



Digital Information Ltd.



InkZone Perfect

**Installation and
configuration manual**

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1 Product Overview

1.1 What it does

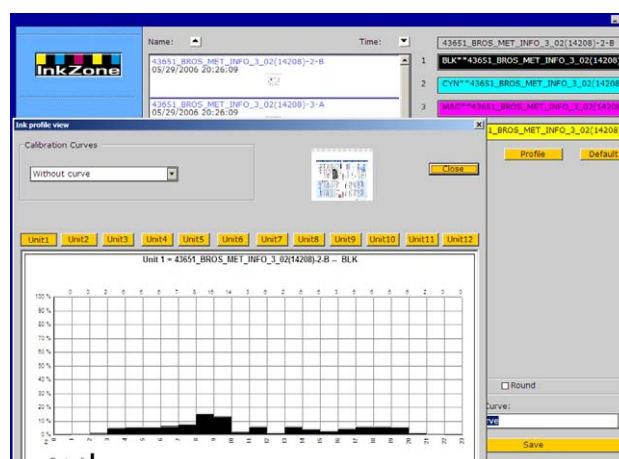
The software is a versatile instrument for providing ink key preset data to a wide range of offset and web press consoles.

Depending on the press console, ink preset data is transmitted by a conventional output file, or console specific media such as flash cards, magnetic stripe cards, digital tape cassettes etc. are used.

The software and prepress department exchange their data in the JDF format, as specified by the CIP4 organization.

To achieve the best results possible, the Calibration Curve Wizard makes it easy to create and adjust the curves for any paper stock by analyzing printed jobs from the production.

The software can either run in manual mode or in fully automatic mode, depending on the circumstances.

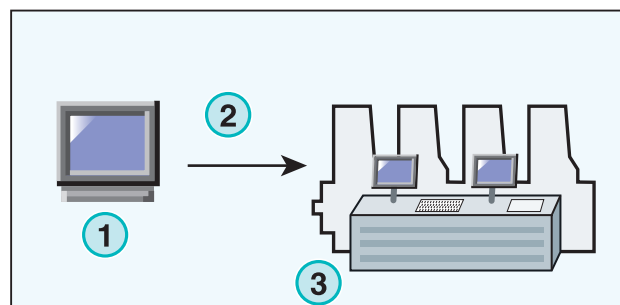


1.2 Workflow Samples

1.2.1 On-line communication

For press consoles which are integrated in an Ethernet network and support the TCP/IP protocol, the ink preset data are sent to a shared network folder.

- (1) PC with software
- (2) Ink preset data through network
- (3) Console/printing press



If a direct Ethernet connection is not possible, then use different emulators for bringing the press online. The drive and the media emulators are fed with ink preset data directly through the Ethernet network.

Supported device drive emulators:

- E-Floppy (for 3,5" floppy drives)
- E-Tape (for digital tape drives made by TEAC)
- E-Strip (for magnetic strip drives)

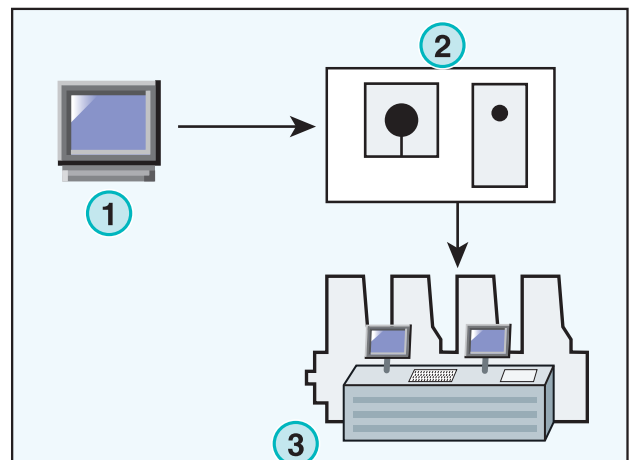
Supported media Emulators:

- PCMCIA Flash Card (Heidelberg consoles)
- Smart Card (MAN Roland consoles)

1.2.2 Offline communication

In an offline workflow, the ink preset data is fed to the press console by a data carrier which is read by the press console.

- (1) PC with the software writes the media
- (2) Media with ink preset information
- (3) At the console, the data on the media is used for ink preset the keys



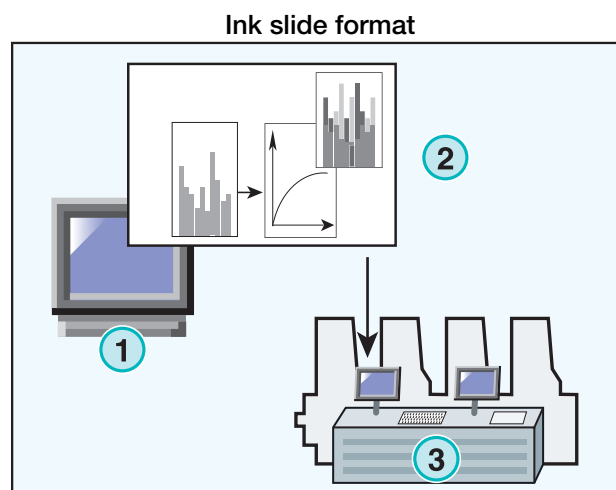
1.2.3 Ink slide and ink coverage values

Depending on the press console format, the software will supply the ink zones either with ink slide values or ink coverage values.

One of the main differences between the two formats is where calibration takes place. When using the ink slide format, calibration is usually done on the press console. When using the ink coverage output, the calibration is already done by the software.

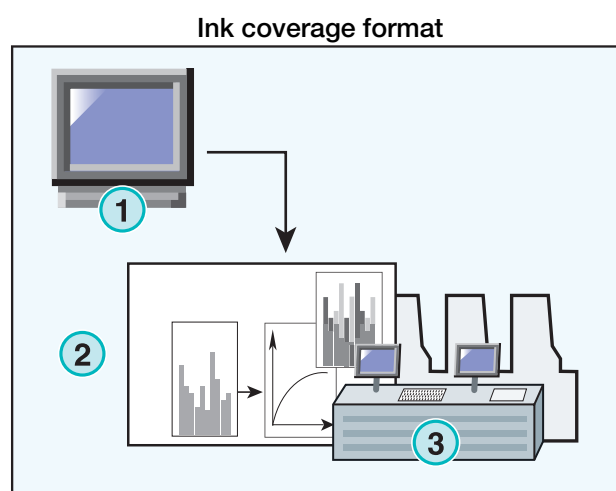
Ink slide format

- (1) PC with software
- (2) The software writes calibrated ink slide data
- (3) Console/Press



Ink coverage format

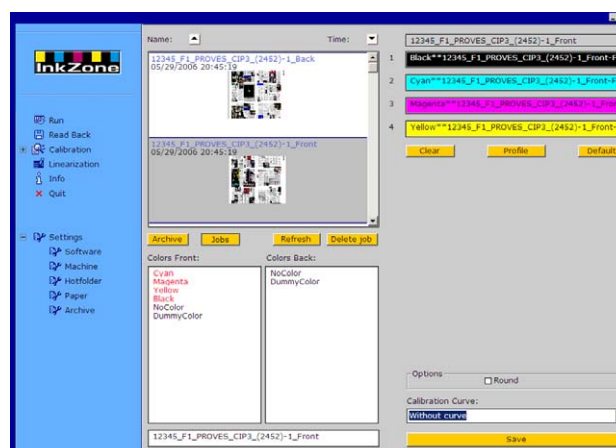
- (1) PC with software
- (2) The software writes raw uncalibrated ink coverage data
- (3) The data is calibrated at the console before it is transmitted to the ink slides



1.3 Using of the software

1.3.1 Manual mode

The software is usually run in manual mode. The user has the advantage to choose between all the calibration curves available. The color sequence and the sequence of front and back side can be set individually for all jobs.



1.3.2 Automatic mode

In a highly automated workflow the automatic mode is preferred. Especially a newspaper workflow can benefit.

In certain circumstances, it is preferred sending ink coverage data fully automated over Ethernet network to the console.

2 Installation

2.1 CD Content

The CD supplied contains the program installer and several PDF manuals that will assist the user in setting up and running the software.

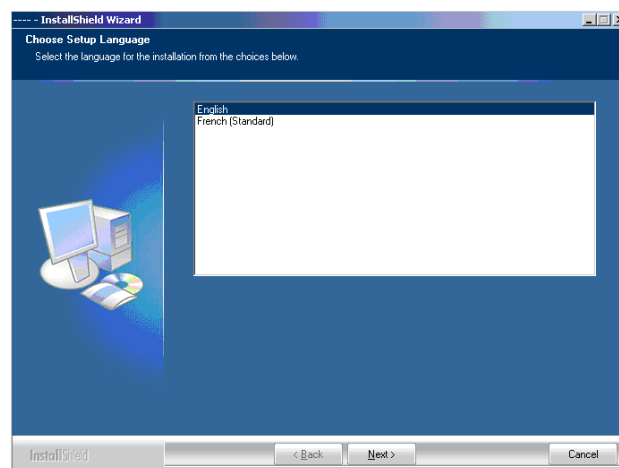


2.2 Software installation

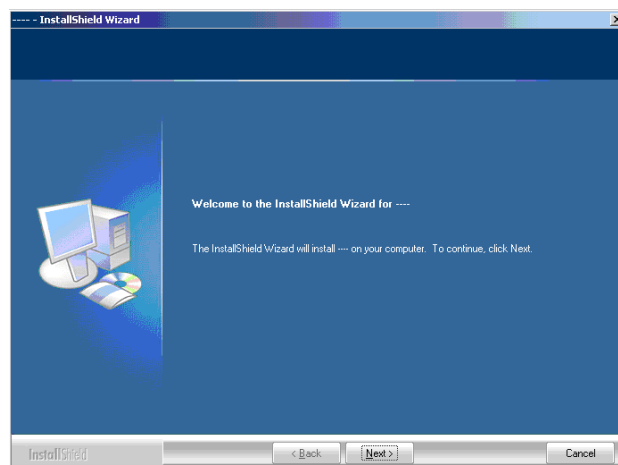
Insert the program CD. The AutoStart function launches the installer. Choose the product **(1)** to be installed.



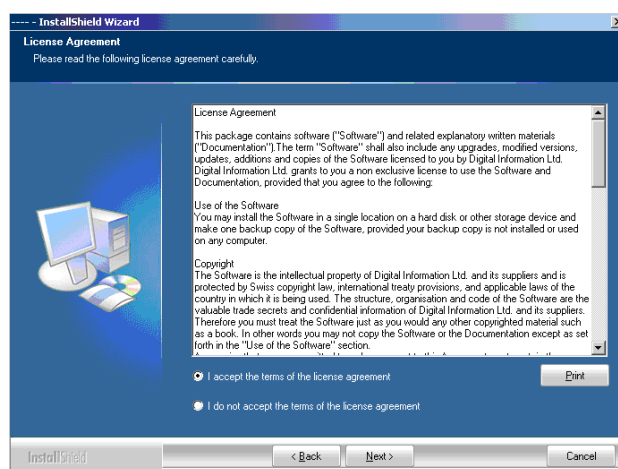
Choose the preferred language and press [Next].



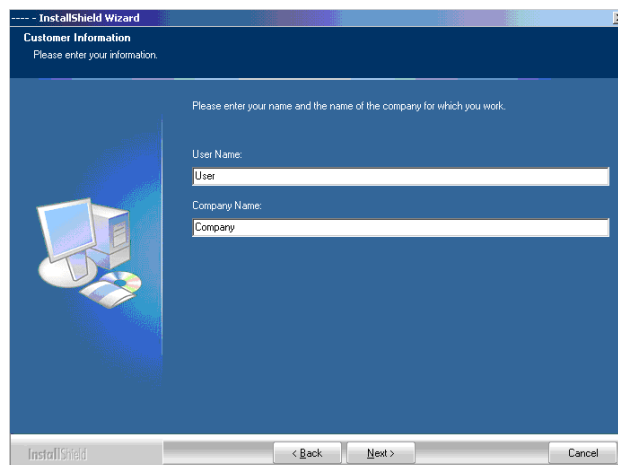
Choose [Next].



Read the license agreement carefully. To continue press [Next].



Enter the user and company name and continue with [Next].



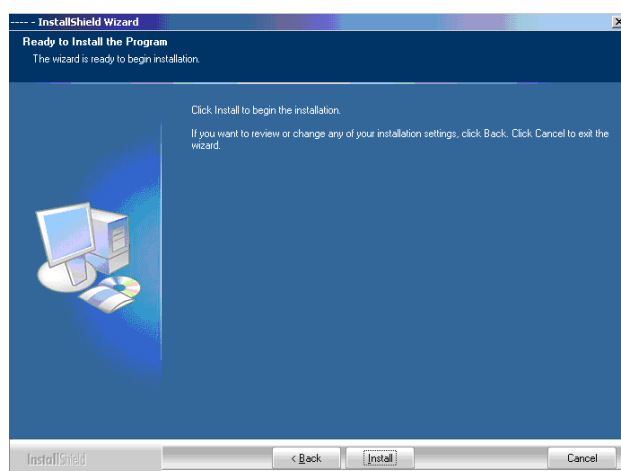
As setup type choose “Complete” **(1)** and continue with [Next].

We recommend running the installer in the “Complete” mode **(1)**.

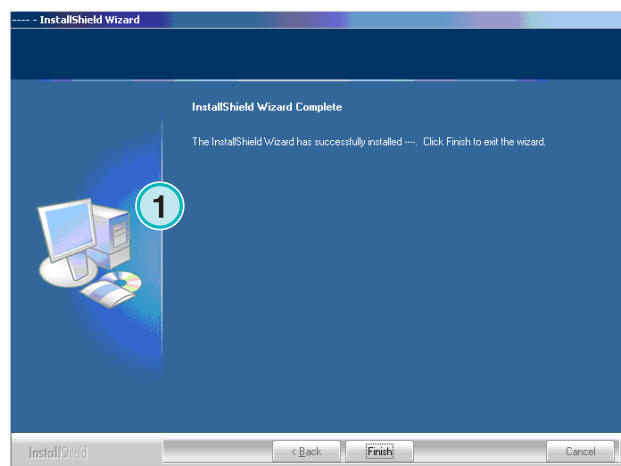
Advanced users may prefer the “Custom” **(2)** mode for setup where the available options can be configured in detail.



Press [Next] to begin installing the files.



The software is installed! Click the checkbox **(1)** if the driver for the hardware key should be installed. This is mandatory if the software is installed for the first time. Continue with [Next].



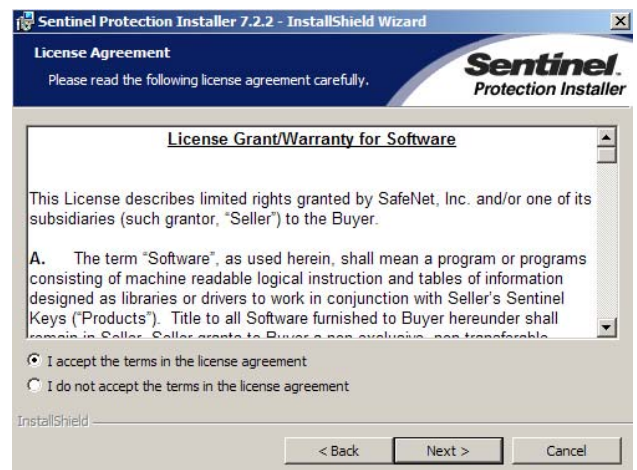
2.3 Installing the Dongle Driver

If at the end of the installation routine the option “Install Sentinel dongle driver” is selected, the dongle driver installer is started.

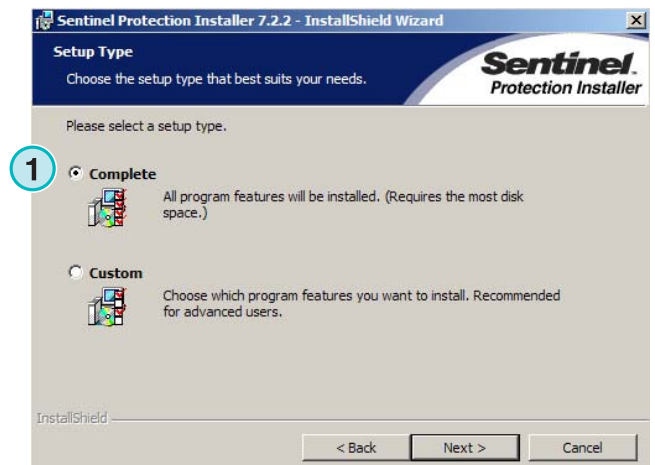
Continue with [Next].



