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MagicPress and MagicPrepress Quick start guide for setting printing presses to ISO12647-2-3-4-6 standards

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This **Quick start guide** does not describe all **MagicPress** and **MagicPrepress** functions, but shows you how to use **MagicPress** and **MagicPrepress** applications for matching quickly your presses to any classic ISO12647-x CMYK print standard.

MagicPress software is designed for **optimizing your solid inks densities** at each press-setting, and **MagicPrepress** for **computing and/or updating your printing forms correction curves**, for matching easily any CMYK or N-Colors print production standards with up to ten inks, and with or without a CMYK base.

Of course, if you are printing with CMYK inks, **MagicPress** and **MagicPrepress** allow you optimal matching of **ISO 12647-2 (offset)**, **ISO 12647-3 (newspapers)**, **ISO 12647-4 (gravure)**, **ISO 12647-6 (Flexography)**, or **G7/IDEAlliance (US interpretation of ISO12647-2)** standards:

1. In a first step, **MagicPress** allows you computing instantly the **optimal CMYK density corrections** for matching the ISO12647-x specified solid inks C.I.E. Lab colors. These density corrections are expressed in terms of density and ink thickness or pigment concentration.

This first step is crucial for any print process: because it fixes the print process dot gains that largely depend on the solid ink's thicknesses and/or viscosities. A classical mistake in Graphic Industries is neglecting this first step, when producing good prints on a press with poorly set solid inks is impossible. Another classical mistake consists into modifying the solid inks densities for improving the print run gray balance, which is never necessary when your print correction curves are properly set.

2. In a second step, once you have set your CMYK optimal densities, **MagicPrepress** allows you measuring the average press dot gains in this printing configuration, and computing a specific correction curve for each printing form that allows matching the aim target TVI (Tone Value Increase) curve specified by your ISO12647 or else CMYK aim standard. This ensures excellent color matching, not only for your CMYK inks and their superimpositions, but also for all CMYK screened tone.

You can easily download and use our free universal CMYK print test forms with **MagicPress** and **MagicPrepress**, or create your own print test forms.

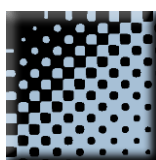
MagicPress and **MagicPrepress** can process instantly the CGATS spectral measurement files generated by the quite affordable **X-Rite i1Pro 1, 2, 3 family**, plus almost any other 45/0° scanning spectrophotometer such as **Techkon** and **Konica-Minolta** scanning spectrophotometers.

MagicPress and **MagicPrepress** not only bring you the highest print quality you need today, but also much better costs and productivity, while avoiding you affording all these uselessly expensive pressroom spectrophotometers.

CMYK_Print_&_Proof



PLATE



MagicPress



MagicPrepress



SPOT_Color_Manager






Installing MagicPress and MagicPrepress:

We recommend using Excel 2010, 2013, 2016 or more recent 32- or 64-bits version on a PC with Windows 7/8/10 32- or 64-bits version and with full HD 16/9 monitor (1980 x 1024 pixels or more).






First download **MagicPress** and **MagicPrepress distribution kits** on [Colorsource software downloads](#) page. The distribution kits come in form of two ZIP's: **MagicPress_demo.zip** and **MagicPrepress_demo.zip**

MagicPress_demo.zip contains **MagicPress** trial version, plus **English** and **French** subfolders containing all appropriate working and training files with English or French names:

 English	28/12/2020 12:42	Dossier de fichiers	
 Français	28/12/2020 12:45	Dossier de fichiers	
 MagicPress_v1.1.1_Trial.exe	10/11/2020 18:26	Application	9 017 Ko

First create a program folder such as **C:\Colorsource** or **D:\Colorsource** and copy **MagicPress_v1.1.1_Trial.exe** (or newer version) in this folder. You can create a shortcut to **MagicPress_v1.1.1_Trial.exe** using the right button of your mouse. Please note that the folder (e.g., **C:\Colorsource**) where you put Colorsource application's ".exe" files **should not** be protected by Windows administrator's rights in order you can save the application with your own parameters, such as your own spectral measurement files access paths or else working files.




The "English" folder contains following subfolders:

 All_reference_files_for_measuring_Colorsource_free_test_form_charts	28/12/2020 12:42	Dossier de fichiers	
 MagicPress sample charts and ref. files	18/11/2020 11:29	Dossier de fichiers	
 MagicPress sample measurement files	18/11/2020 11:29	Dossier de fichiers	
 MagicPress user's guide	18/11/2020 11:29	Dossier de fichiers	
 Sample Color libraires	18/11/2020 11:29	Dossier de fichiers	

The "**MagicPress sample measurement files**" folder contains a number of typical spectral or non-spectral CGATS measurement files that you can open as Measurement files (or as Fingerprint files) with **MagicPress** application. **You should train by opening these sample measurement files** and check how **MagicPress** processes each measurement file and displays its results. Of course, **MagicPress** can only display all results if a spectral measurement file is opened.






The "**All_reference_files_for_measuring_Colorsource_free_test_form_charts**" folder contains all the text reference files you need for measuring all the CMYK test charts we use on the free Colorsource CMYK test forms. You can use these charts reference files for measuring charts with MeasureTool or i1Profiler if you are using X-Rite **i1Pro** 1, 2 or 3, or for measuring charts with **Techkon** software if you are using Techkon **SpectroDens**.

MagicPrepress_demo.zip contains **MagicPrepress** trial version, plus **English** and **French** subfolders containing all appropriate working and training files with English or French names:

 English	28/12/2020 12:43	Dossier de fichiers	
 Français	28/12/2020 12:43	Dossier de fichiers	
 MagicPrepress_v1.1.1.exe	10/11/2020 18:22	Application	9 831 Ko

Copy **MagicPrepress_v1.1.1_Trial.exe** (or newer version) in the same folder as **MagicPress** application. You can create a shortcut to **MagicPrepress_v1.1.1_Trial.exe** using the right button of your mouse.

The "English" folder contains following subfolders:

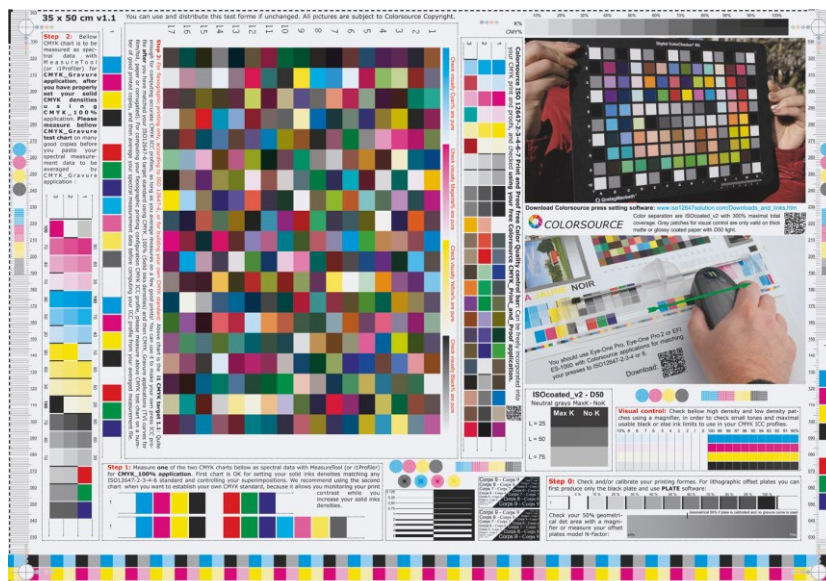
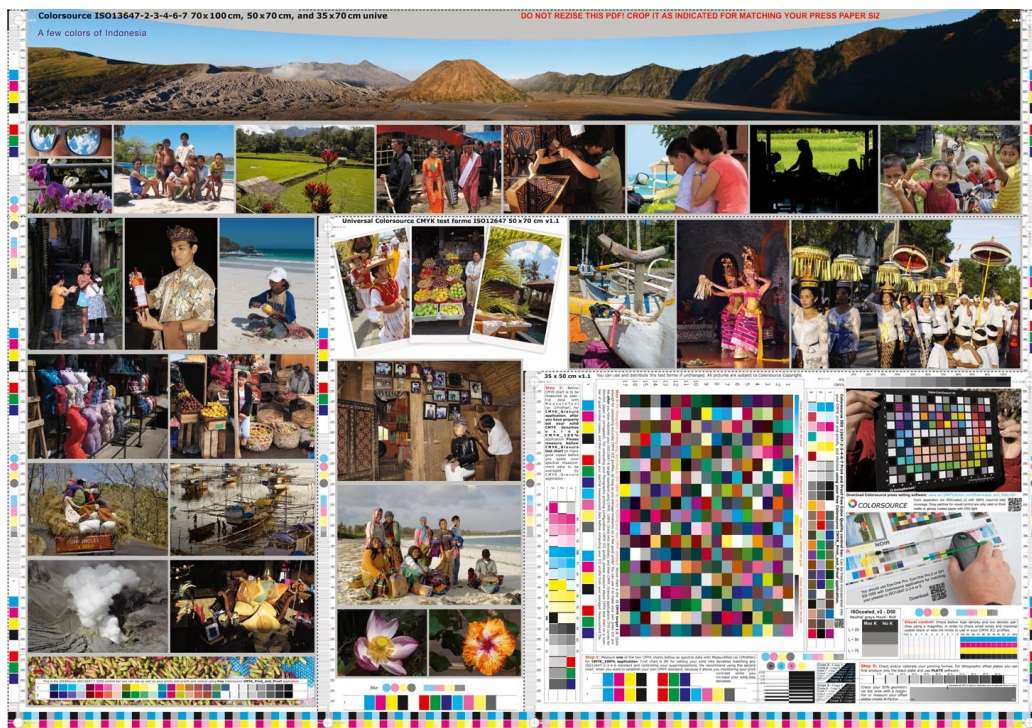
 All_reference_files_for_measuring_Colorsource_free_test_form_charts	28/12/2020 12:43	Dossier de fichiers	
 MagicPrepress sample charts and ref. files	18/11/2020 11:28	Dossier de fichiers	
 MagicPrepress sample measurement files	18/11/2020 11:28	Dossier de fichiers	
 MagicPrepress user's guide	18/11/2020 11:28	Dossier de fichiers	
 Sample Color libraires	18/11/2020 11:28	Dossier de fichiers	

