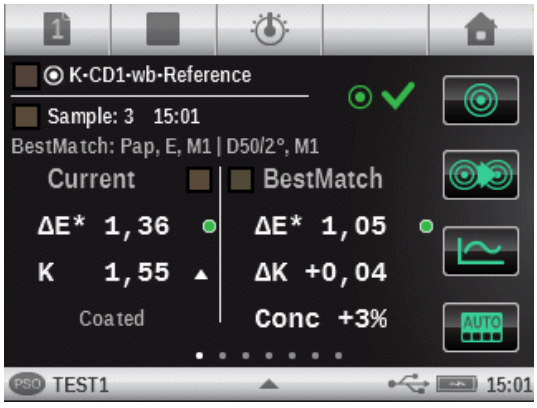
NOTE: If you have not used Job Templates on the eXact, please refer to the eXact Training Videos on how to work with Job Templates. Find below some highlights.

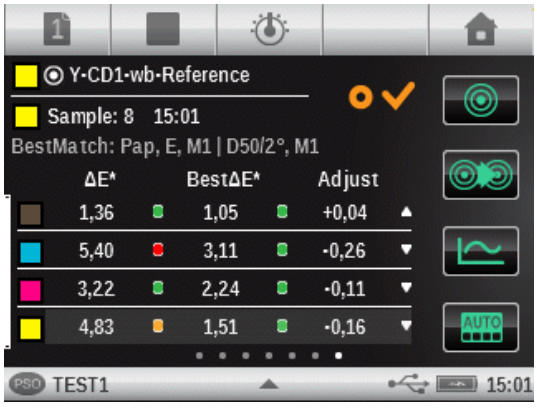
Select the PSO-M1 Tool on the eXact and create a new Job with one of the new Job Templates.

NOTE: When you use the new PSO-M1 Tool on your eXact, you will be asked to move the D50 Filter lever to the Position 1 and you might need to calibrate that Measurement Mode as well.



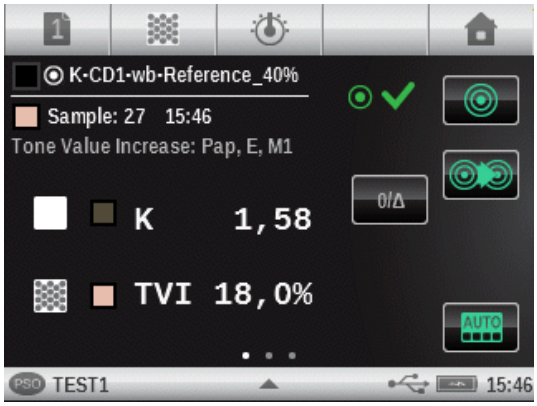
When you measure the Fulltones you can use the function BestMatch for individual color assessment or the BestMatch Table to get an Overview of all Fulltones.

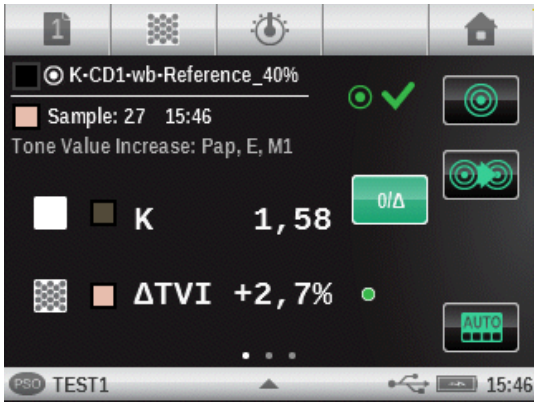




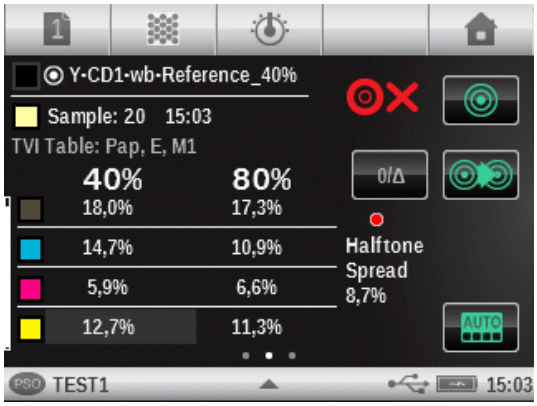
NOTE: If you don't have the BestMatch Table as active function available refer to the eXact Training or the eXact Manual on how to activate further functions in eXact tools.

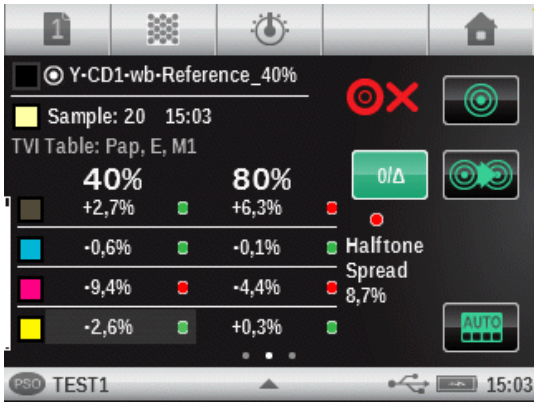
When you measure the tints you can view the TVI for a single tint. You can switch between the absolute and Delta View by clicking on the 0/Δ Button to see ΔTVI deviation





Or use the TVI Table to get an overview of all tints with a TVI pass/fail circle behind each tint.





NOTE: The halftone tints (40% i.e. 50% depending on the TVI option) also have a tolerance for the Halftone Spread attached. It might be that the halftones pass the ΔTVI tolerance but not the Halftone Spread tolerance so that the whole halftone fails like the Y-CD1-wb-Reference_40% shown above.