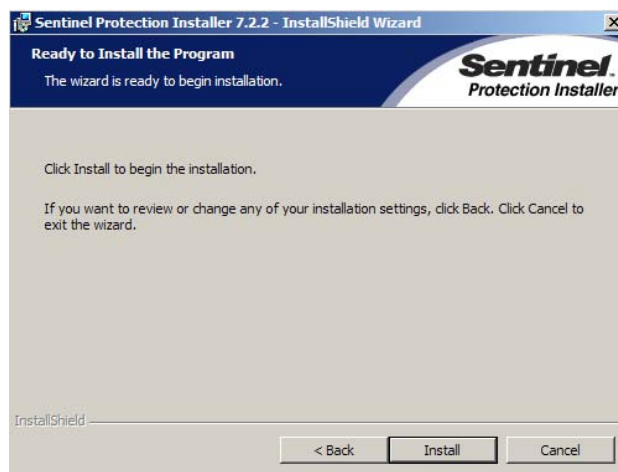
Read the license agreement carefully. To continue press [Next].



As setup type select “Complete” (1) and continue with [Next].



Click [Install] to begin the installation of the dongle driver files.

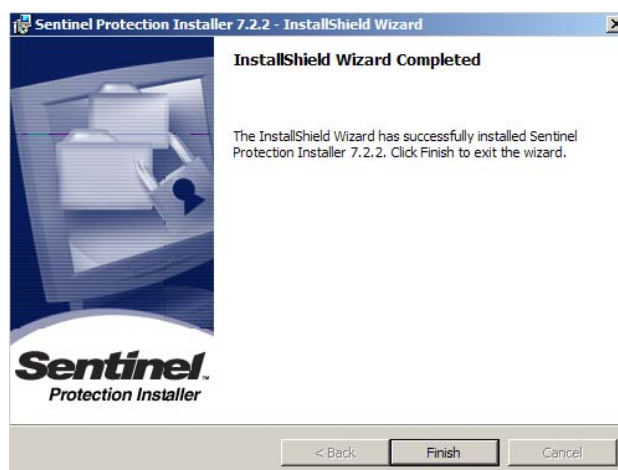


The installer will ask if the dongle driver should be installed in server mode.

Click [No] to disable this feature.



The dongle driver is installed!



2.4 Install the license file

The product package contains a license CD with the license file for the delivered dongle. Copy the license file, a file with the extension lcc , to the program directory, the directory where the program exe file has been installed.

Note

A hardware dongle has an own unique configured license file.



2.5 Program icons

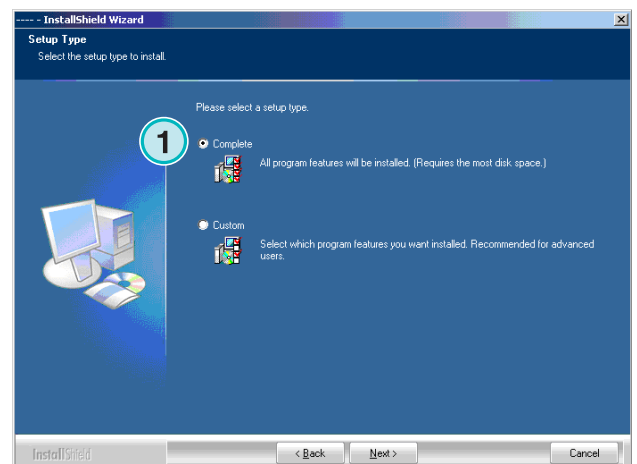
A program icon is placed on the desktop and in the Start Program menu **(1)**.



2.6 Default directories in “Complete” setup mode

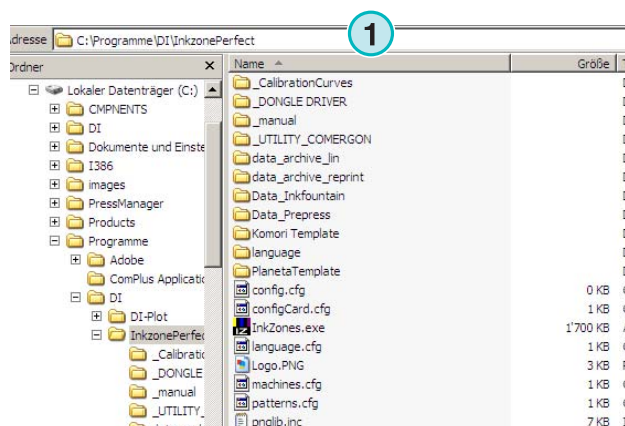
Various directories are created when the installer runs the “Complete” **(1)** setup routine:

- An archive directory for printed jobs
- An input directory for CIP4/JDF files
- An output directory for ink preset data
- Program specific directories for calibration curves, the linearization wizard etc.



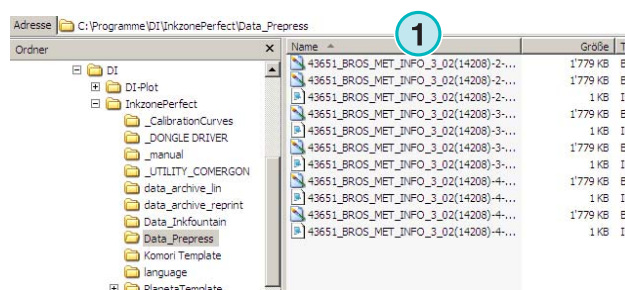
2.6.1 Default installation path in “Complete” setup mode

The default path to the program directory is shown in the image (1).



2.6.2 Default input path for CIP4/JDF data

The input directory for CIP4/JDF files is positioned here (1) by default. The JDF files are created by the other software product which is supplied with this package.

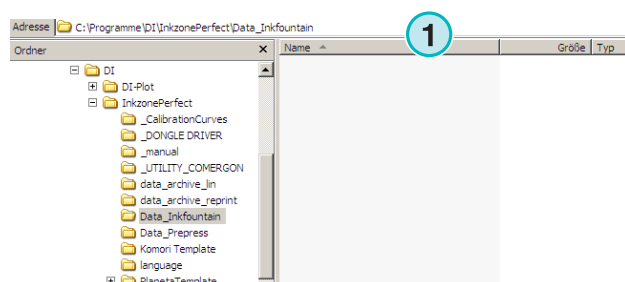


Install that program by launching from the AutoStart function.



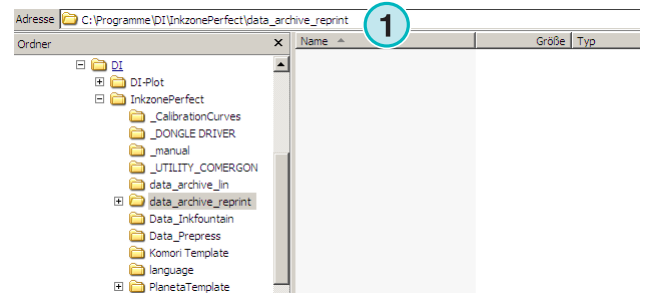
2.6.3 Default output path for ink preset files

Depending on which preset format is used, the software will either output to a directory, or directly to a connected hardware device like a device or a media emulator. The output directory can reside on the computer running the program, or on the network as a shared network folder. The default path to the output directory for ink preset files is shown in the image (1).



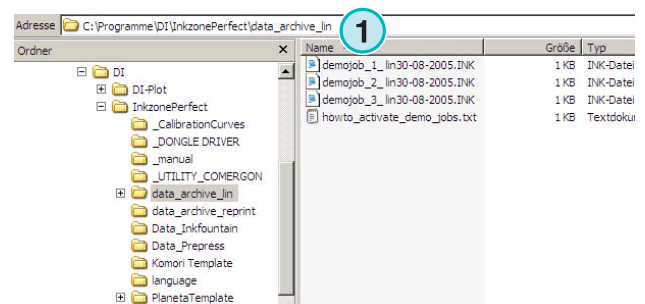
2.6.4 Default path to the job archive

The default directory for the job archive is positioned here **(1)**. The software places the archive files in subfolders, which assists the user in keeping the archive organized.



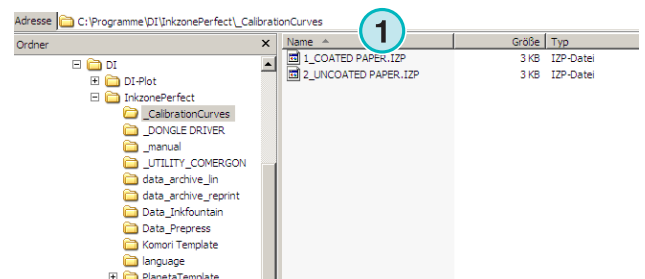
2.6.5 Default path for linearization jobs

When creating calibration curves with the linearization wizard, the job's data are stored in this directory **(1)** by default.



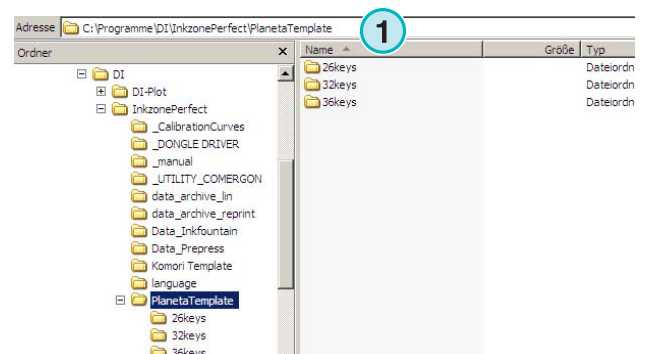
2.6.6 Default path for the calibration curves

The calibration curves are stored in this directory **(1)** by default.



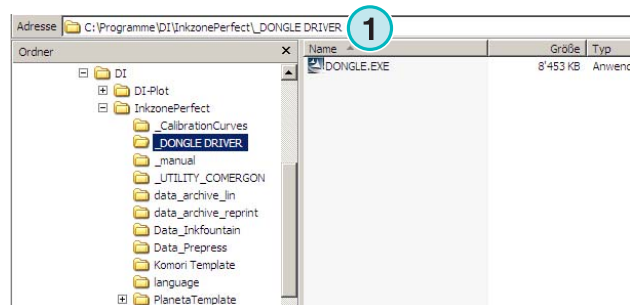
2.6.7 Default path for Planeta Varimat templates

All the templates for the Planeta Varimat printing press console, are stored in this directory **(1)** by default.



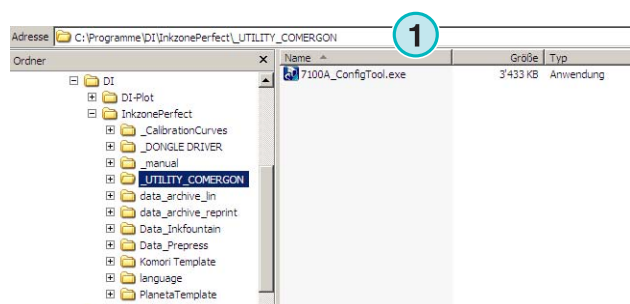
2.6.8 Default path for the Sentinel Dongle driver installer

To rerun the Sentinel dongle driver installation, select the dongle.exe installer from this directory (1).



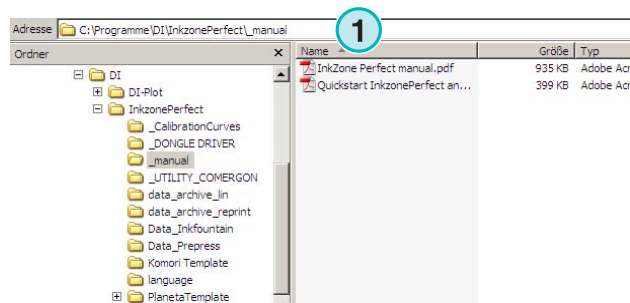
2.6.9 Default path to the Ethernet to RS232 converter

For connecting a media emulator, like the Heidelberg flash card emulator, to the network, a RS232 to Ethernet media converter is used. Its IP address and serial communication parameters are configured by running the configuration installer, which is located here (1).



2.6.10 Default path to the user and administrator manuals

The documentations for using the product are installed in this directory (1).

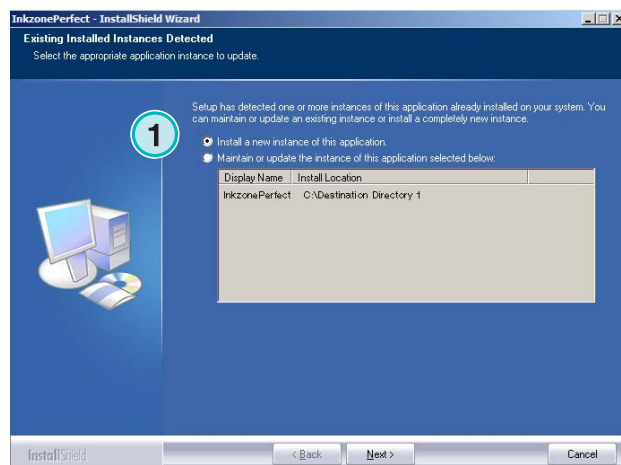


2.7 Multiple program installation

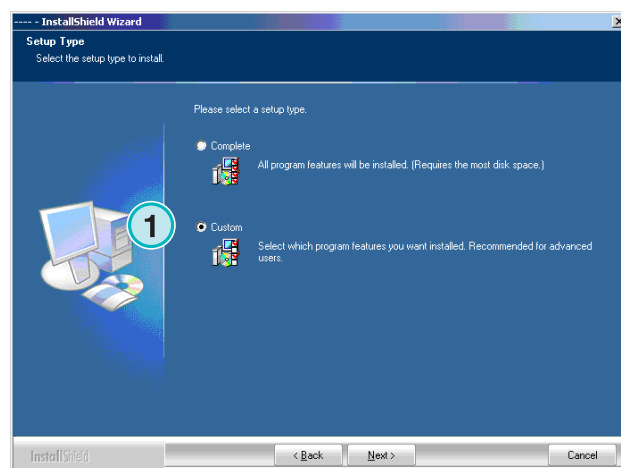
The software's architecture makes it possible to install the program several times in different directories. Each of these instances can be configured individually and run in parallel at the same time.

To install an additional instance, run the installer again and choose the first option **(1)**.

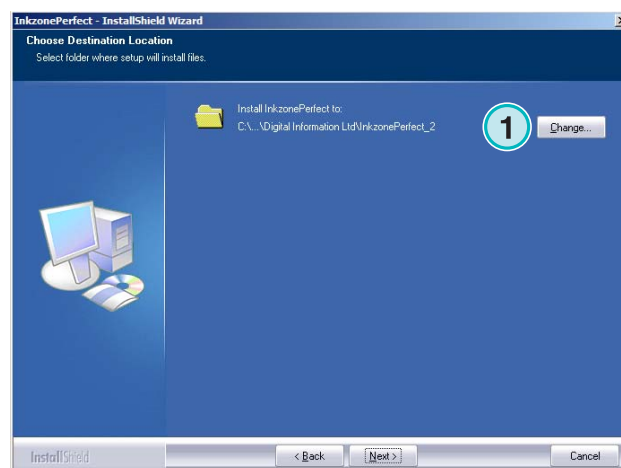
Press [Next] to continue.



In this window, select the second option “Custom”(1).



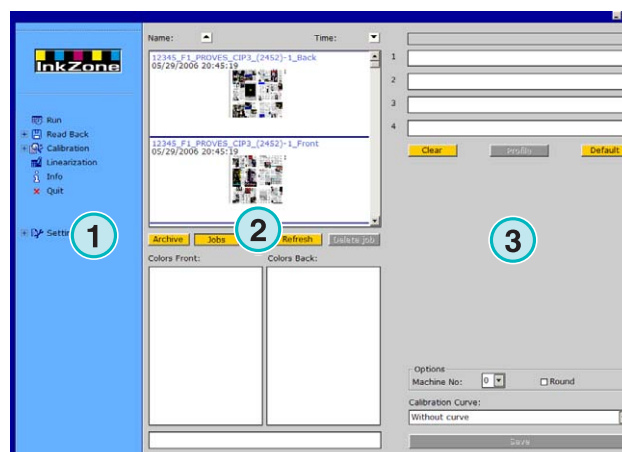
Now you can choose an individual installation directory **(1)** and continue with the installation as shown in the previous steps. At the end of the installation, an additional program icon is on the desktop.