The “**MagicPrepress sample measurement files**” folder contains a number of typical spectral or non-spectral CGATS measurement files that you can open as Measurement files (or as Fingerprint files) with **MagicPrepress** application.

You should train by opening these sample measurement files and check how **MagicPrepress** processes each measurement file and displays its results. Of course, **MagicPrepress** can only display all results if a spectral measurement file is opened.

You can build your own CMYK test form including the CMYK charts we supply in the ZIP distribution kits, or your own CMYK test charts (provided you build the appropriate text reference files). Or you can use one of the free ready-to-use Colorsource CMYK print test forms available at:

https://www.iso12647solution.com/Colorsource_universal_CMYK_print_test_formes.htm



PC and Microsoft Excel configuration:

PC configuration:

Operating systems: Windows 7, Windows 8.x, Windows 10 in their 32- or 64-bits versions. Recommended 1980 x 1024 HD monitor or more.

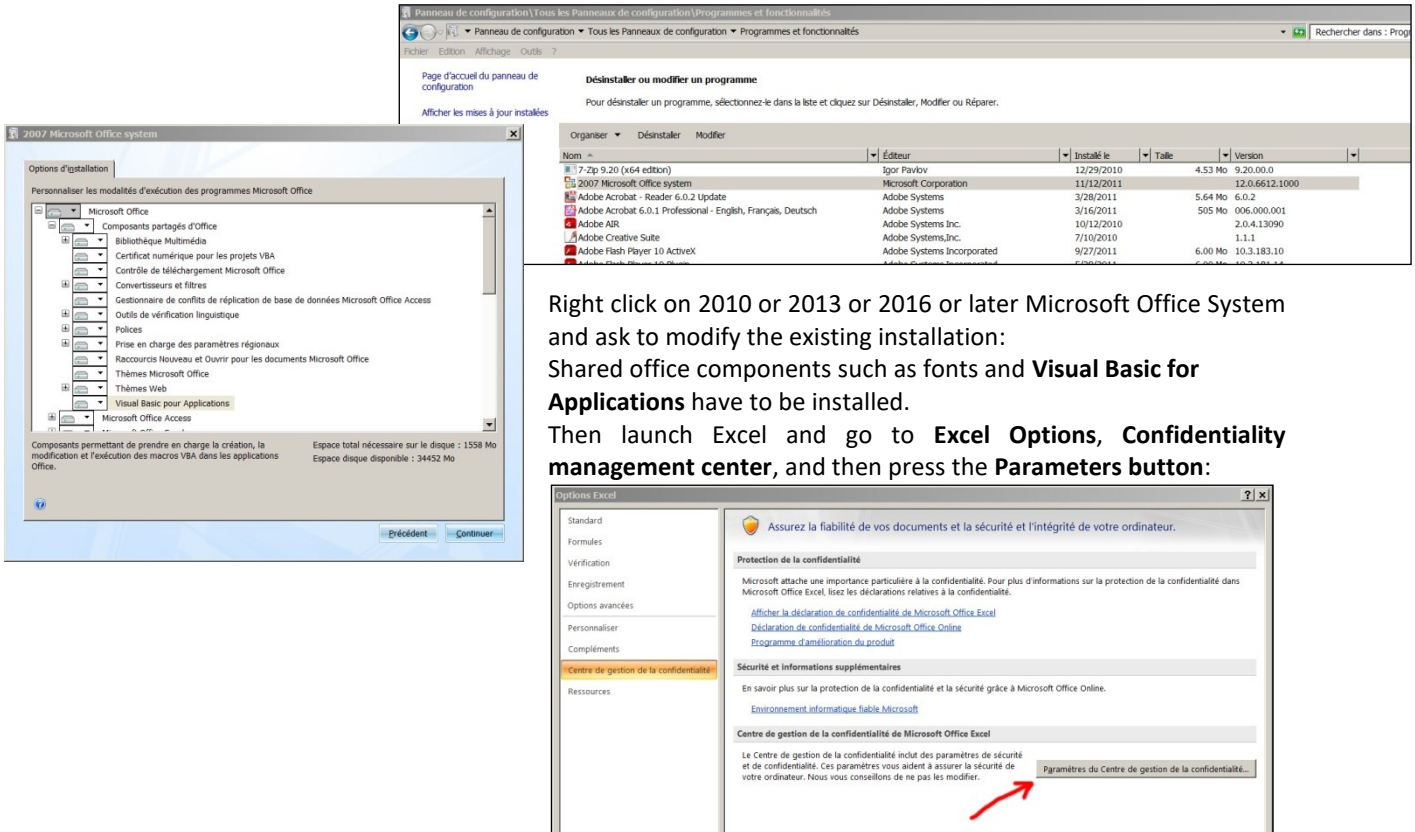
Colorsource applications are executable (.exe) files: Install them in a folder (e.g. C:\Colorsource\ or C:\Program files(x86)\Colorsource\) and then create shortcuts for fast access. **Do not install the .exe application in a folder protected by an administrator password or you will have problems for saving your application with its current data and parameters.**

Please note that when you have just downloaded by Internet the ZIP distribution kit of any Colorsource application, unzipped it, and then click for the first time on the application (“.exe” file such as “MagicPress_v1.1.1.exe”), Windows warns you launching this .exe is risky, **just as Windows would warn you for any other .exe, or .docm or .xlsm or else program file you download form Internet:** So you have to trust Colorsource for launching the application, and you will have no problem, as long as you have downloaded the Colorsource application from one of the secured Colorsource web sites such as: <https://www.color-source.net/> or <https://www.ISO12647solution.com> or <https://www.iso12647solution.com/>

Microsoft Excel configuration:

Colorsource applications are using **Microsoft Excel** for computing engine. Use **Microsoft Excel 2010 or Excel 2013 or 2016 or later** (in their 32- or 64-bits versions). Please note that Excel (or Microsoft Office) should be installed with appropriate Microsoft Office components including Visual Basic, otherwise the application will not launch.

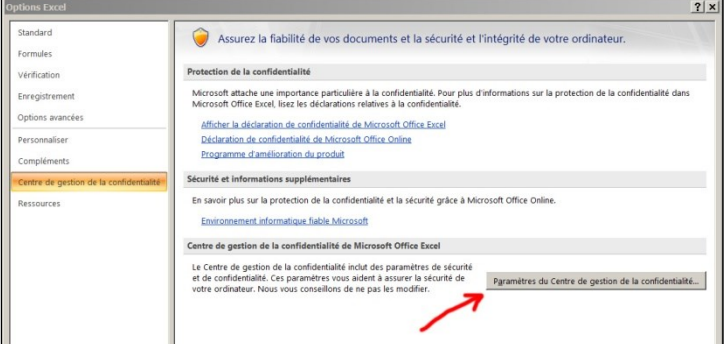
Sometimes (with some scarce Excel installation kits) optional components of Microsoft Excel must be installed. If needed go to Windows Control Panel, in the program’s installation menu:



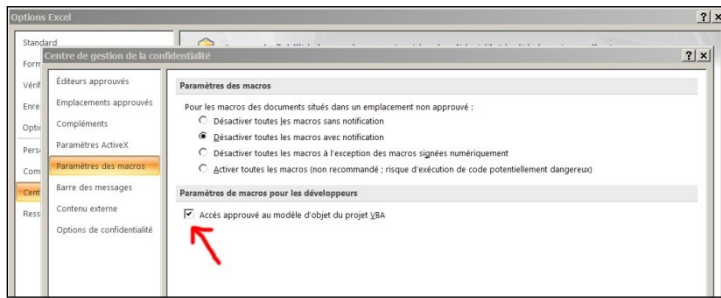
The image shows two screenshots. The top one is the Windows Control Panel 'Programs and Features' window, displaying a list of installed programs. The bottom one is the '2007 Microsoft Office system' installation options window, showing various components that can be selected or deselected.

Nom	Éditeur	Installé le	Taille	Version
7-Zip 9.20 (x64 edition)	Igor Pavlov	12/29/2010	4.53 Mo	9.20.00.0
2007 Microsoft Office system	Microsoft Corporation	11/12/2011	12.0.6612.1000	
Adobe Acrobat - Reader 6.0.2 Update	Adobe Systems	3/28/2011	5.64 Mo	6.0.2
Adobe Acrobat 6.0.1 Professional - English, Français, Deutsch	Adobe Systems	3/16/2011	505 Mo	006.000.001
Adobe AIR	Adobe Systems,Inc.	10/12/2010	2.0.4.13090	
Adobe Creative Suite	Adobe Systems,Inc.	7/10/2010	1.1.1	
Adobe Flash Player 10 ActiveX	Adobe Systems Incorporated	9/27/2011	6.00 Mo	10.3.183.10

Right click on 2010 or 2013 or 2016 or later Microsoft Office System and ask to modify the existing installation:
Shared office components such as fonts and Visual Basic for Applications have to be installed.
 Then launch Excel and go to **Excel Options, Confidentiality management center**, and then press the **Parameters** button:



You HAVE TO approve the access to object model of VBA project (see below):



Check your Excel version is installed with all most recent Microsoft updates.

For checking Excel is up to date, go to **Excel/File/Help** or to **Excel/File/Account** and then press the « **Search for updates** » button.

Finally, if the application does not launch, disable your antivirus (Not frequent because Windows 10 latest native protection tools consider the software is sure when you launch it.).

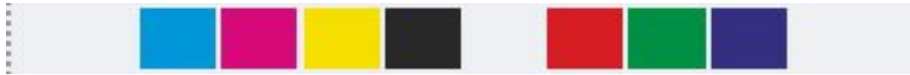
If you meet any problem for running **MagicPress** or **MagicPrepress**, or if you need to get more familiar with the chart measurement applications, you can read **Software_installation_and_brief_description_Guide_Rev10.pdf** that is supplied in both **MagicPress/English/MagicPress user's guide** and **MagicPrepress/English/MagicPress user's guide** subfolders.

Using MagicPress application:

Typical CMYK charts for MagicPress:

You will find the following CMYK charts on free Colorsource CMYK test forms. Measuring any of these CMYK charts (**only one scan**) allows determining instantaneously the four optimal printing densities of your solid C, M, Y, and K inks, with taking into account the measured spectral reflectance of the inks and paper, and your aim ISO12647 or else CMYK standard:

- **MagicPress_CMYK_RGB_chart.tif:**



- **MagicPress_CMYK_RGB_CMYK75%_chart.tif:**



- **MagicPress_and_Prepress_Offset_single_line_32_patches_CMYK_chart.tif or .eps chart:**



This **MagicPress_and_MagicPrepress_Single_line_chart_H7mm.tif** chart is available as .tif and .eps file and can be used with both **MagicPress** and **MagicPrepress** applications: Quite convenient for mastering continuous print process with saving a lot of paper: Because you can use this chart with most of your standard CMYK commercial print runs, check your CMYK correction curves, and update them if necessary.

Above CMYK charts text reference files are supplied in:

MagicPress/English/All_reference_files_for_measuring_Colorsource_free_test_form_charts subfolder, and they are named respectively:

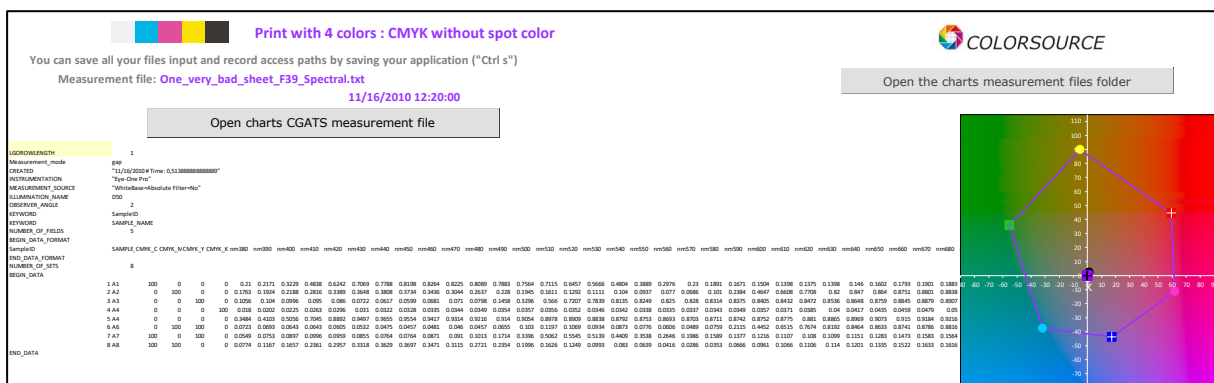
- **MagicPress_CMYK_RGB_Ref.txt,**
- **MagicPress_CMYK_RGB_CMYK75%_Ref.txt,**
- **MagicPress_Offset_Press_1_x_single_line_32_patches_CMYK_chart_Ref.txt.**

MagicPress application tabs:

You can practice and check following examples by using the sample measurement files supplied in **MagicPress/English/MagicPress sample measurement files** subfolder.

The **Measure** tab allows **Opening** your chart spectral measurements file:

Sample measurement file **One_very_bad_sheet_F39_Spectral.txt** is used hereafter.



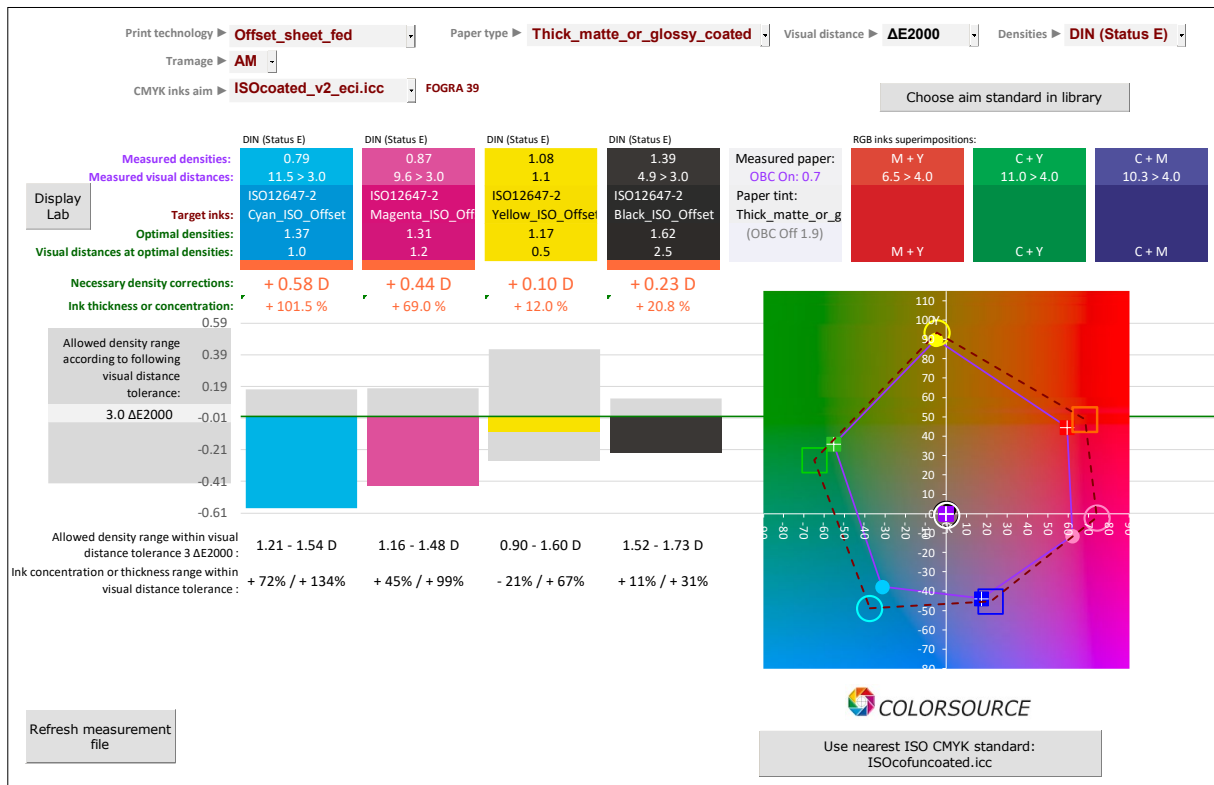
The screenshot shows the MagicPress application interface. At the top, there is a color bar and the text "Print with 4 colors : CMYK without spot color". Below this, there is a message: "You can save all your files input and record access paths by saving your application ("Ctrl s")". The measurement file is "One_very_bad_sheet_F39_Spectral.txt" with a timestamp of "11/16/2010 12:20:00". There are buttons for "Open charts CGATS measurement file" and "Open the charts measurement files folder". The main area displays a table of spectral data with columns for wavelength (nm) and density (D) for C, M, Y, and K. The table is partially visible, showing data for wavelengths from 411 nm to 648 nm. To the right, there is a spectral plot showing the density curves for C, M, Y, and K across the wavelength range.