3 User Interface

3.1 Short overview

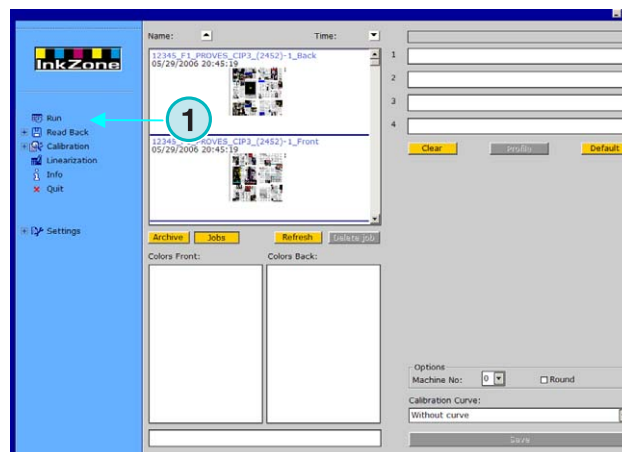
When launching the program, this user interface is displayed. The column on the far left of the panel **(1)** is used for navigation. The center area **(2)** displays all jobs currently available, with their color separations underneath. The section on the right represents the virtual printing press **(3)**.



3.2 Menu structure

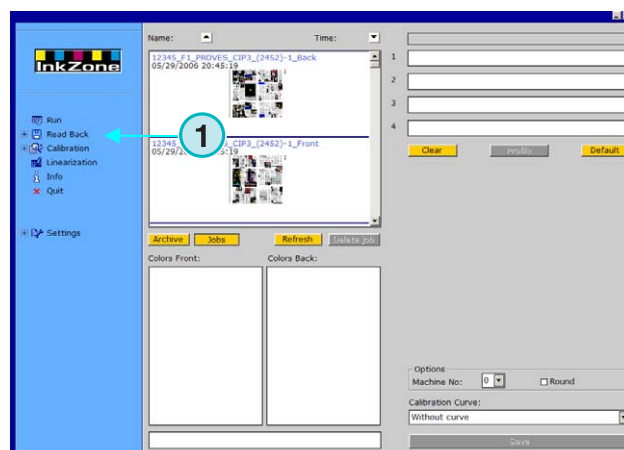
3.2.1 Run window

The first item on the navigation menu **(1)** opens the Run window, which is the user's work place. It is the default window when launching the software. That's where the user selects the jobs and curves, from where he transfers them to the press console.



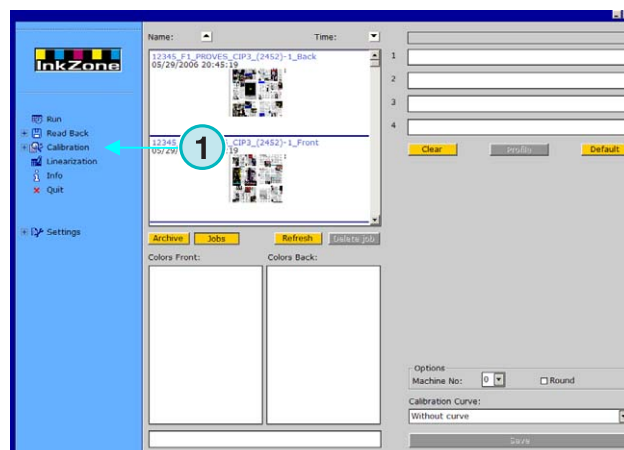
3.2.2 Read back

The second item **(1)** activates the Read Back function, which is used for storing the data of a printed job. These data can be selected for reprints, or for optimizing the calibration curves with the linearization wizard.



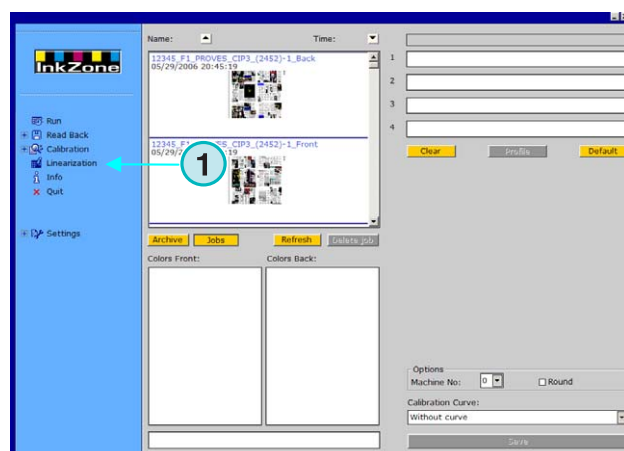
3.2.3 Calibration

The third item **(1)** opens the Calibration control panel. With this tool new calibration curves are created or existing ones adjusted.



3.2.4 Linearization

The forth item **(1)** starts the linearization wizard. The wizard is used for creating and optimizing curves, which are based on the information of printed jobs.



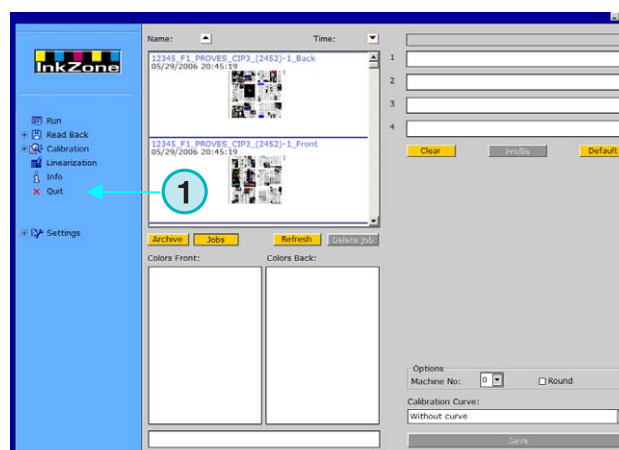
3.2.5 Info

Select this item for opening the Info **(1)** window, which displays information on the software version currently installed.



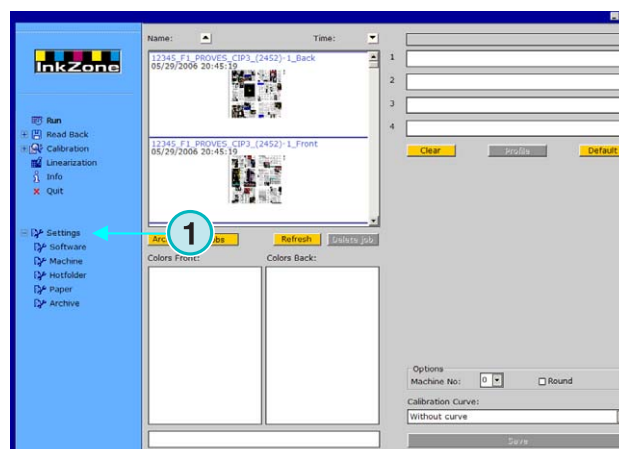
3.2.6 Quit

Exit the program by clicking this item **(1)**.



3.2.7 Settings

Select this item **(1)** to open the control panel for setting all configuration parameters



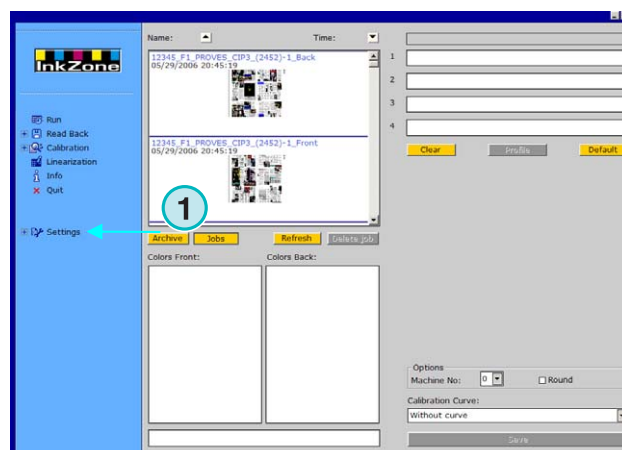
4 Basic Configuration

4.1 Appearance

The parameters specific to each ink preset format are configured by several control panels. They can be accessed through this menu (1).

How the options appear in the menu (1) is dependent on the ink preset format selected. Which of the ink preset format can be selected is dependent on the dongle license file.

An overview on the options available for each ink preset format can be found in the document [Ink_preset_output_formats.pdf](#).



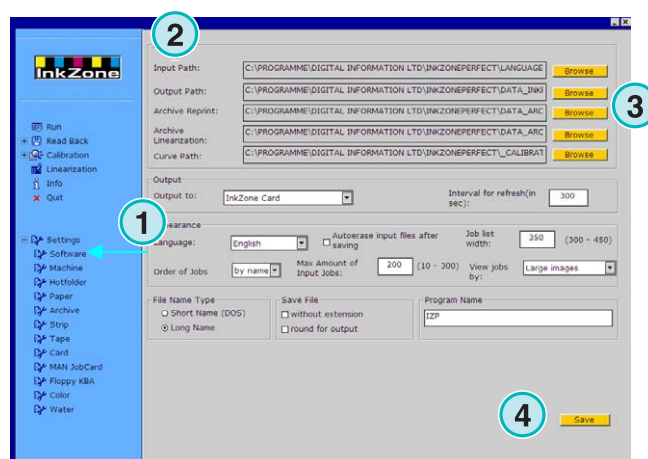
All control panels used by the software are described in the following sections.

4.2 Menu Software

4.2.1 Setting up the paths

For configuring the basic parameters, select this panel from the Settings menu (1). The five path directories can be selected here (2):

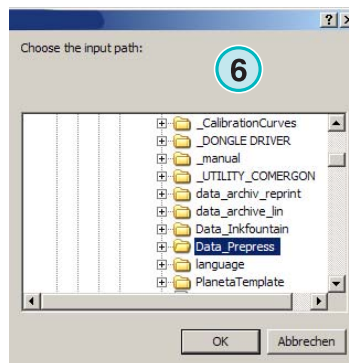
- 1.) Input path: directory for the input files containing the ink preset data.
- 2.) Output path: destination directory for the ink preset data format.
- 3.) Archive Reprint: directory for the archived jobs.
- 4.) Archive linearization: directory for the data needed by the Calibration Wizard
- 5.) Curve path: directory for the calibration curves.



Select a path by clicking on its button (3).

Save it by selecting the button (4).

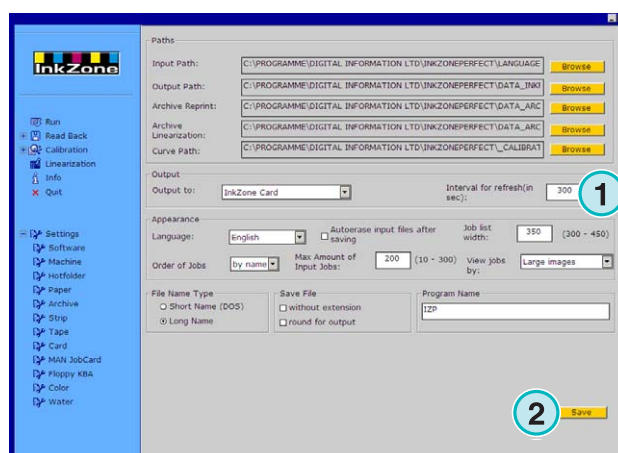
In the same window, a new dialog panel (6) pops up where the path can be set.



4.2.2 Refresh Intervall

In this field (1), a time interval for refreshing the job list can be set.

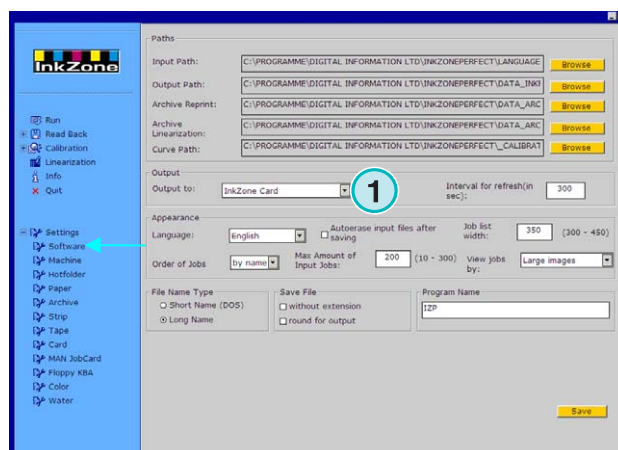
Use the button on the bottom right (2) to store the current settings.



4.2.3 Define the Output format

Select (1) the ink preset data format for the press console used.

Depending on the format, different configuration options are available in the navigation section. Detailed information which options are available with each press console format can be found in the document "Ink_preset_output_formats.pdf".



4.2.4 Configuring the Appearance

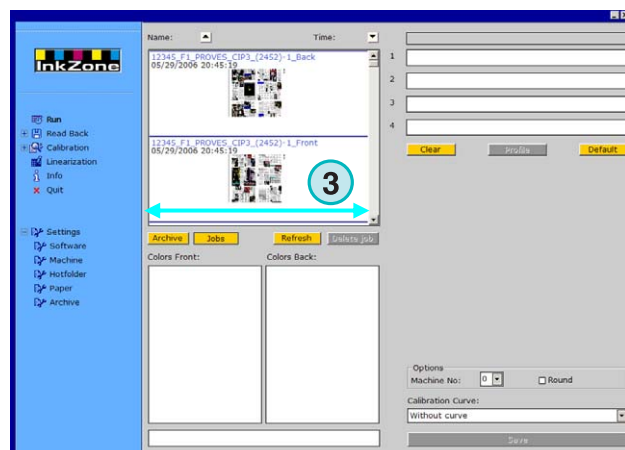
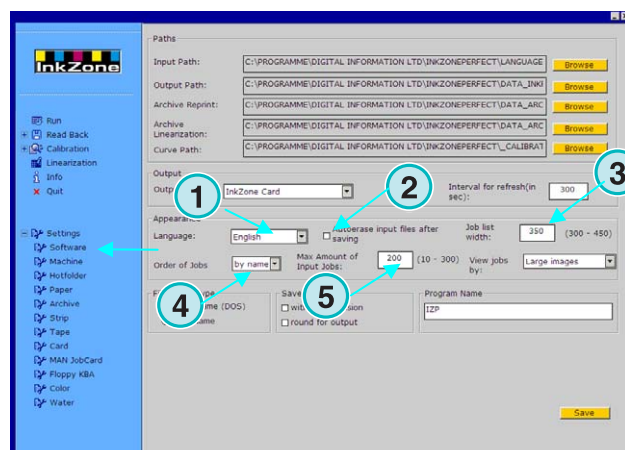
Select the language for the user interface (1).

When this checkbox (2) is activated, the software deletes an input file after the job has been transmitted to the press console.

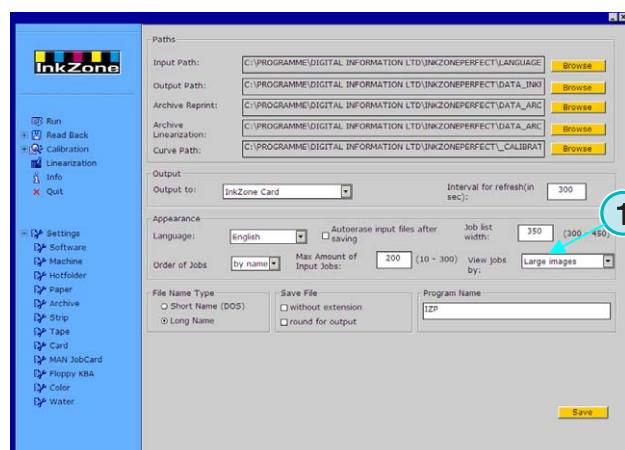
Set the width of the job list (3). A value between 300 to 450 pixels can be set. Depending on the monitor resolution setting, the value has to be adjusted.

Select (4) the order in which the jobs appear in the job list, either by name or by date.

To prevent the input folder from overflowing, a maximum number of input jobs can be set (5). When it is reached, the oldest job is deleted.



Select in which order the jobs are displayed in the Run window (1). They can be sorted in three ways:



- (1) Large preview
- (2) Small preview
- (3) No preview

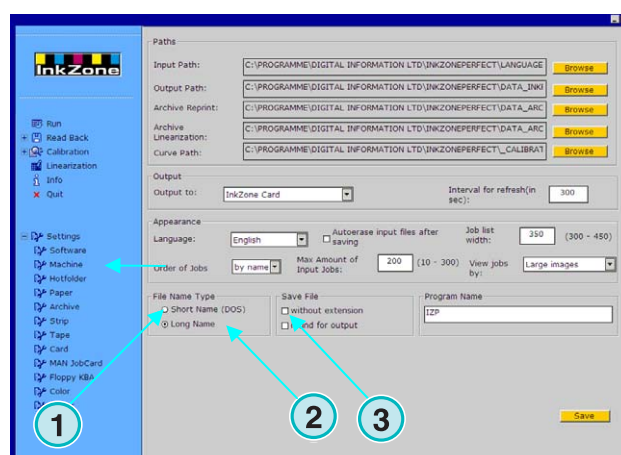


4.2.5 File name treatment during export

If the ink key data format for output is based on a file format, select this radio button **(1)** if the file name should be shortened according to the MS-DOS 8+3 name convention. Use it, when connecting to a console running on a MS-DOS based system.