The **AimStandard** tab allows specifying your CMYK or else public or private aim standard:

You can specify your aim CMYK solid colors by choosing:

1. Any of the **ISO12647-2, 12647-3, 12647-4, 12647-6** or **G7/IDEAlliance** standard, such as Fogra39,
2. A custom standard specified by a **Fingerprint** measurement file (**Fingerprint** tab measurement file),
3. Or specific colors chosen in the current inks' library (**InksLib** tab file),

This tab displays the measured colors and densities of each solid inks (100%), its optimal density for best possible color matching, the necessary correction of ink density or thickness or concentration, the minimal and maximal authorized densities and concentrations for matching your chosen aim standard solid CMYK colors:



For example, above monitor copy, where a very bad offset test form has been measured, shows that matching Fogra39 colors requires:

1. Increasing Cyan density from 0.79 to 1.37 D (**+0.58 D**), i.e., increasing ink thickness by +101.5%,
2. Increasing Magenta density from 0.87 to 1.31 D (**+0.44 D**), i.e., increasing ink thickness by +69.0%,
3. Increasing Yellow density from 1.08 to 1.17 D (**+0.10 D**), i.e., increasing ink thickness by +12.0%,
4. Increasing Black density from 1.39 to 1.62 D (**+0.23 D**), i.e., increasing ink thickness by +20.8%.

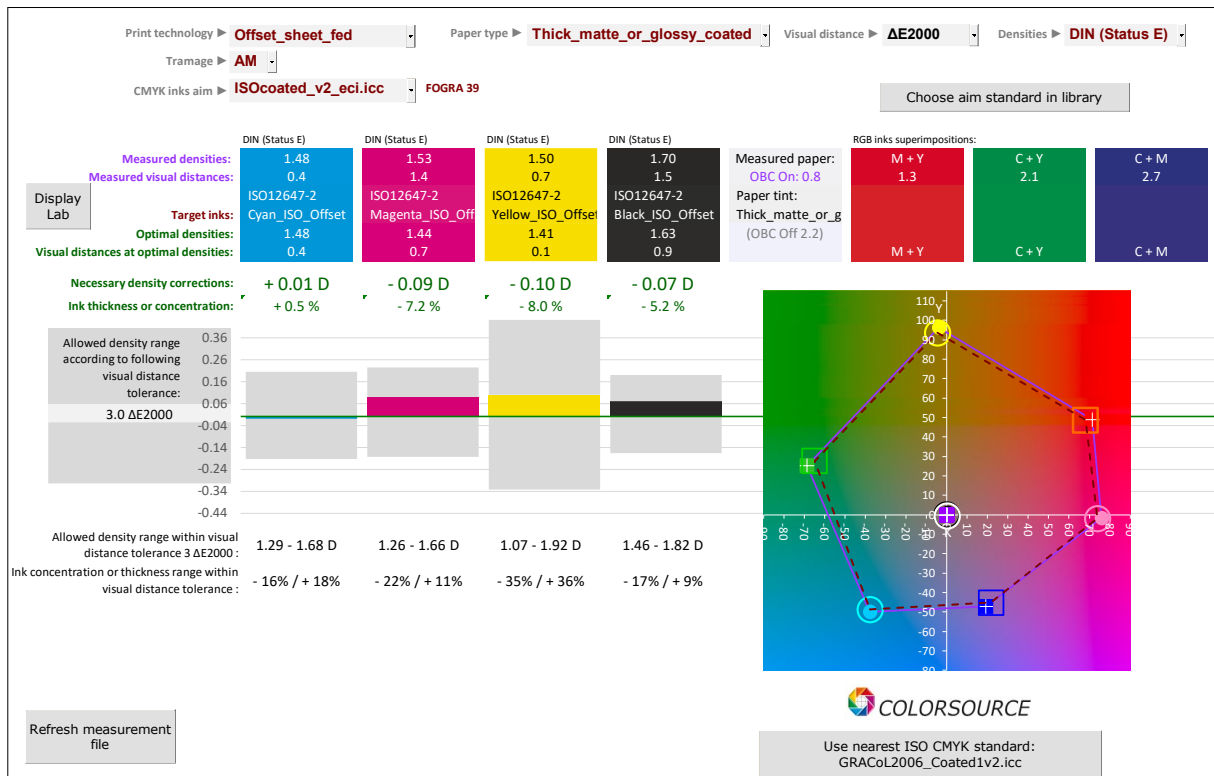
And this will allow:

1. Reducing ΔE2000 visual distance from **11.5 to 1.0** on Cyan,
2. Reducing ΔE2000 visual distance from **9.6 to 1.2** on Magenta,
3. Reducing ΔE2000 visual distance from **1.1 to 0.5** on Yellow,
4. Reducing ΔE2000 visual distance from **4.9 to 2.5** on Black.

The **Expertise** tab summarizes all results and gives you a diagnosis for the measured printed copy.

Sample measurement file **CMYK_100%_sheet_2_Spectral.txt** is used hereafter:

AimStandard tab:



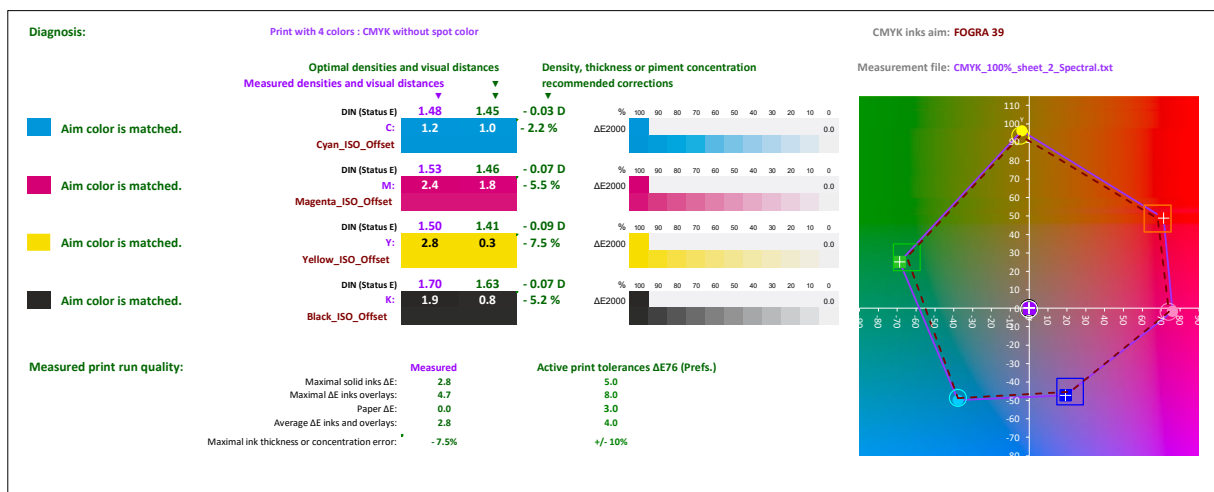
Above view shows that this **CMYK_100%_sheet_2_Spectral.txt** measurement file has been measured on a print with acceptable density settings for matching Fogra39 standard.

Checking the RGB superimpositions is quite useful for wet offset print processes where you can be OK on solid inks and be bad on their superimpositions (e.g., in case of blanket pressure problem).

But above view shows as well that Fogra 39 aim Lab colors could be matched within 3 ΔE2000 tolerance with very different densities: **For example, Yellow solid color can be matched with print densities ranging from 1.07 to 1.92 D!**

This clearly shows that matching ISO12647 solid inks colors within small ΔE tolerances is not enough: It does not guarantee you are using the optimal print density, i.e., optimal ink's thickness if you are printing offset or optimal ink's concentrations if you are printing gravure.