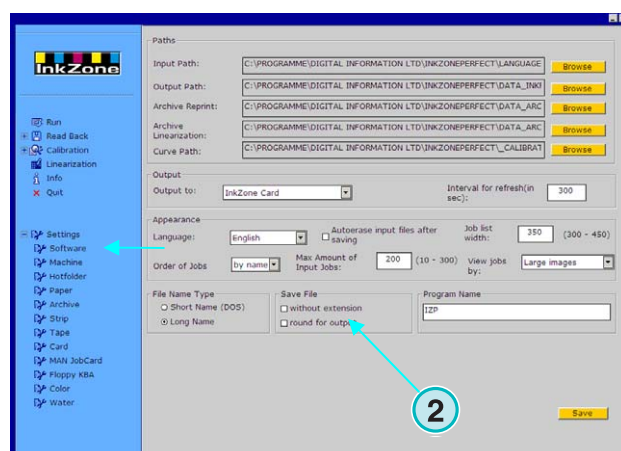
Use the default setting **(2)** to output a job with its unchanged long name.

Enable the checkbox **(3)** to store data without any file extensions like *.ink.



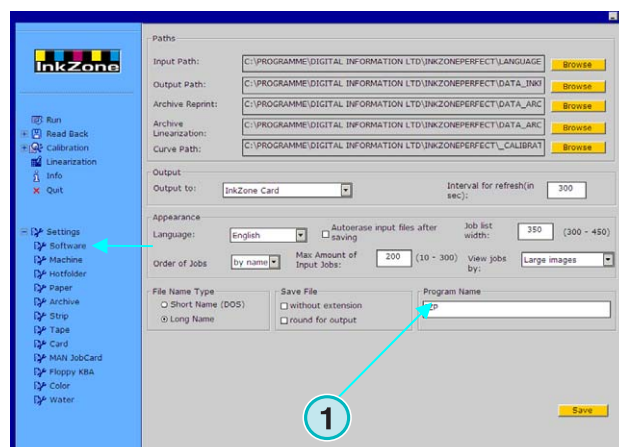
4.2.6 Rounding the output values

Click the second option **(2)** to round ink values to the next full number. Example: 4.3% will become 4.0 %. Some consoles accept whole numbers only.



4.2.7 Individual program name

If several instances of the program are installed, each instance can carry its own independent name. Change the name here **(1)**, and it will be displayed in the task bar.



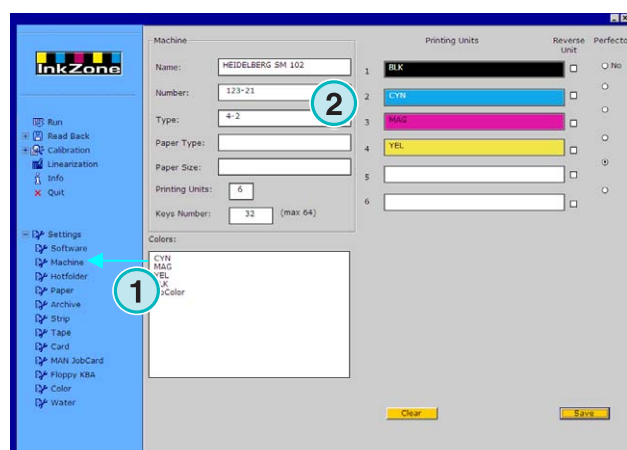
4.3 Menu Machine

4.3.1 Defining the printing press

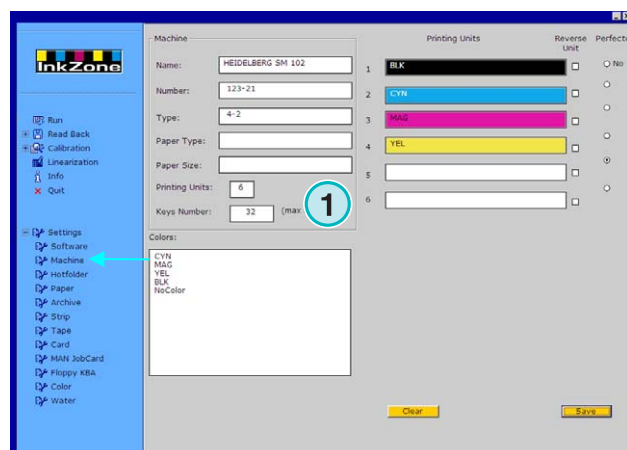
Open the Settings menu and select the second item **(1)**. In this panel, define the basic settings relating to the printing press **(2)**:

- 1.) Enter the name of the press
- 2.) Enter a number for the press (*)
- 3.) Enter the type of the press (*)
- 4.) Enter the paper type used (*)
- 5.) Enter the paper size used (*)

(*) Some press console formats require a press number within the ink preset format. For detailed information see the included file "Ink_preset_output_formats.pdf"



Enter the number of printing units and the number of ink slides per unit in these two fields **(1)**.



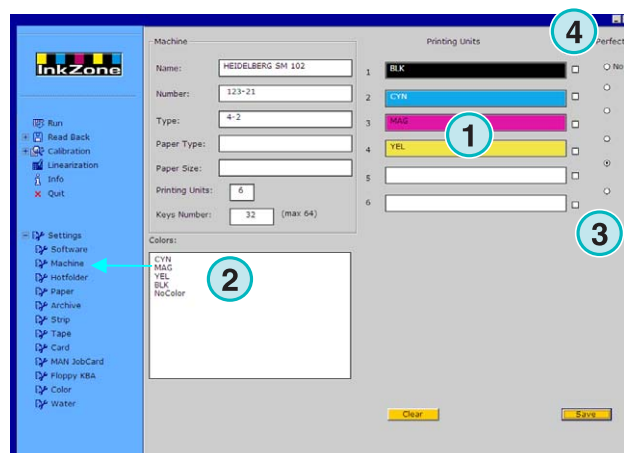
The bars on the panel's right hand side represent the color sequence on the printing press (1). Drag and drop each color from the color field (2) to the printing unit section (1).

Note

If a unit is dedicated to a spot color, leave it blank.

If the printing press is equipped with a perfector, click one of the check boxes accordingly (3).

If the press is equipped with a reverse unit on which the key position is mirrored, click the check box on the unit (4).



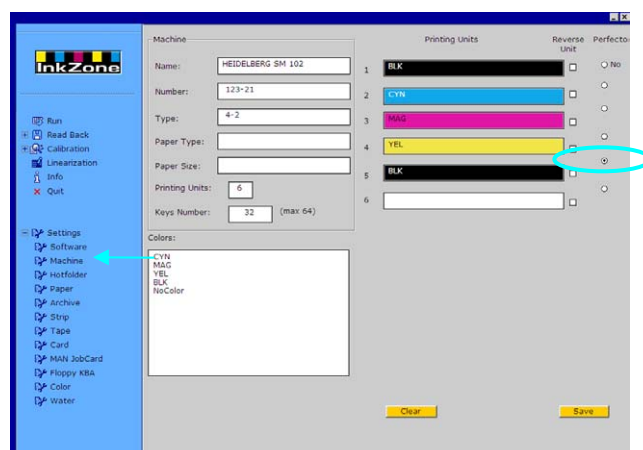
4.3.2 Example 1: 6 color press

Press with 6 units, perfector for printing 4 over 2

Unit 1 to 4 = KCMY,

Unit 5 = Black,

Unit 6 = Spot color



4.3.3 Example 2: 10 color press

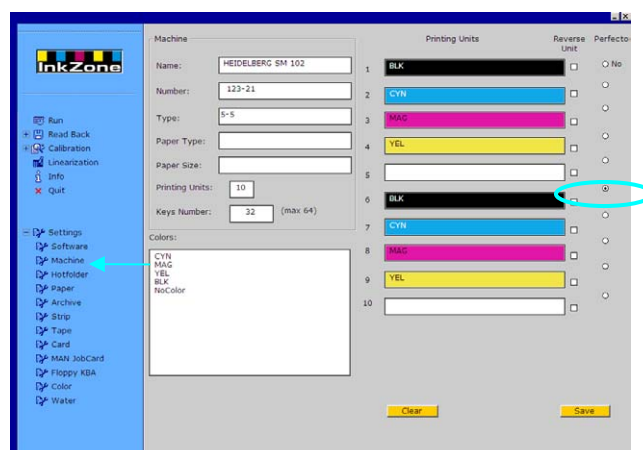
Press with 10 units, perfector for printing 5 over 5

Unit 1 to 4 = KCMY,

Unit 5 = Spot color,

Unit 6 to 9 = KCMY,

Unit 10 = Spot color,



4.4 Menu Hotfolder

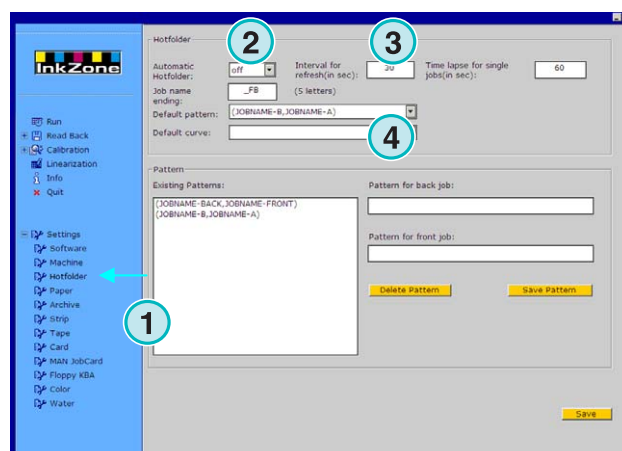
4.4.1 Common parameters

Open the Settings menu and select the third item (1). On this panel, set all parameters related to running the software in a fully automatic hotfolder mode.

Enable the hotfolder mode here (2).

Set a value in seconds for refreshing the input folder (3): according to this interval the folder will be rescanned regularly for incoming jobs.

Select a calibration curve (4) according to the paper used.



4.4.2 Front/Back side jobs in Hotfolder mode

The software is able to pair a single front side job with a single back side job, depending on the file name structure. When doing so, the job names must carry front and back side indicators at the end of their name.

Common front side indicators are _1A, _2A, _Front
Common back side indicators are _1B, _2B, _Back

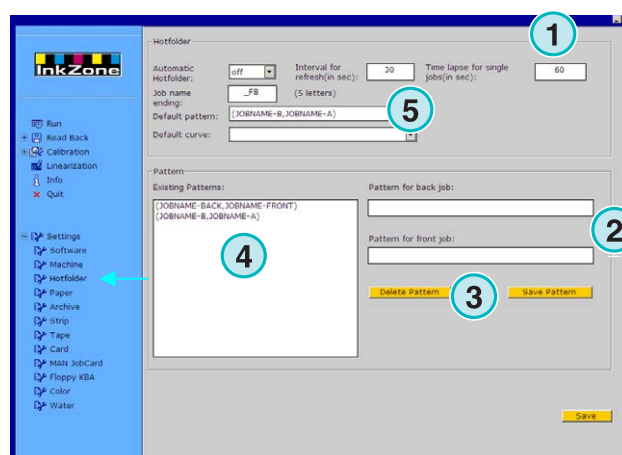
This value (1) is the timeout for the back side, which means “How long should the software wait for the back side to arrive until the job is treated as single sided”.

Set the name indicator for the front and back side here (2). A valid entry would be _F for front, and _B for back. Add or delete the name patterns with these buttons (3). The patterns / indicators will be listed here (4).

Select from this list box (5) the front / back indicator for your workflow. These indicators are read from the existing pattern / indicator list (4).

Note

If the output in Hotfolder mode consists of jobs with combined front and back sides in one file, it is recommended to feed the software with CIP3 files of the same configuration.



4.5 Paper menu

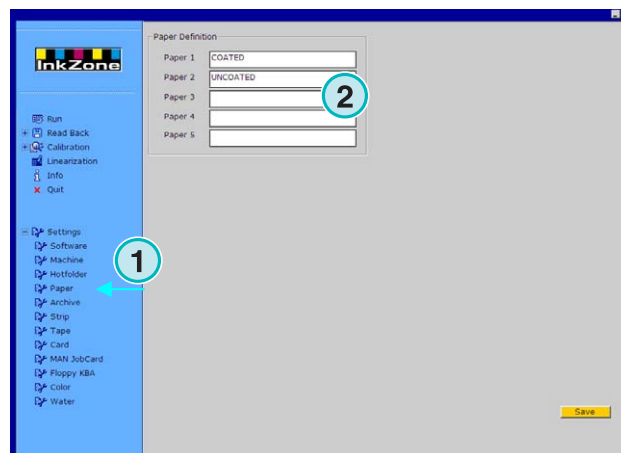
4.5.1 Paper type definition

Select the forth item (1) to define the paper types most used on the printing machine.

Enter the names here (2).

Note

The names will only be used by the Linearization Wizard.



4.6 Menu Archive

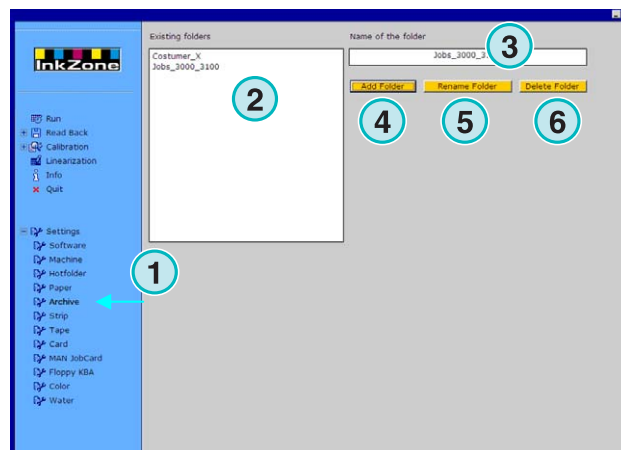
4.6.1 Organize the archive

The archive is organized on a directory tree structure: the subdirectories branch out from the root directory.

The subdirectories can be arranged in the archive setup panel.

Open the archive setup panel by selecting it from the menu Settings, where it is listed as the fifth item (1). All available directories are listed here (2).

- Add a new archive:
 1. Enter the archive's name here (3)
 2. Press button (4)
- Rename an existing archive:
 1. Select the archive (2)
 2. Press button (5)
 3. Change the archive's name (3)
- Delete an archive:
 1. Select the archive (2)
 2. Press button (6)



4.7 Menu Strip

4.7.1 What it is used for

Note

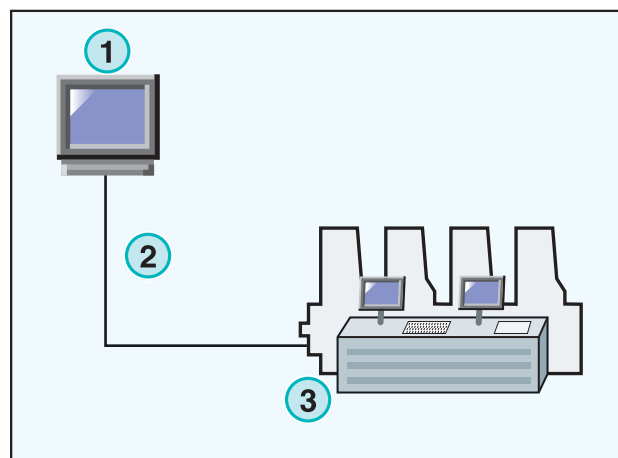
The Strip menu is only available if the license key is enabled for outputting to a magnetic strip device.

Some older press consoles (made at the beginning of the nineties) are equipped with a magnetic strip reader for receiving the ink preset data calculated by a plate scanner etc.. Typical presses are: Akiyama, Komori, Mitsubishi, etc.

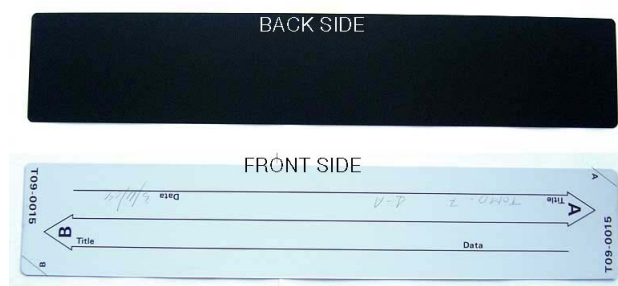
Such consoles can be integrated in the workflow by a magnetic strip emulator. It is connected to the software's RS232 serial interface.

On such a console, the magnetic strip reader's data cable is unplugged and connected to the emulator. Now the console can be fed with ink preset directly through the network.

- (1) PC with software
- (2) Ethernet connection to Magnetic Strip Emulator
- (3) Console/Press



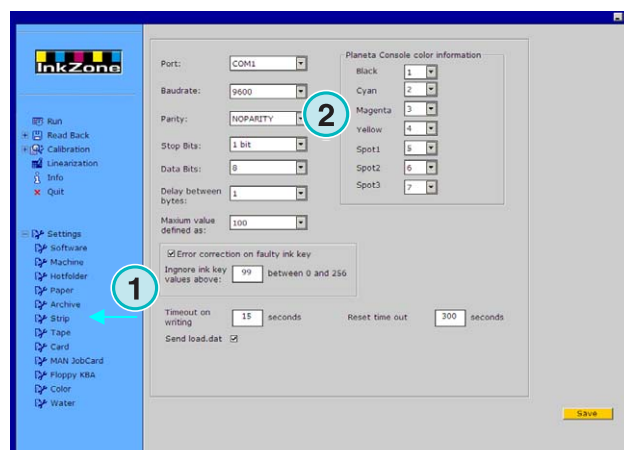
A magnetic strip medium is shown on the right.



4.7.2 Communication parameters

From the menu Settings, open the menu Strip (1).
Set the RS232 communication parameters (2) as follows:

- Baudrate = 9600
- Parity = No parity
- Stop bits = 1
- Data bits = 8
- Delay between bytes = 1



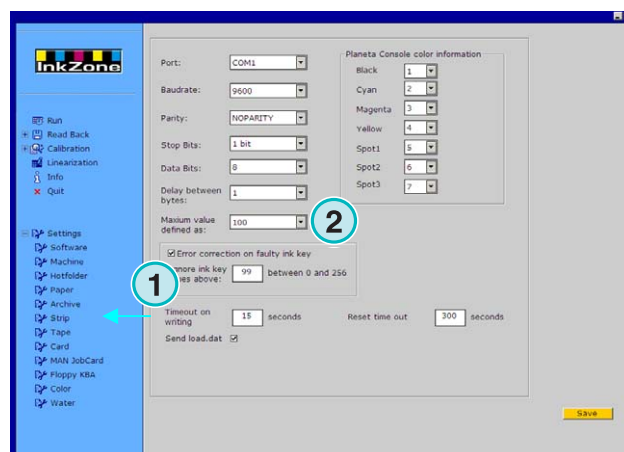
4.7.3 Maximum ink slide values on the console

Normally, the 100% opening of an ink slide on the press corresponds to the logic value of 100 on the console.

On some presses, the 100% opening corresponds to a value of 256. To take this ratio into account, change the value in field (2) to 256.

Note

An indication to this problem is when the values transmitted from the software to the emulator fall constantly short by the factor of around 2.5.



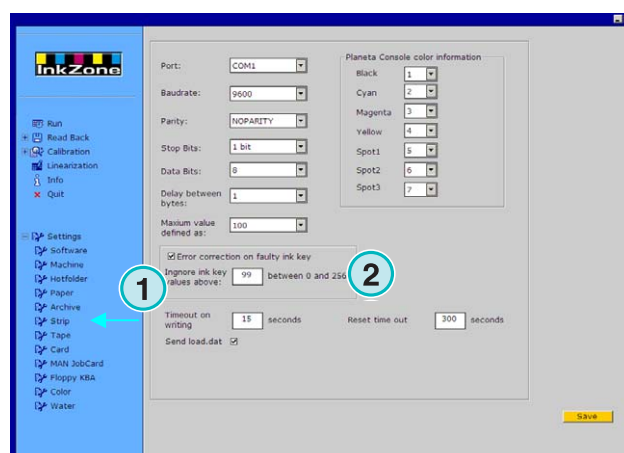
4.7.4 Receiving erroneous ink slide values

Ink slide profiles originate from an OK sheet; they are reused for reprint and for linearization.

Occasionally it can happen that an ink slide motor on a press is defective. Such an ink slide may report a value of 99 or higher. On press consoles which use a maximum of 256, the reported value may be 255 or higher.

The software can be set to ignore such values, in order to gain correct archive and linearization data.

Activate the checkbox (2) and enter a trigger value of 99 or 254, according to the system used on the console.

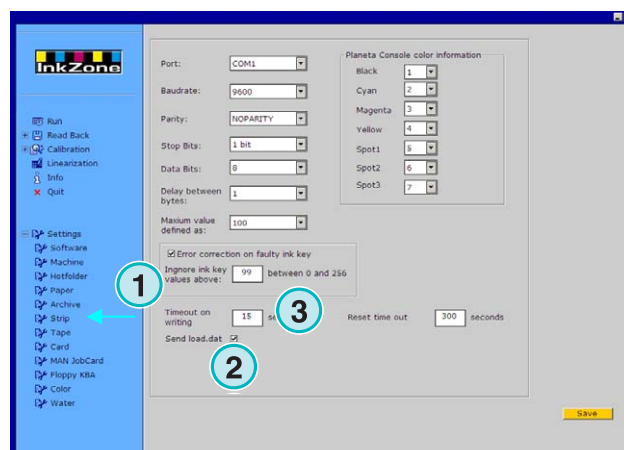


4.7.5 Sending program code with each job

By activating this checkbox (2), a hardware program code is sent to the emulator. Set the timeout for sending such data (3) to 15 seconds.

Note

This mode is disabled for standard use.

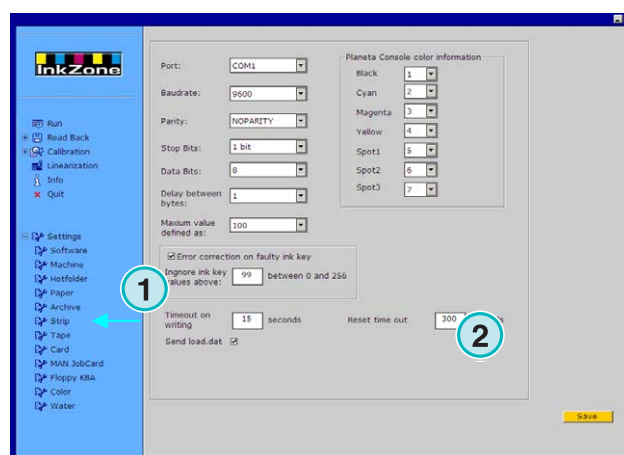


4.7.6 Resetting the communication port

Set a value in seconds (2) before the communication process is reset. This avoids problems on the local PC workstation.

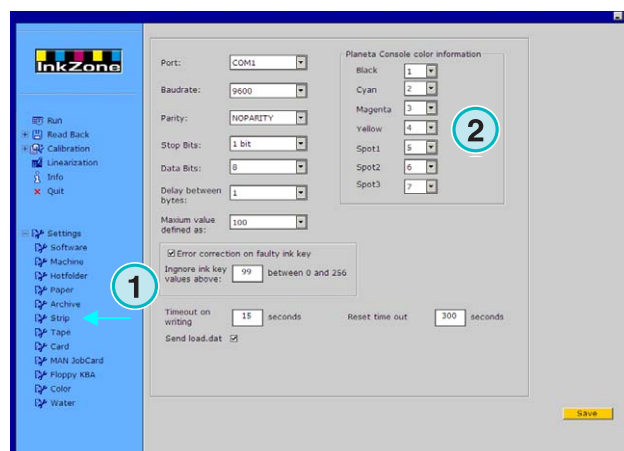
Note

Enter values not lower than 300.



4.7.7 Numeric color information for the press console

At the console, the received color names are identified with a specific numbers. The numbering can be assigned to seven colors: the four basic process colors black, cyan, magenta and yellow, plus three additional spot colors (2).



4.8 Menu Tape

4.8.1 What it is used for

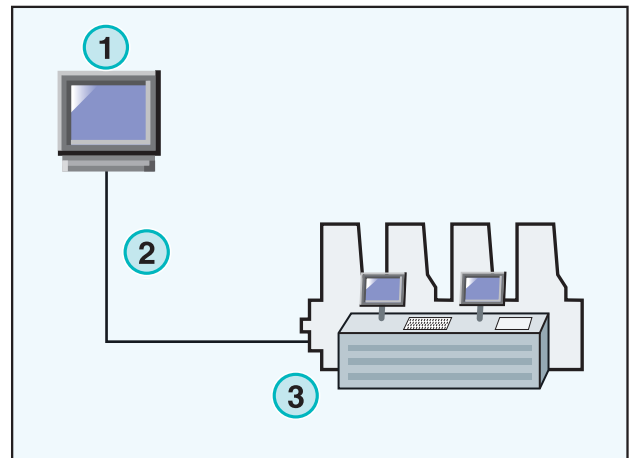
Note

The Tape menu is only available if the license key is enabled for outputting to a magnetic tape device.

Some older press consoles (made at the beginning of the nineties) are equipped with a digital cassette tape drive for receiving ink preset data (calculated by a plate scanner etc.). A typical press is the Planeta Varimat with a Fuji console.

Such consoles can be integrated in the workflow by a tape drive emulator. It is connected to the software's RS232 serial interface.

On such a console, the magnetic strip reader's data cable can be unplugged and connected to the emulator. Now the console can be accessed directly through the network.



(1) PC

(2) Ethernet connection to Tape Emulator

(3) Console/Press

A digital tape cassette is shown on the right.

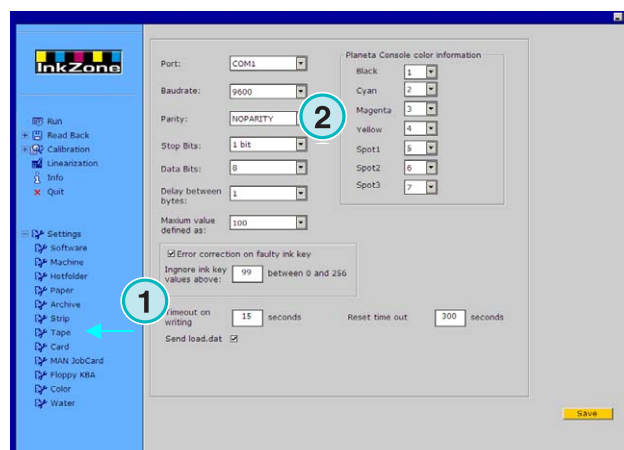


4.8.2 Communication parameters

Open the Tape control panel (1) by selecting it from the menu Settings.

Set the RS232 communication parameters (2) as stated below:

- Baudrate = 9600
- Parity = No parity
- Stop bits = 1
- Data bits = 8
- Delay between bytes = 1



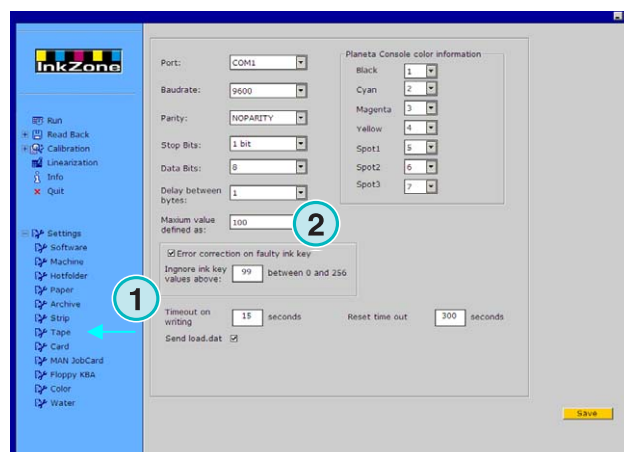
4.8.3 Maximum ink slide values on the console

Normally, the 100% opening of an ink slide on the press corresponds to the logic value of 100 on the console.

On some presses, the 100% opening corresponds to a value of 256. To take this ratio into account, change the value in field (2) to 256.

Note

An indication to this problem is when the values transmitted from the software to the emulator fall constantly short by the factor of around 2.5.



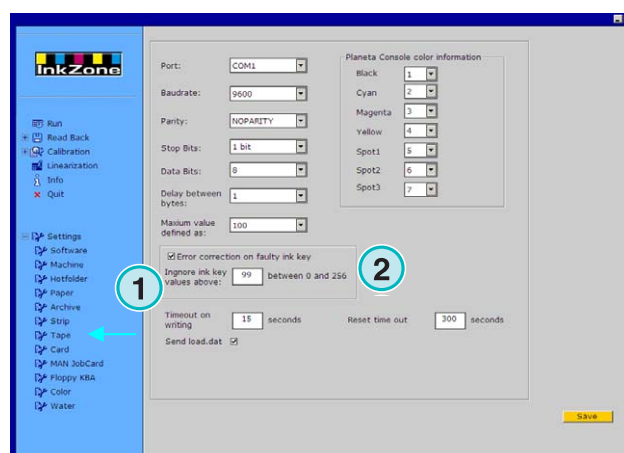
4.8.4 Receiving erroneous ink slide values

Ink slide profiles originate from an OK sheet; they are reused for reprint and for linearization.

Occasionally it can happen that an ink slide motor on a printing machine is defective. Such an ink slide may report a value of 99 or higher. On press consoles which use a maximum of 256, the reported value may be 255 or higher.

The software can be set to ignore such values, in order to gain correct archive and linearization data.

Activate the checkbox (2) and enter a trigger value of 99 or 25, according to the console.

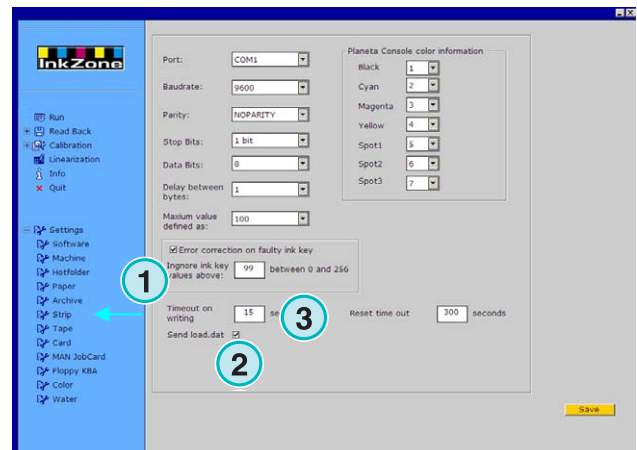


4.8.5 Sending program code with each job

By activating this checkbox (2), a program code will be sent to the hardware emulator. Set the timeout for sending such data to 15 seconds (3).

Note

This mode is disabled for standard use.

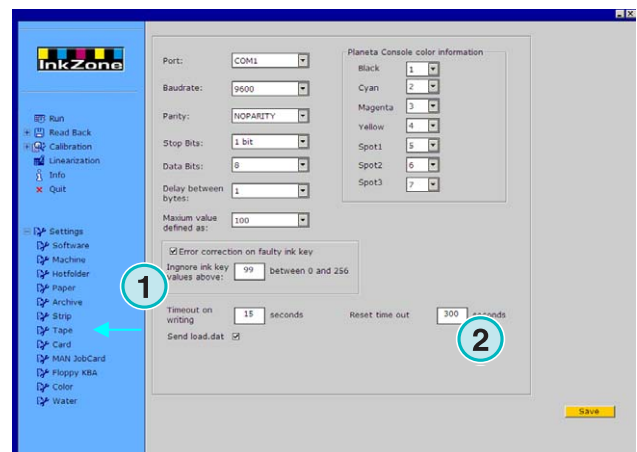


4.8.6 Resetting the communication port

Set a value in seconds (2) before the communication process is reset. This avoids problems on the local PC workstation.

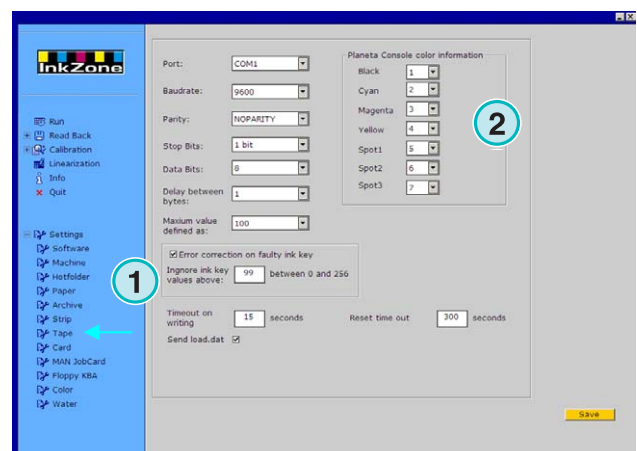
Note

Enter a value not lower than 300..