Expertise tab:



For demonstrating the 5.0 $\Delta E76$ tolerance specified by ISO12647-x is a nonsense, the sample measurement file **CMYK_100%_sheet_2_Spectral.txt** is used hereafter **both as Measurement file and as aim Fingerprint file**, and with ISO12647-2 (wrongly) specified $\Delta E76$ color difference:

On following view, **MagicPress** application proves you that Fogra39 standard solid CMYK aim colors can be matched within **5.0 $\Delta E76$ tolerance**, using far too wide ranges of CMYK densities:



1. Cyan density can be set from 1.25 to 1.75D (Ink thickness decreased by 19% or increased by 24%!)
2. Magenta density can be set from 1.33 to 1.75 D (Ink thickness decreased by 17% or increased by 19%!)
3. Yellow density can be set from 1.34 to 1.70 D (Ink thickness decreased by 14% or increased by 17%!)
4. Black density can be set from 1.50 to 1.95 D (Ink thickness decreased by 15% or increased by 18%!)

Because density means “ink thickness” when printing offset and “pigment concentration” when printing gravure, and the press dot gains depend a lot of the “ink thickness” and/or “pigment concentration”, **your press CMYK TVI curves depend A LOT on the solid ink density you are using for each ink.**

This means your workflow CMYK correction curves will not be efficient if you print too far from the optimal CMYK print densities, even if you match the solid CMYK aim colors within small visual distance tolerance.

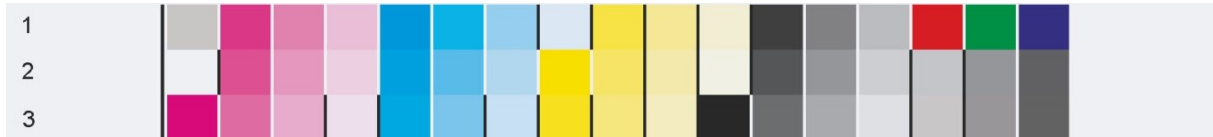
This is showing **MagicPress** not only allows finding immediately the optimal CMYK print densities, but also allows matching these optimal print densities at each new print run, **ensuring your workflow CMYK correction curves will be computed and then used with valid CMYK ink thicknesses and/or pigment concentrations.**

Using MagicPrepress application:

After you have set your solid inks densities with **MagicPress**, measuring an appropriate CMYK chart designed with C%, M%, Y% and K% steps will allow **MagicPrepress** computing the CMYK printing forms correction curves that allows matching your aim standard's TVI curves.

Typical CMYK charts for MagicPrepress:

- **MagicPrepress_CMYK_10%_steps_chart_on_3_lines.tif:**



- **MagicPress_and_Prepress_Offset_single_line_32_patches_CMYK_chart.tif or .eps chart:**



This **MagicPress_and_MagicPrepress_Single_line_chart_H7mm.tif** chart is available as .tif and .eps file and can be used with both **MagicPress** and **MagicPrepress** applications: Quite convenient for mastering continuous print process with saving a lot of paper: Because you can use this chart with most of your standard CMYK commercial print runs, check your CMYK correction curves, and update them if necessary.

Above CMYK charts text reference files are supplied in:

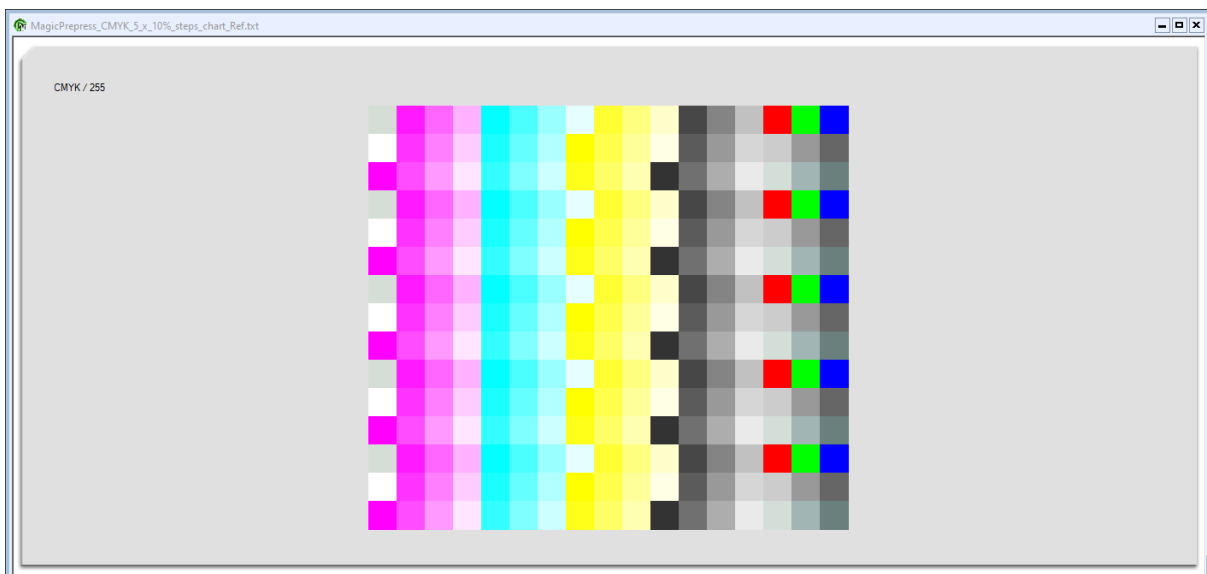
MagicPrepress/English/All_reference_files_for_measuring_Colorsource_free_test_form_charts subfolder, and they are named respectively:

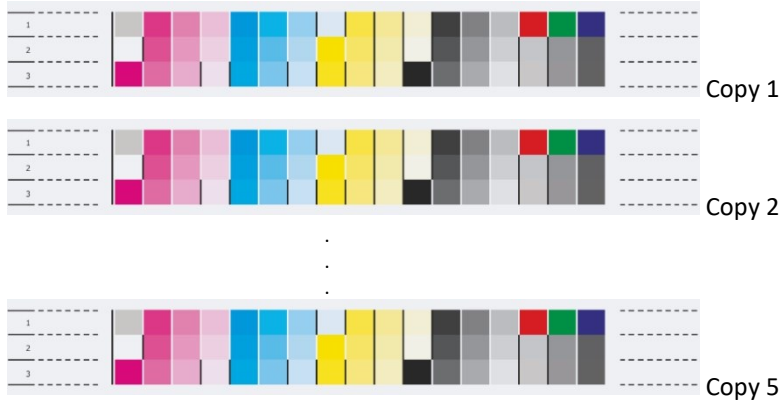
- **MagicPrepress_CMYK_5_x_10%_steps_chart_Ref.txt,**
- **MagicPrepress_Offset_Press_15_x_single_line_32_patches_CMYK_chart_Ref.txt.**

Above CGATS reference files allow measuring their attached CMYK chart many times on many different printed copies, in order **MagicPrepress** can average all the chart measurements and compute it's results from average print run measurements. For example:

MagicPrepress_Offset_Press_15_x_single_line_32_patches_CMYK_chart_Ref.txt allows measuring 15 times on 15 printed copies the **MagicPress_and_Prepress_Offset_single_line_32_patches_CMYK_chart.tif** chart:

MagicPrepress_CMYK_5_x_10%_steps_chart_Ref.txt allows measuring 5 times on 5 printed copies the **MagicPrepress_CMYK_10%_steps_chart_on_3_lines.tif** chart:





Please note that if you are using MeasureTool with i1Pro 1 or 2, you can stop measuring your chart at any moment and save your spectral measurement file. On above example, you can measure 3 charts, first line of 4th chart, and then stop and save your spectral measurement file. **MagicPrepress** application averages data that has been measured, and ignores data that has not been measured.

We strongly recommend measuring many copies, because no print process is perfectly repetitive and we are only interested by the **average** printing press behavior.

MagicPrepress application tabs:

You can practice and check following examples by using the sample measurement files supplied in **MagicPrepress/English/MagicPrepress sample measurement files** subfolder.

The **Measure** tab allows you **Opening** your spectral measurements file:

Sample measurement file **15_Copies_without_correction_curves_ISOcoated_v2.txt** is used hereafter.

The **DeclareCurves** tab allows you declaring the CMYK workflow correction curves that has been applied for producing the print run you are measuring:

Of course, computing new CMYK workflow correction curves requires knowing:

1. The **measured print CMYK TVI curves**, that are computed by MagicPrepress from the measurement file,
2. The **Aim standard CMYK TVI curves**, that can be specified at any moment in the **AimStandard** tab,
3. The **existing CMYK workflow correction curves** that has been applied for producing the print run you are measuring.

This **Quick start guide** will not describe all the numerous different ways you can use the **DeclareCurves** tab, but only two easy ways for you testing **MagicPrepress** application:

"No correction curve on workflow":

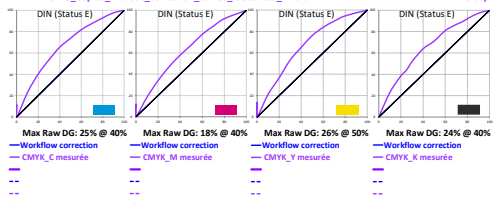
You can use this "No correction mode" for most of sheet-fed offset test print runs with classic screening such as AM 150 or 175 dpi. In this case you disable all correction curves on your prepress workflow (except the CtP calibration curve) and you produce the CMYK test form plates without any CMYK correction.

Declare the correction curves of the measured print run ▶ **No correction curve on workflow**

This mode can be used for most of test print runs. However, if the test print dot gain is too high (e.g. using offset stochastic screening), you can determine here a suitable pre-correction curve by simulating the effect of a printing forms choking curve. Applying this pre-correction curve to all printing forms will allow printing the test form better, for more accurate measurements of high densities.

Simulate the effects of using a pre-correction curve on your test form

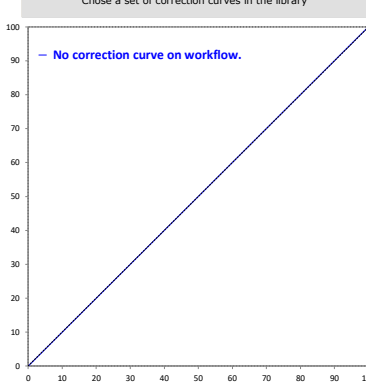
File: 15_Copies_without_correction_curves_ISOcoated_v2.txt
15 copies have been measured



Maximal raw press dot gain is 26% @ 50% on Y:
50% will print as 76% if printing form is not corrected.

Choose a set of correction curves in the library

— No correction curve on workflow.



Device name: CMYK_C CMYK_M CMYK_Y CMYK_K
Measured inks names: Offset_Quickset Offset_Quickset Offset_Quickset Offset_Quickset

"Manual input of the existing correction curves":

This mode allows you declaring the CMYK workflow curves that has been applied for producing the four printing forms of the print run you are measuring: You can freely input manually for each ink up to 26 control points between 0 and 100% and their correction values:

Declare the correction curves of the measured print run ▶ **Manual input of the existing correction curves**

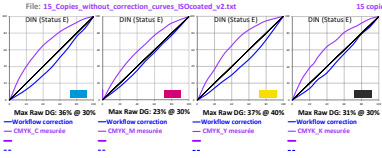
This mode allows you computing your optimal correction curves by using any production print run fitted with suitable control bars: you just need inputting hereunder the values of the workflow correction curves that have been used for producing the measured print run. You can as well display the press raw dot gain you would have measured if printing without any correction curve: This is an important control, because the workflow correction curves sometimes hide abnormally high press dot gain.

Use the Workflow control points specified in "NewCurves" tab (10% Steps)

CMYK_C: Use this correction curve for all inks

Show the uncorrected press raw TVI curves

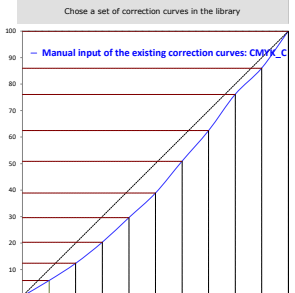
File: 15_Copies_without_correction_curves_ISOcoated_v2.txt
15 copies have been measured



Maximal raw press dot gain is 37% @ 40% on Y:
40% will print as 77% if printing form is not corrected.

Choose a set of correction curves in the library

— Manual input of the existing correction curves: CMYK_C



Device name: CMYK_C CMYK_M CMYK_Y CMYK_K
Measured inks names: Offset_Quickset Offset_Quickset Offset_Quickset Offset_Quickset

Workflow control points (10% Steps)	CMYK_C	CMYK_M	CMYK_Y	CMYK_K
0	0	0	0	0
10	8.9	10.0	7.5	0
20	17.8	20.0	15.0	0
30	26.7	30.0	22.5	0
40	35.6	40.0	30.0	0
50	44.5	50.0	37.5	0
60	53.4	60.0	45.0	0
70	62.3	70.0	52.5	0
80	71.2	80.0	60.0	0
90	80.1	90.0	67.5	0
100	89.0	100.0	75.0	0

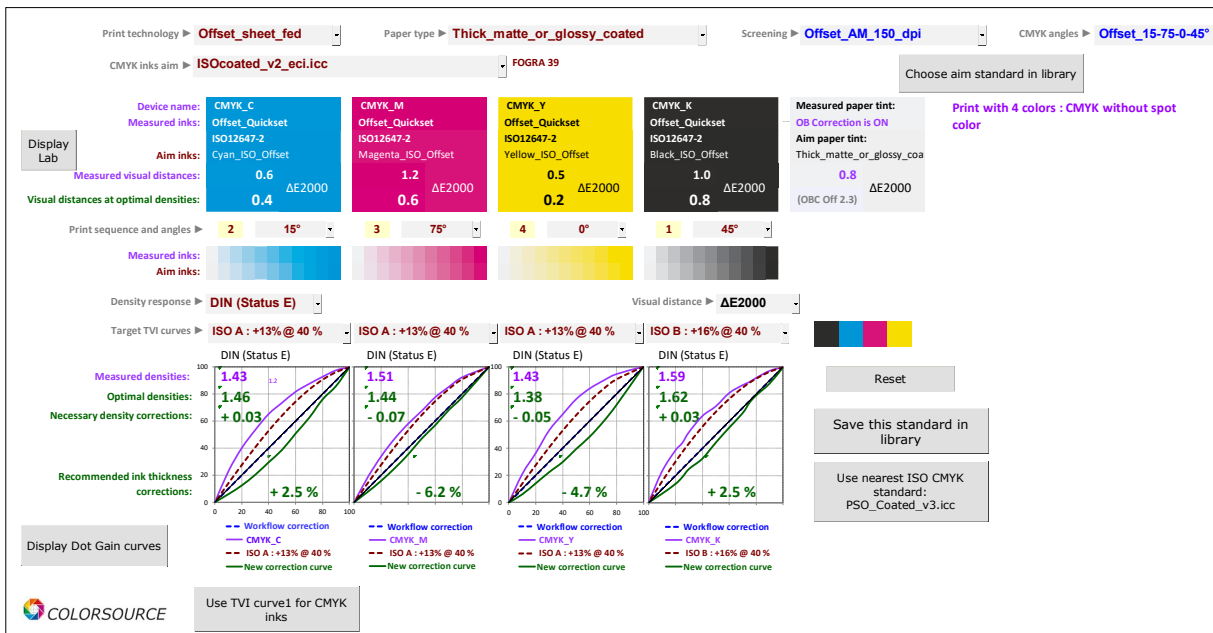
The **AimStandard** tab allows specifying your CMYK or else public or private aim standard:

You can specify your aim CMYK solid colors by choosing:

1. Any of the **ISO12647-2**, **12647-3**, **12647-4**, **12647-6** or **G7/IDEAlliance** standard, such as Fogra39,
2. A custom standard specified by a **Fingerprint** measurement file (**Fingerprint** tab measurement file),
3. Or specific colors chosen in the current inks' library (**InksLib** tab file).

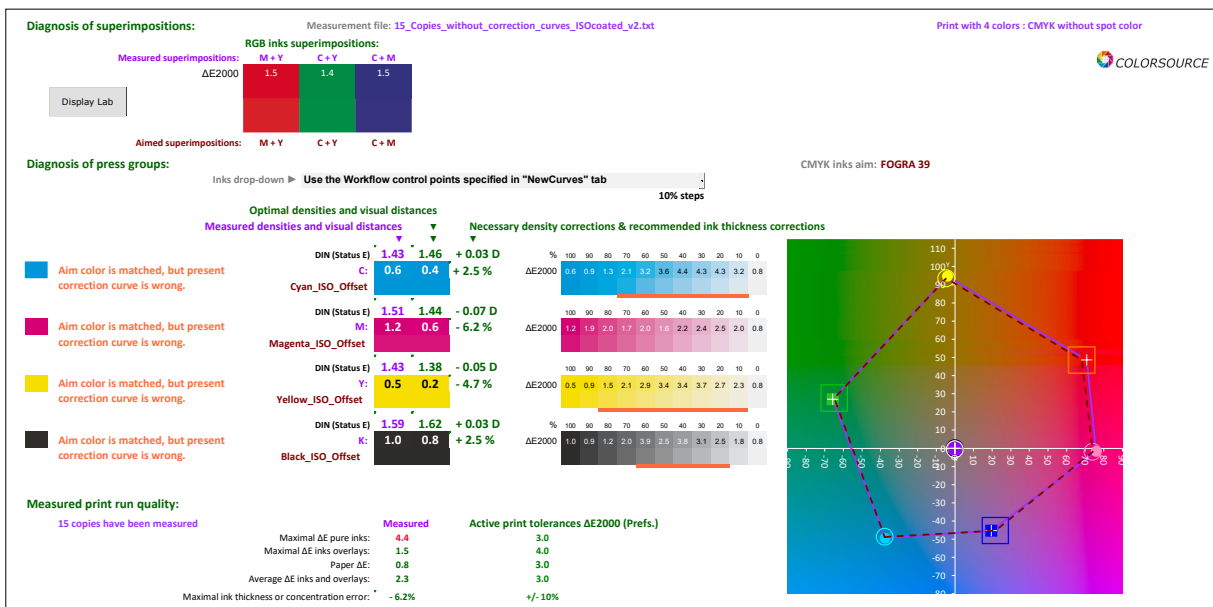
When you choose an **ISO12647-x** or **G7/IDEAlliance** aim standard, the chosen standard's TVI curves are set as aim TVI curves for computing the new correction curves.