4.8.7 Numeric color information for the press console

At the console, the received color names are identified with a specific numbers. The numbering can be assigned to seven colors: the four basic process colors black, cyan, magenta and yellow, plus three additional spot colors.



4.9 Menu Card

4.9.1 What it is used for

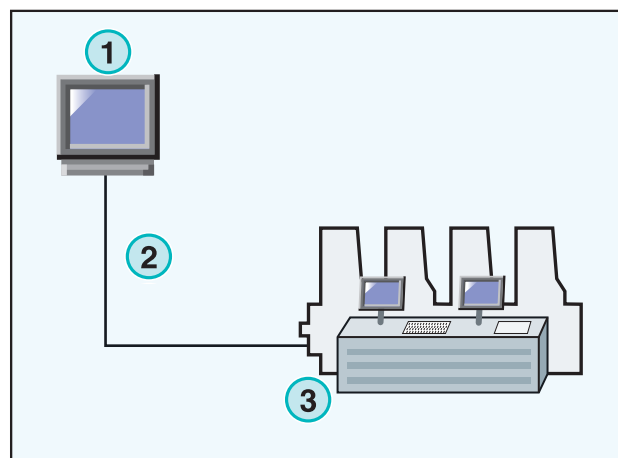
Note

The Menu Card is only available if the license key is enabled for outputting to a flash card or a job card emulator device.

On the Heidelberg CP2000, CP1.02, CP1.03 and CP1.04 consoles a flash card reader is used for reading in the ink preset data. On most MAN Roland consoles a chip card reader is used instead.

On such consoles, the card emulator is inserted in the card reader instead of the card. The emulator is connected to the network through Ethernet and the TCP/IP protocol.

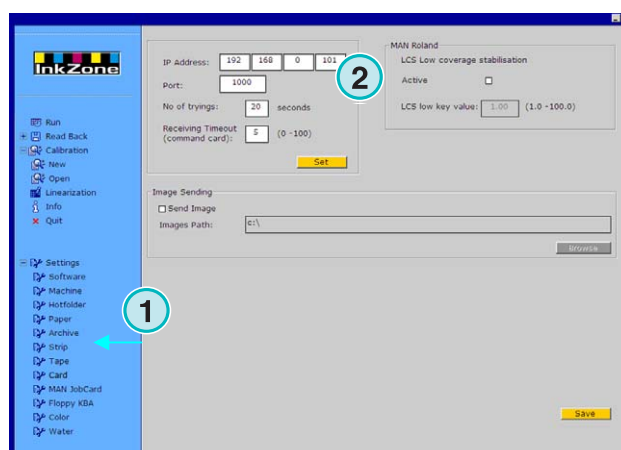
- (1) PC with the software
- (2) Ethernet connection to the Flash Card Emulator
- (3) Console/Press



4.9.2 Communication parameters

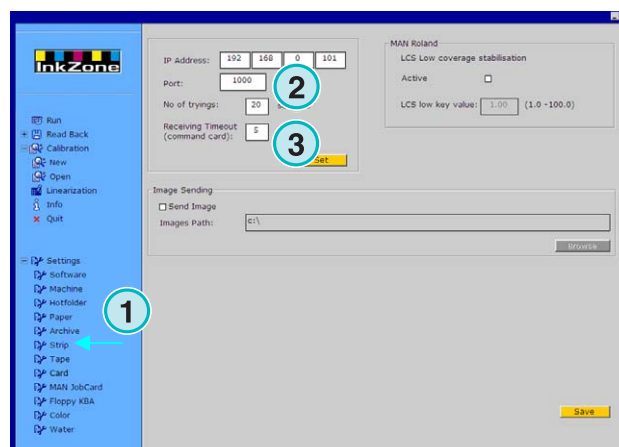
Open this panel by selecting it from the Menu Settings the entry (1).

Enter the emulator's IP address and port number here (2).



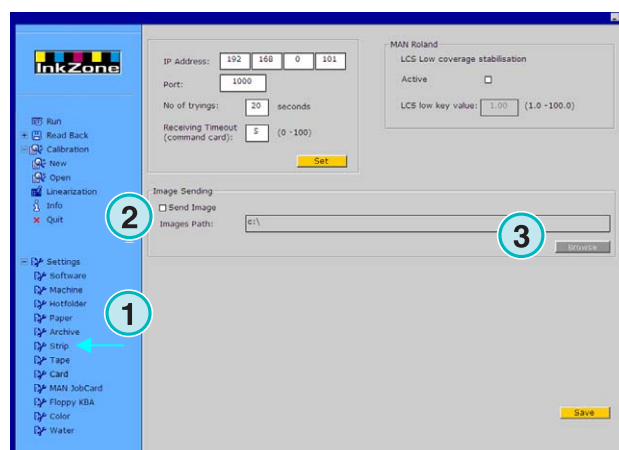
4.9.3 Additional communication settings

This function tries to prevent transmission failure in case there is a communication problem. Enter a value for how many times **(2)** the software should try sending the data and for how long it should continue to do so **(3)**.



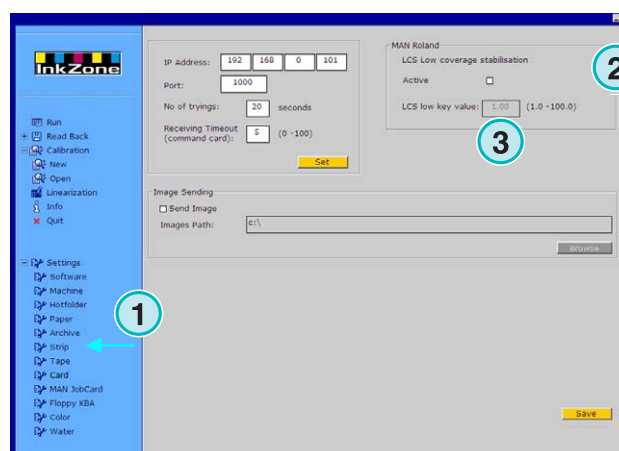
4.9.4 Sending a job's thumbnail picture to a folder

When this checkbox **(2)** is activated, a thumbnail picture of each job will be sent to a folder. Select the path here **(3)**.



4.9.5 LCS settings for MAN Roland consoles

MAN Roland consoles can run a preset mode called LCS. Its used for jobs with very low ink coverage. The function can be enabled by this checkbox **(2)**. Select the minimum ink key opening **(3)** when LCS is active.



4.10 MAN Jobcard menu

4.10.1 What it is used for

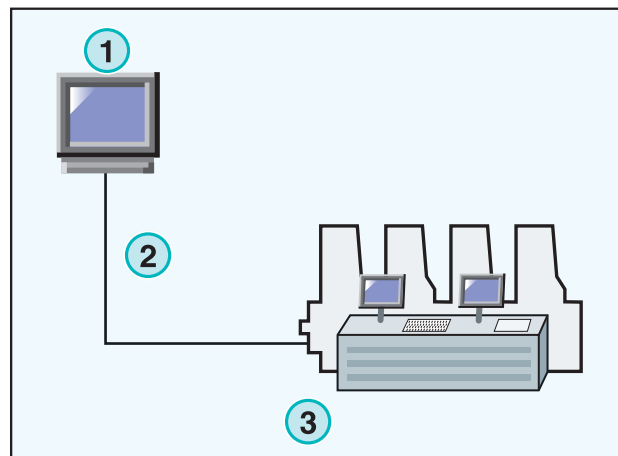
Note:

This menu is only available if the license key is enabled for outputting to a MAN Job Card Reader.

The software can send the data to a MAN Job Card Reader. It is connected through a serial RS232 port to the PC workstation. The Job Card Reader is either placed offline or direct into the press console as an online connection

Online connection

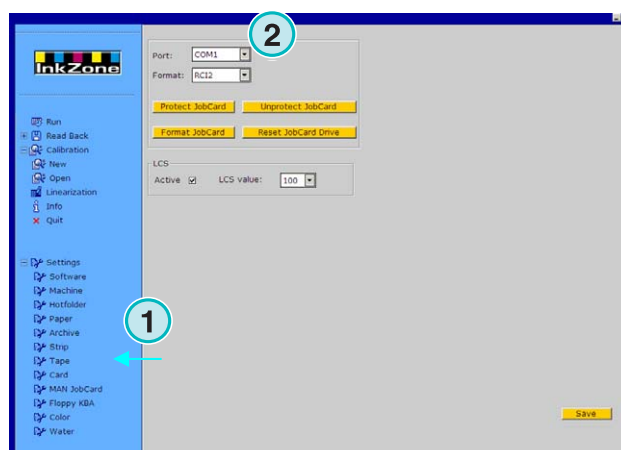
- (1) PC with software
- (2) Verbindung zu Job Card Emulator
- (3) Console/Press



4.10.2 Communication parameters

Open the MAN Jobcard panel from the selected menu (1). Select the menu item to open the control panel.

Select the communication port where the MAN Jobcard writer is installed (2).



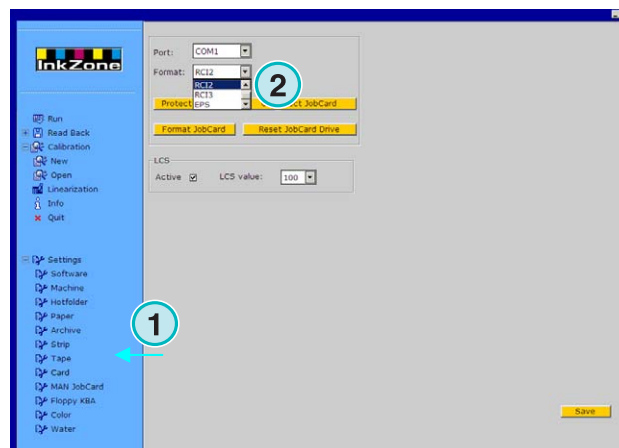
4.10.3 Ink preset format

Select between four formats (2):

- 1.) RCI1
Ink slide data.
- 2.) RCI2
Ink slide data. Standard format for most MAN consoles.
- 3.) RCI3
Ink slide data.
- 4.) EPS
Ink coverage data.

Note

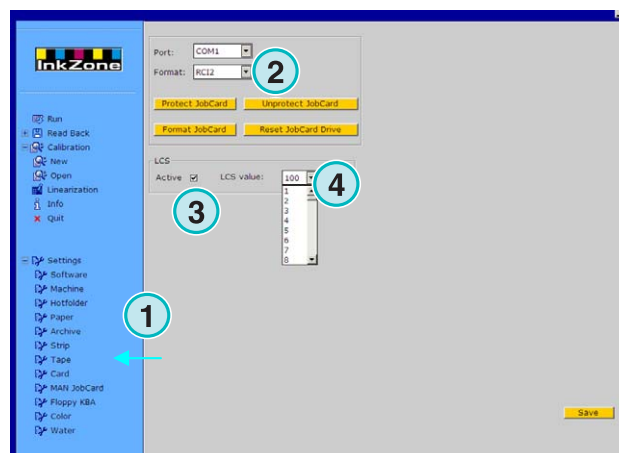
When using the EPS format, the software will bypass any calibration. All calibration issues are handled directly on the press console.



4.10.4 Low ink coverage on RCI output

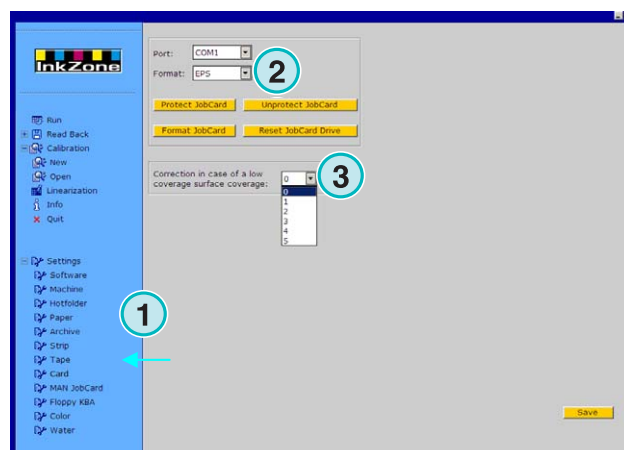
MAN Roland consoles run a LCS preset mode for jobs with low ink coverage.

LCS can only be activated (3), when an RCI format is selected from this check box (2). When LCS is active, select the minimum ink key opening from this list box (4).



4.10.5 Low ink coverage on EPS data

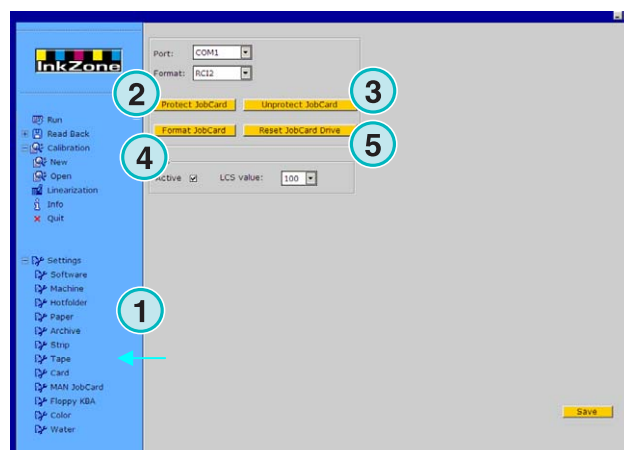
When the EPS format is selected (2), a correction value for jobs with low ink coverage can be selected here (3). The value 0 has no effect on low ink coverage areas. The highest value 5 effects the biggest changes.



4.10.6 Job card functions

Apply following settings to the job card:

- (2) Write protect the job card
- (3) Disable write protection on the job card
- (4) Format the job card
- (5) Reset the job card reader



4.11 KBA E-Floppy menu

4.11.1 How it is used

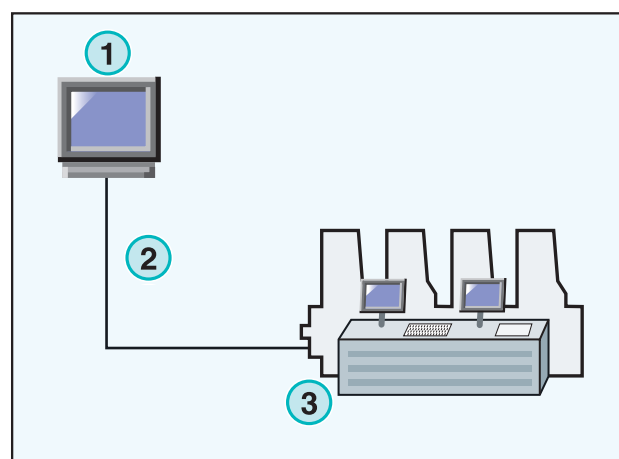
Note

This menu is only available if the license key is enabled for outputting to a KBA E-Floppy.

To bring a KBA console online, a 3.5" floppy drive is emulated.

On the console, the data cable to the 3,5" floppy drive is unplugged and connected to the floppy emulator. Now the console can receive the ink preset data from the PC workstation.

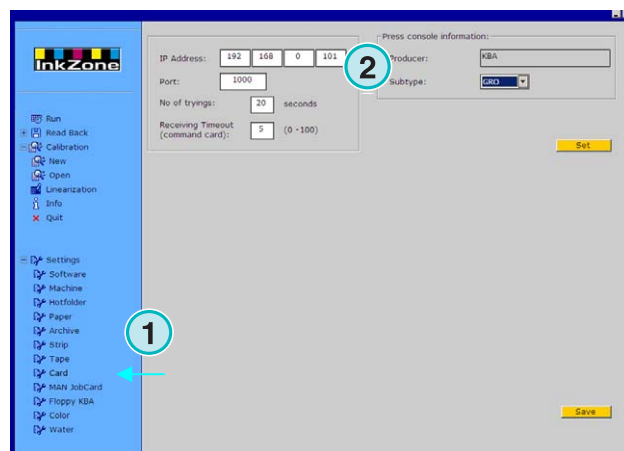
- (1) PC with software
- (2) Ethernet connection to the E-Floppy Emulator
- (3) Console/Press



4.11.2 Communication parameters

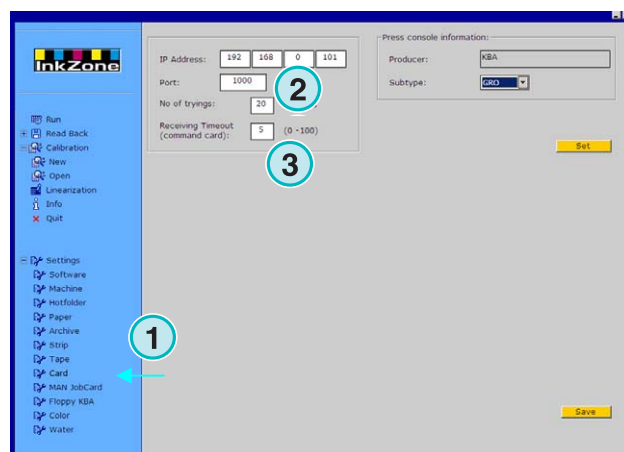
Select the menu entry (1) to open the control panel.

Enter the IP address and port number (2) for the E-Floppy emulator.



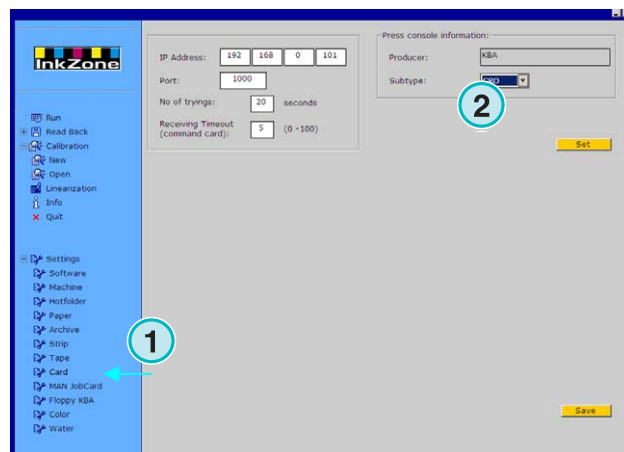
4.11.3 Additional communication settings

Enter a value for how many times (2) the software should try sending the data and for how long it should continue to do so (3).



4.11.4 Press console format

Select a press console format, either COL or GRO (2).



4.12 Color menu

4.12.1 Common parameters

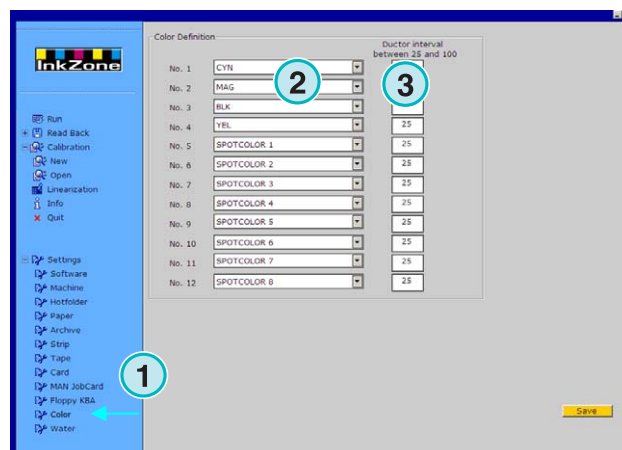
Note

The Color menu is only available if the output format supports this feature.

Select the Color control panel (1) from the Settings menu.

On some consoles, the received color names are identified with a specific numbers. The numbering can be assigned to twelve colors: the four basic process colors black, cyan, magenta and yellow, plus eight additional spot colors.

On some presses a ductor interval can be set for each color (3).



4.13 Menu Water

4.13.1 Common parameters

Note

The Water menu is only available if the output format supports this feature.

Select the Water control panel from the Settings menu.

On various consoles, the water setting on the press can be controlled by a numeric value. It can be set for each unit independently (2).



5 Calibration Curves

5.1 Concept

5.1.1 Overview

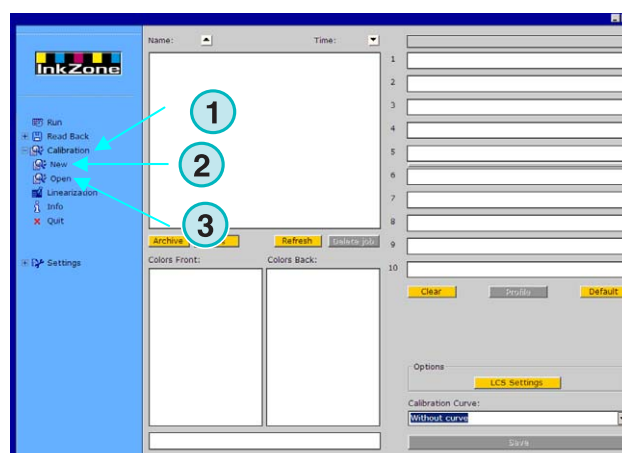
The software uses internal calibration curves to optimize the ink preset settings for different paper stock and ink types. These curves adjust the ink slide and ductor values on the press console.

A set of calibration curves is either defined for the process colors Cyan, Magenta, Yellow, Black, plus spot colors, or for each printing unit of the press.

Calibration curves can either be created by using the linearization wizard, or through manual adjustment. Create as many sets as you wish; the software does not set any limits.

5.1.2 Access a set of curves

Open the Calibration control panel (1). Two options are available: one for creating a new set of curves (2) and one for adjusting an existing set (3).



5.1.3 Calibrating colors or printing units

A set of calibration curves is either created for a particular set of colors, or for the printing units of the press.

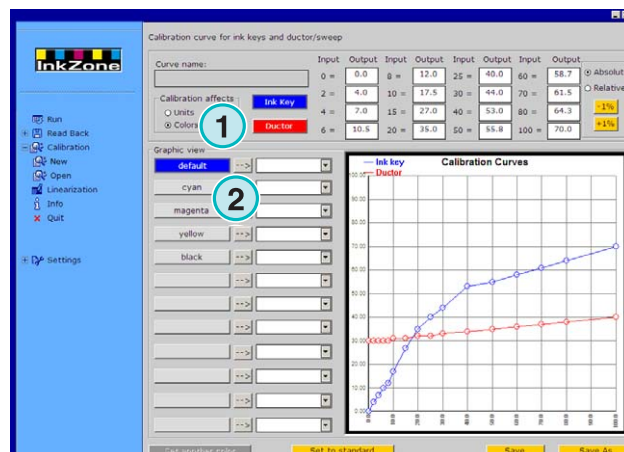
Select here **(1)** the type of calibration curve.

Take for example a four-color CMYK job with a front and back side printed on an eight unit machine: the calibration curves which is set to “colors” affect the process colors on the front and back side both in the same way.

Select a color curves by their corresponding buttons **(2)**. A set of curves may consist of up to 12 individual curves.

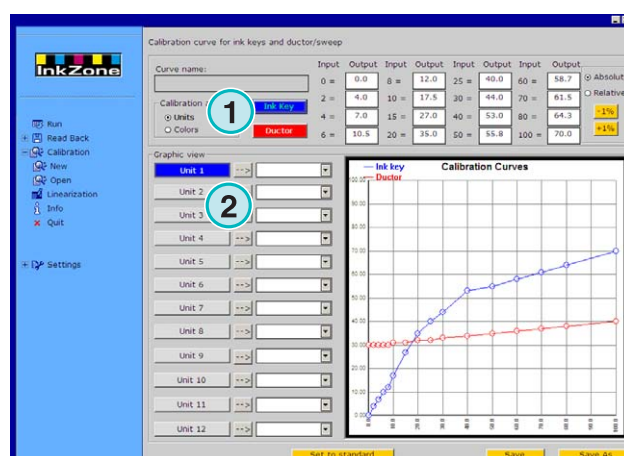
Note:

The calibration method applied to colors is much more common than the one applied to units.



Calibration on units

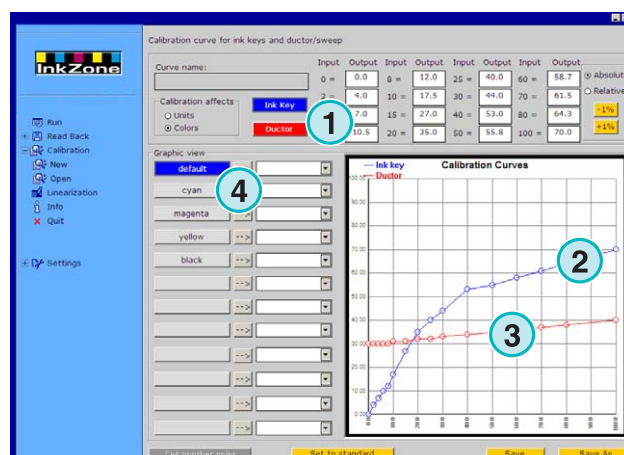
Select the units here **(2)** to which the curves should be applied.



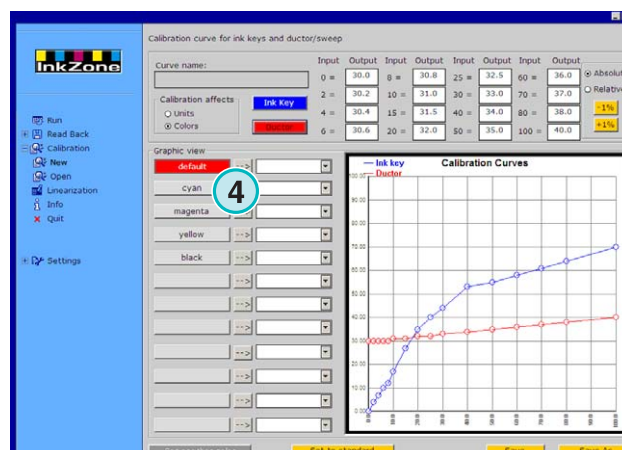
5.1.4 Ink key curve versus ductor curve

Select with these two buttons **(1)** either the curve for the ink key curve, shown as a blue curve **(2)**, or the ductor curve, shown as a red curve **(3)**.

When selecting the ink key curve **(1)**, the button **(4)** for the active color or unit changes to blue.



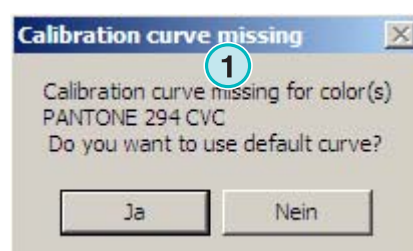
When selecting the ductor curve, the button for the active color or unit changes to red **(4)**.



5.1.5 Spot color handling during export

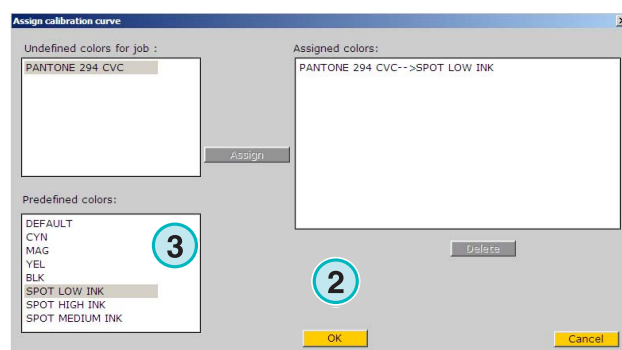
During export to the ink preset format, the software inspects the jobs for spot colors. Three scenarios are possible:

- 1.) Job has no spot colors:
The software exports it without any message.
- 2.) Job contains a spot color which is defined in the curve set:
The software exports the job. The spot color is handled according to the calculated spot color curve. No message appears.



- 3.) A job contains a spot color which is not defined in the curve set:
During export, the software detects the missing calibration curve and displays a message **(1)** to alert the user.

The user can either use the default curve by clicking [YES], or assign the missing spot color to a predefined calibration curve by clicking [NO].



When selecting the second option, a new dialog window appears **(2)**. Map the spot color to a predefined calibration curve **(3)**.

Note

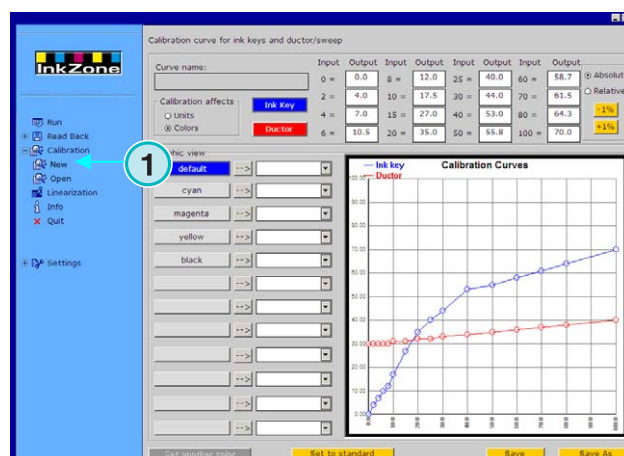
Add to each curve set three different curves for each spot color; one curve for high coverage, one for medium, and one for low coverage. The press operator can then decide which set would fit the spot color best.

5.2 Operating mode

5.2.1 Adding a new curve

Press the menu item **(1)** to get a basic curve. If the curve mode is set to “colors”, a set with the process colors Cyan, Magenta, Yellow, and Black is generated. In addition, there is a so called default curve available.

If the curve mode is set to “units”, a set of curves for unit 1 to 12 is generated.

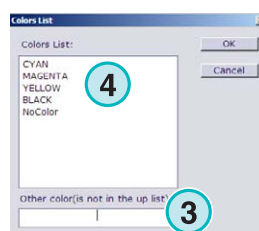
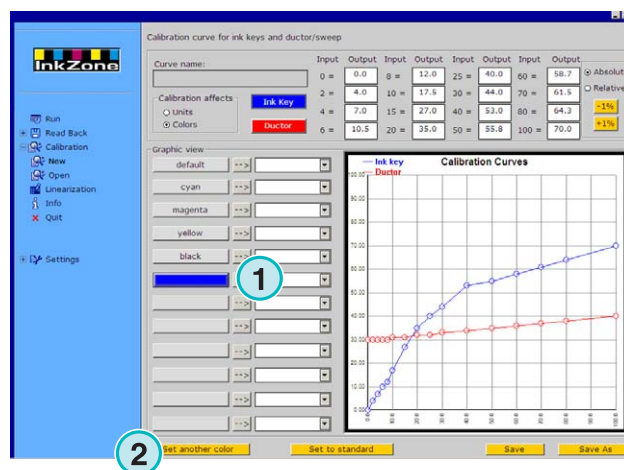


5.2.2 Add a color to the curve

To add a spot color curve, select one of the free buttons **(1)**. Now press button **(2)** to add a name in field **(3)**.

Note

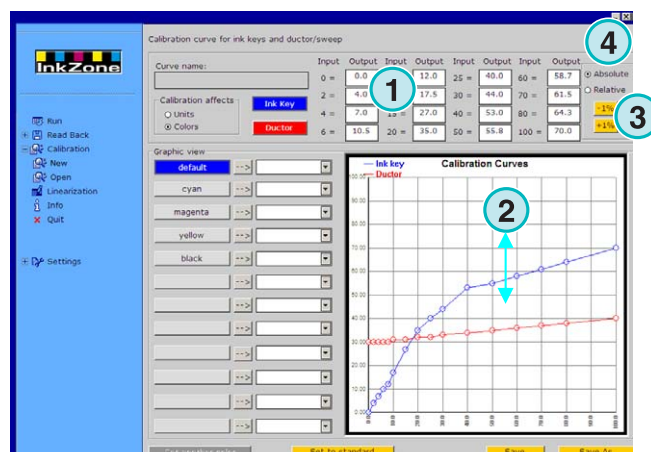
All colors from all jobs in the input directory are displayed in the color list **(4)**.



5.2.3 Adjust a curve shape

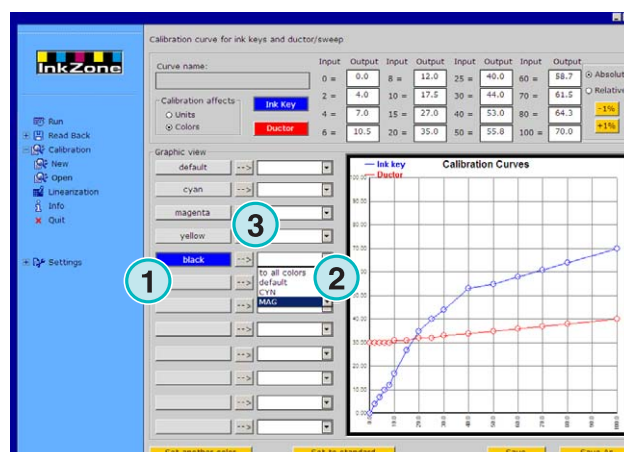
There are three different ways to change the shape of a curve:

- Change the value of a particular curve position here (1).
- Change the shape by dragging the points on the curve up or down (2).
- Press the buttons (3) to increase or decrease the curve by a percentage. Depending on the radio button setting (4), the curve changes in relation to the current position (relative) or in fixed increments (absolute).