You may change these ISO12647 aim TVI curves if you want to create your own non-ISO private aim standard, but you should rather test **MagicPrepress** application by matching your press to a classic ISO12647-x public CMYK print standard, such as **Fogra 39** hereunder:



The **Expertise** tab gives a detailed diagnosis for the measured average print run:

Following view shows that the measured print run is good, because it is an offset test print run with no workflow correction curve, so that average measured solid and training colors are near enough to optimal, but of course the measured CMYK TVI curves are wrong in absence of any CMYK correction curve on the workflow:



The **AimStandard** and **Expertise** tab alarms:

From the measured print run average spectral measurement file, **MagicPrepress** is computing the average densities and **average solid colors**, plus the **optimal CMYK print densities ensuring minimal visual distances to the chosen public or private CMYK aim standard**. This in order to check the measured run CMYK density settings are valid for computing good and accurate print forms correction curves.

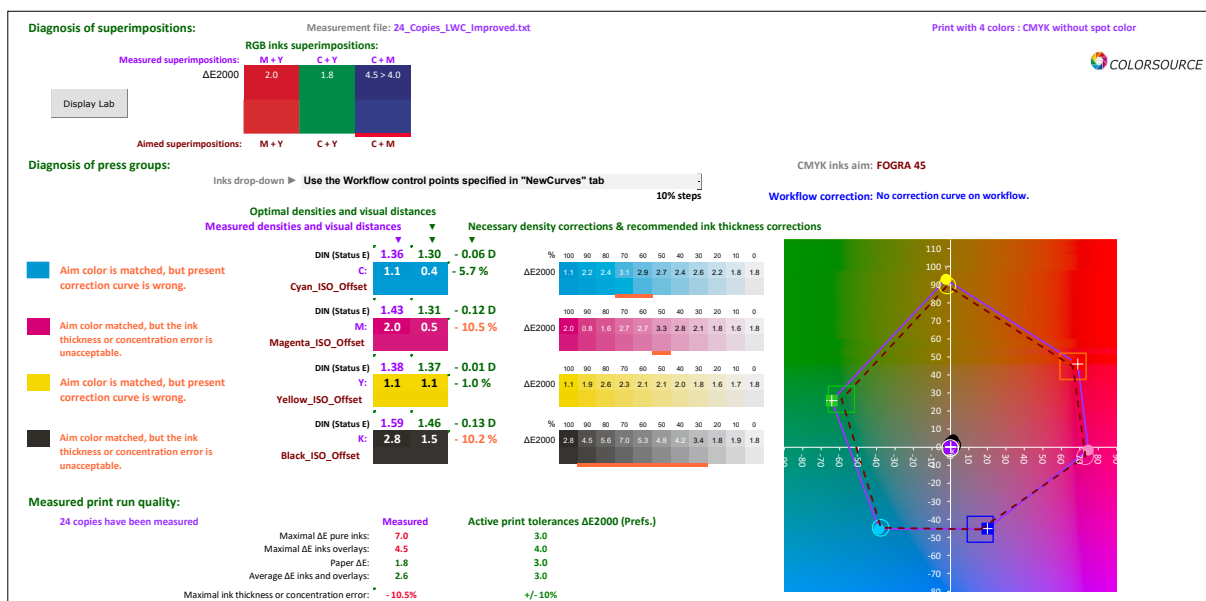
A measured print run with bad solid densities (i.e., bad ink's thickness and/or bad ink's pigment concentration) will produce bad printing forms correction curves, because dot gains of print processes strongly depend on the solid CMYK inks' thicknesses (offset printing) or the CMYK inks' pigment concentrations (gravure printing).

That is why alerts are displayed in **AimStandard** and **Expertise** application tabs if one or more inks of your measured average test print run poorly matches the solid target colors, **or does match the target colors but with bad thickness or pigment concentration**.

For example, processing sample measurement file **24_Copies_LWC_Improved.txt** with **MagicPrepress** shows the measured average print is bad for computing CMYK correction curves for matching **Fogra 45** aim standard:



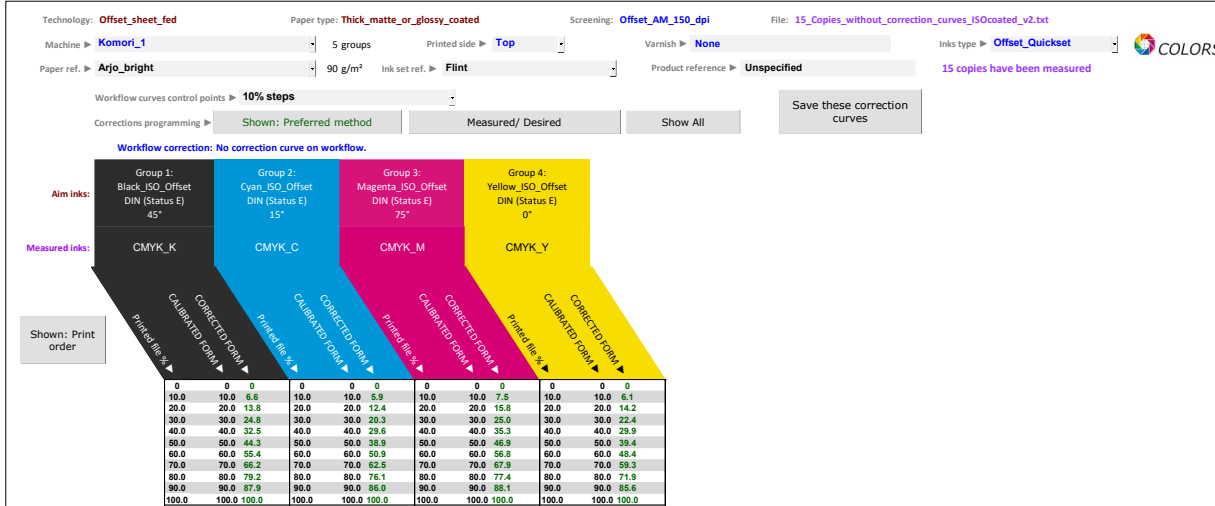
1. Average solid Magenta measured visual distance is 2.0 ΔE 2000: This is small BUT the Magenta ink thickness should be decreased by **10.5%**,
2. Average solid Black measured visual distance is 2.8 ΔE 2000: This is small BUT the Black ink thickness should be decreased by **10.2%**.



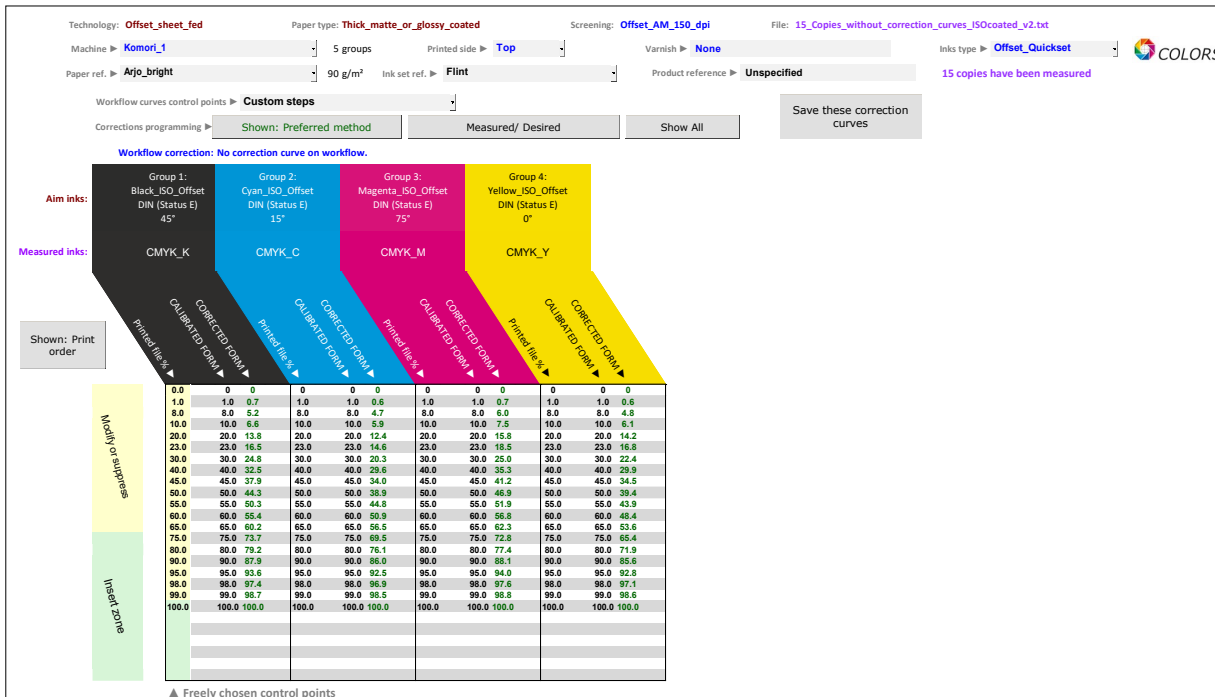
The **NewCurves** tab displays your new CMYK workflow correction curves:

The new correction curves to be programmed in your prepress workflow can be displayed with a lot of flexibility for matching all market workflow software technical requirements, whichever the CMYK chart you have measured, with control points that may be different from your workflow control points.

Example: 10% steps workflow control points



Example: Freely chosen control points



Of course, new CMYK correction curves should be programmed in your prepress workflow only if the computed new correction curves are significantly different from the existing correction curves, which can be easily checked using the various **NewCurves** tab displays.

- You can display **Measured/Desired** TVI curves and check if they are significantly different.
- You can as well display all curves and check if **New correction** curves are significantly different from **Workflow correction** curves

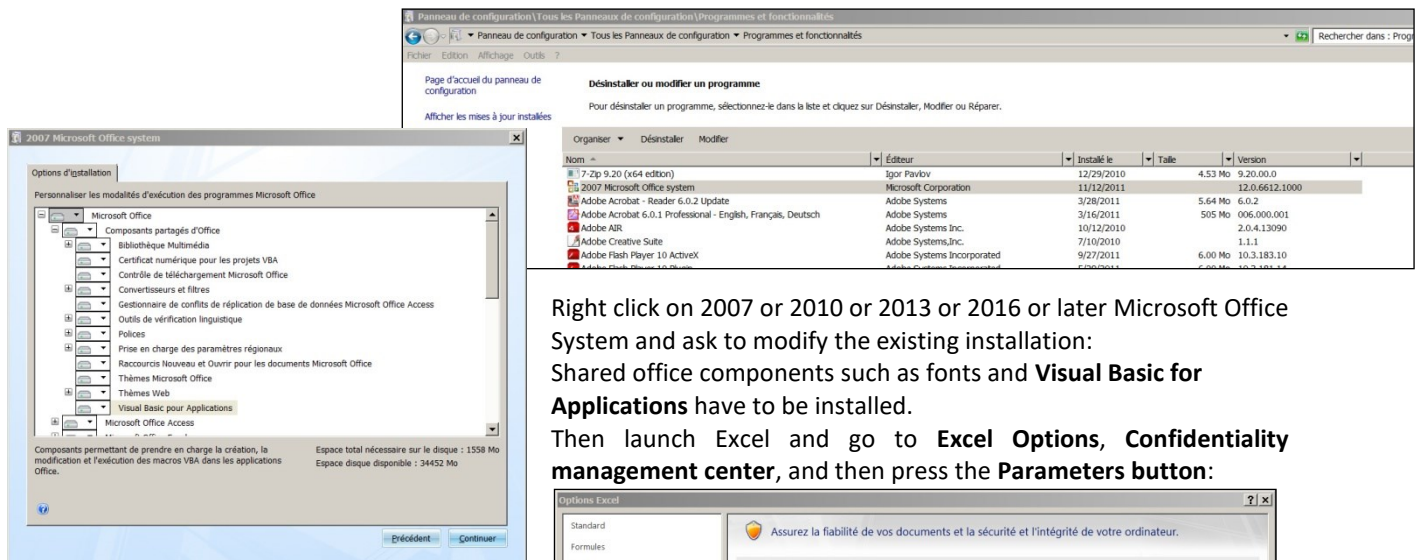
Troubleshooting and FAQs:

The application does not launch:

Colorsource applications are using Microsoft Excel for computing engine. Use **Microsoft Excel 2007, Excel 2010 or Excel 2013 or 2016 or later**.

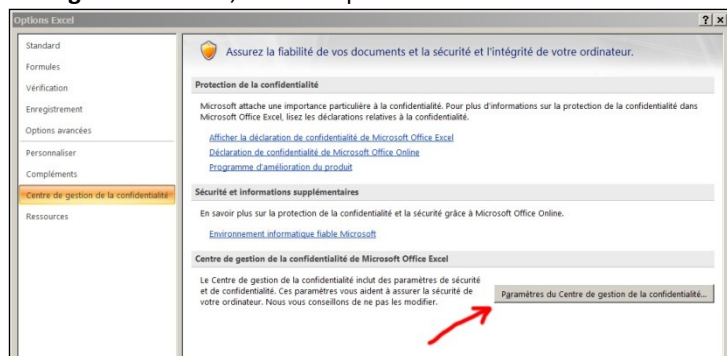
Please note that Excel (or Microsoft Office) should be installed with appropriate Microsoft Office components including Visual Basic, otherwise the application will not launch.

Sometimes optional components of Microsoft Excel (depending on your Excel version and installation kit) **MUST** be installed. If needed go to Windows Control Panel, in the program's installation menu:

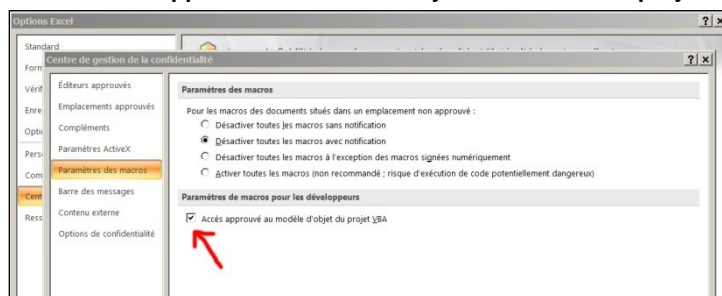


Right click on 2007 or 2010 or 2013 or 2016 or later Microsoft Office System and ask to modify the existing installation: Shared office components such as fonts and **Visual Basic for Applications** have to be installed.

Then launch Excel and go to **Excel Options, Confidentiality management center**, and then press the **Parameters** button:



You HAVE TO approve the access to object model of VBA project:



Check your Excel version is installed with all most recent Microsoft updates.

For checking Excel is up to date, go to **Excel/Options/Resources** (Excel 2007), or go to **Excel/File/Help** or to **Excel/File/Account** and then press the « **Search for updates** » button.

Finally, if the application does not launch, disable your antivirus: There are no problems with most of the serious antivirus applications (including Windows native protection systems, free antivirus like Avira, AVG etc.) but some rare antivirus applications may prevent the application launching.

Make a test by disabling your antivirus and if necessary, change of antivirus program if your present application is the problem.

Results tabs display too small or too large on my monitor:

Press "Ctrl" key and use the mouse wheel for zooming in or out, and then save your application ("Ctrl s").
You can mask Excel ribbon (Point the ribbon with your mouse and use the mouse right button menu).
You can as well use **Excel FULL SCREEN display** (menu display ... Full screen) because you do not need Excel menus for making full use of Colorsource software. The Escape key allows switching back to normal Excel display mode.

Colorsource software search for the language at each start:

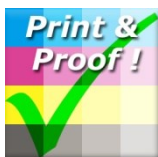
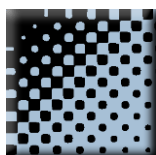
Each Colorsource application detects your keyboard language and configures the appropriate language **at first launch**. You have to save your application ("Ctrl s" or File/Save) for avoiding the application searching the language at each following launch.

MagicPress, MagicPrepress and CMYK_Print_&_Proof offer me all traditional ISO 12647-2, ISO 12647-3, ISO 12647-4 and ISO 12647-6 target Lab colors, but I want to match "Euroscale.icc" target colors!

Please see in detailed users guide how to compute your own color targets from aim ICC profiles and record them as colorimetric CGATS measurement files for using them as a Fingerprint.

Any other question?

support@color-source.net

CMYK_Print_&_Proof**PLATE****MagicPress****MagicPrepress****SPOT_Color_Manager**