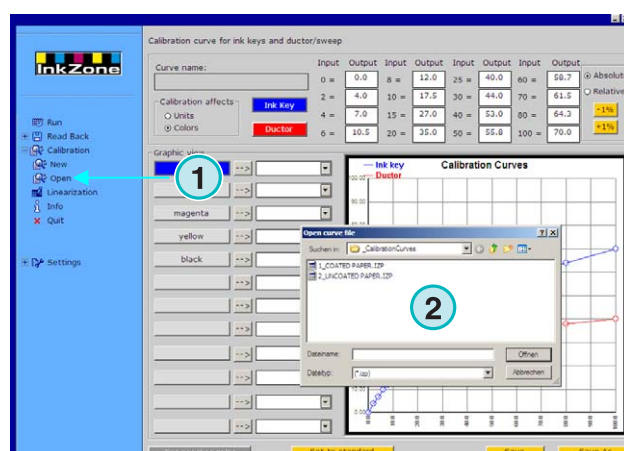
5.2.4 Copy the curve values from one color to another

Select the source (1) curve as shown on the left side of the panel. Open the list box next to it and select the destination color (2). Press the arrow button (3) to transfer the source color values to the destination curve.



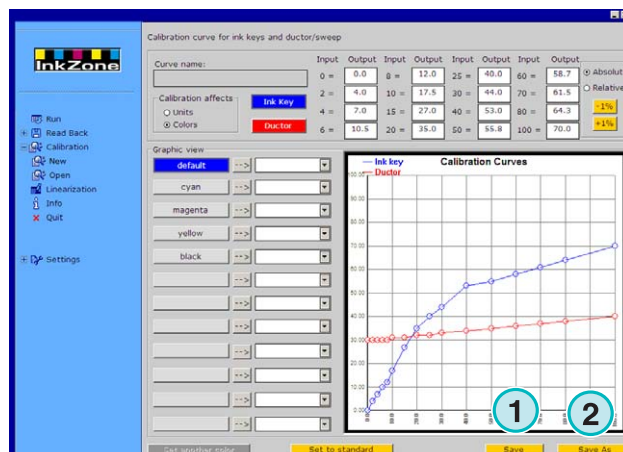
5.2.5 Opening an existing calibration curve set

Open an existing calibration curve set by clicking the second menu item (1) in the navigation section. Select the set from the dialog window which pops up (2).



5.2.6 Save the calibration curve

Store the changes by pressing button **(1)**. To save the changes to a new calibration curve set, press button **(2)**.



6 Linearization wizard

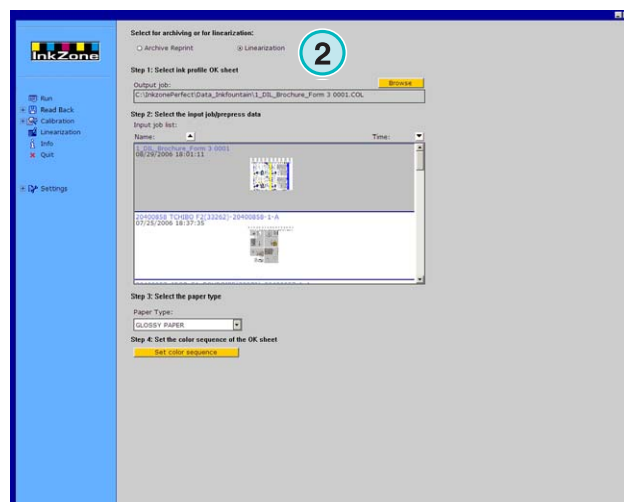
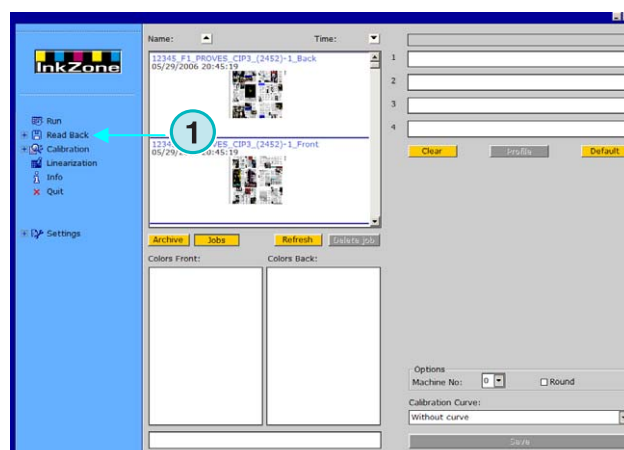
6.1 Concept

6.1.1 Overview

The Linearization wizard assists the user in adjusting and creating color calibration curves.

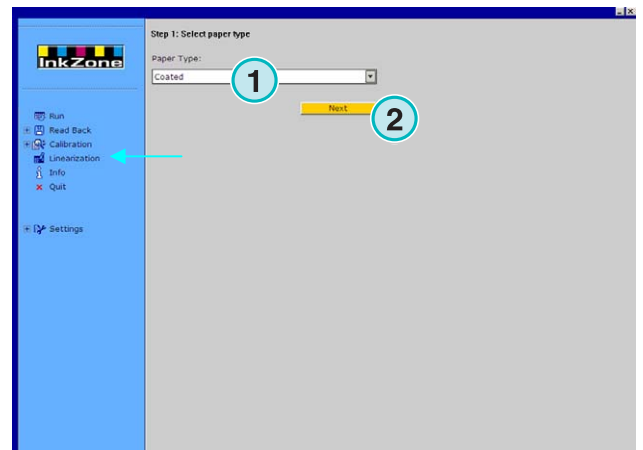
In order to use the feature, the OK Sheet values have to be fed back to the software. Two steps are necessary:

- 1.) Save the ink slide data from the console to a medium or to the medium drive emulator. If a file based ink preset system is used, the data is stored in the file system.
- 2.) Run the read back function **(1)** and select option **(2)** to feed the data to the wizard.



6.1.2 Using the wizard

Select the Linearization Wizard from the navigation section. Select the paper type from this list box (1). Press button (2) to continue.

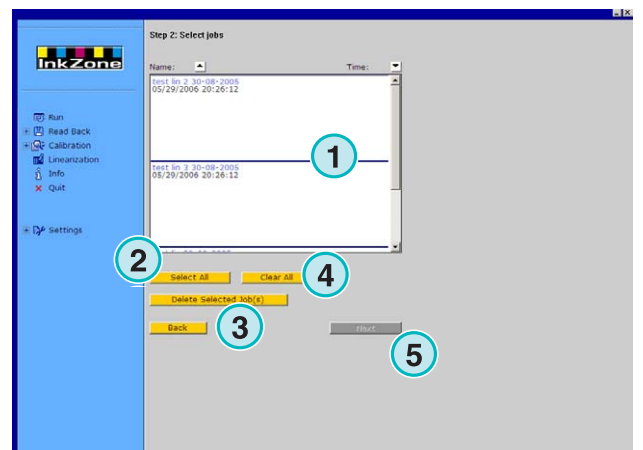


Take the next step and select the appropriate jobs from the job list (1). Select them all by using button (2), or select them individually by clicking them with the mouse.

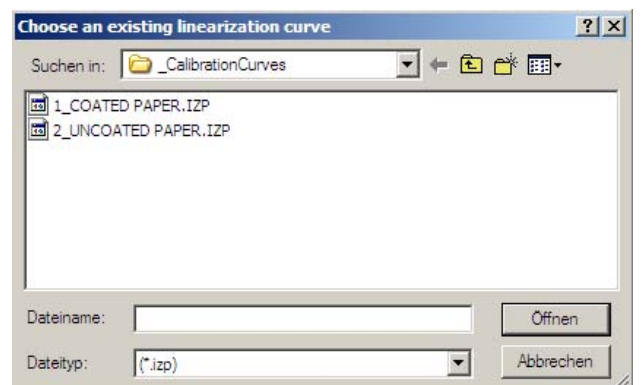
Continue with button (5).

Additional controlling functions:

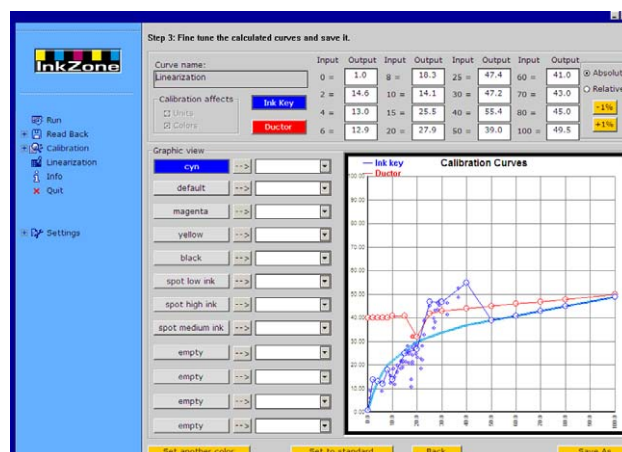
- Delete selected jobs (3)
- Deselect all jobs (4)



A dialog window pops up. Select a curve file to be optimized.

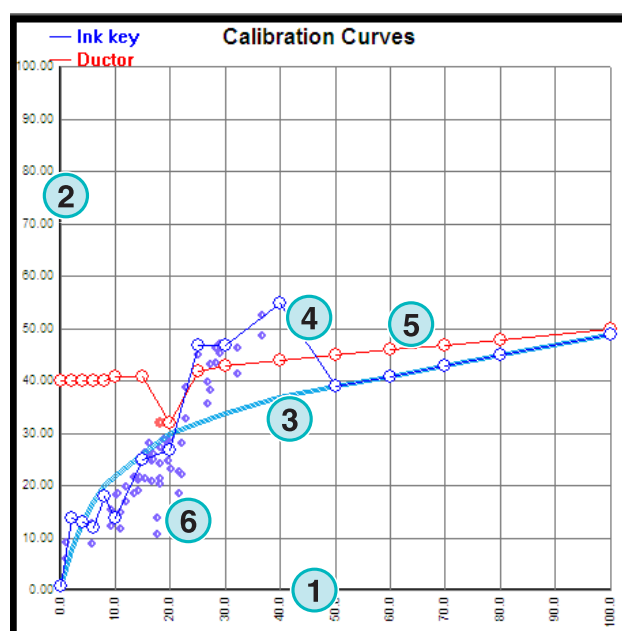


The final window shows the old and new calibration curves. The new curve is calculated by using from a job the ink coverage data from prepress and ink slide data from OK Sheet. Each color can be analyzed and adjusted independently.



Read the chart like this:

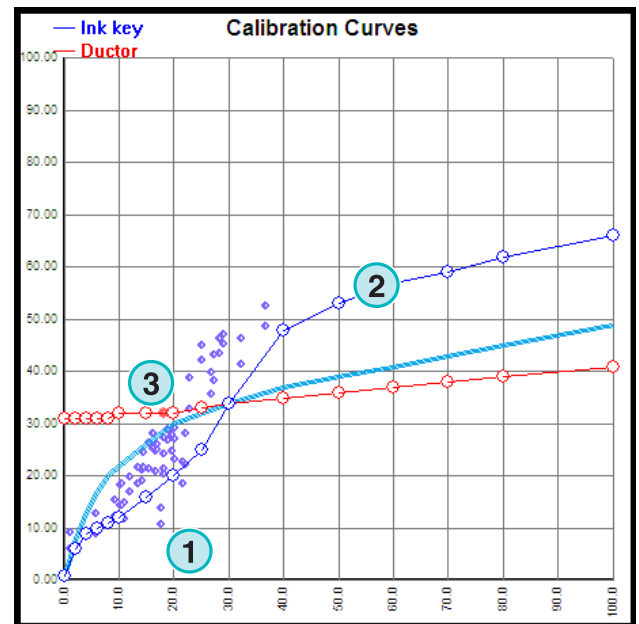
- (1) Horizontal axis X = input data from prepress
- (2) Vertical axis Y = value which is applied to the ink key
- (3) Thick light blue line = original calibration curve selected in the previous step
- (4) Thin blue line = calculated new curve
- (5) Thin red line = ductor curve
- (6) Purple dots = represent a combination of the calculated ink value from prepress (X axis) and the final ink key setting from the OK sheet (Y axis).



Adjust the curve by the following criteria:

- smooth the curve
- draw the curve to the lower area of the purple dots
- ignore points which are beyond everything **(1)**
- if the line of the purple dots ends, adjust the curve so that it continues in a regular, slightly raising shape **(2)**
- draw the red ductor curve in a regular, slightly raising shape **(3)**

Save the new curves.



7 MAN Konsole

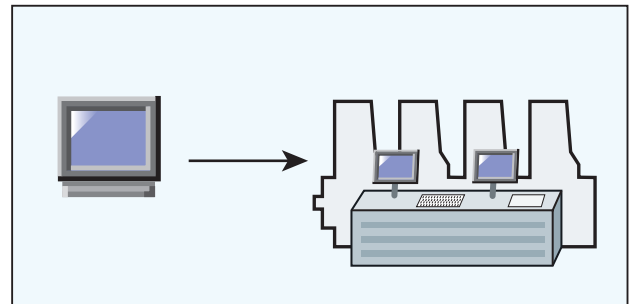
7.1 Workflow

The MAN Roland console is typically equipped with a Jobcard Reader drive to receive ink preset data. The connection from the software to the console can be configured as Offline or Online.

7.2 Online communication

At the press console the Jobcard Reader is connected to a multiplexer. The multiplexer connects either to the console or the industrial PC, where the software is installed.

The console reads the ink preset data from a Job Card which is in the Jobcard Reader, which has been written with the software.



7.2.1 Data format

The data is written in an ink coverage or ink slide format.

Ink coverage

RCI1, RCI2, RCI3

Standard format is RCI2

Ink slide

EPS format

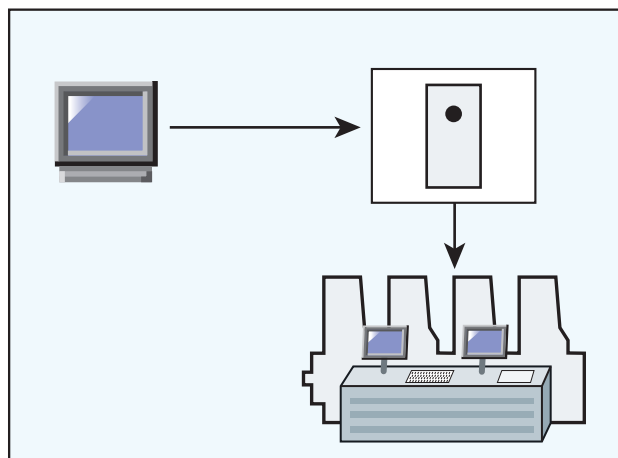
7.2.2 Precondition

The console is equipped with a Job Card reader.

7.3 Offline communication

The Jobcard drive is connected with a serial connection to the PC, where the software is installed on. The software will write the ink preset data to the Job cards for different machines.

The other way around, the software reads a job card, containing ink slide information from a printed job, for storing it into an archive and reuse in a later production run.



7.3.1 Data format

The data is written as an ink coverage or ink slide format.

Ink coverage

RCI1, RCI2, RCI3

Standard format is RCI2

Ink slide

EPS format

7.3.2 Precondition

The console is equipped with a Job Card reader.

7.4 Read and write the ink preset data on the console

At the press console, read and write the ink preset data with the standard operating commands.

8 Ryobi

8.1 Workflow

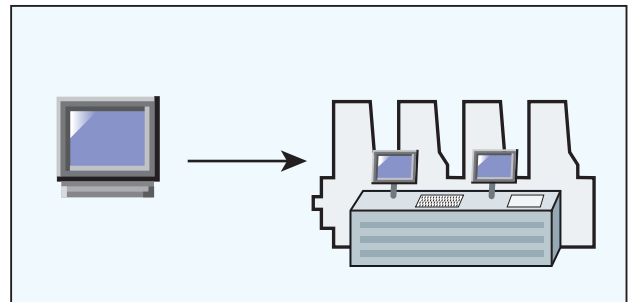
The Ryobi console is typically equipped with a 3,5" floppy disk drive to receive ink preset data.

Some consoles are prepared for a online connection through Ethernet, those are equipped with an Ethernet network interface card.

The connection from the software to the console can be configured as Offline or Online.

8.2 Online communication

The ink preset data is provided online through the Ethernet network connection. The console reads the data from a network shared folder.



8.2.1 Data format

The data is written in an ink coverage or ink slide format.

Ink coverage

DEM format

Ink slide

MCN format

8.2.2 Precondition

The console is equipped with a Ethernet network interface card.

8.3 Offline communication

The ink preset data is copied on a 3,5" floppy disk and read in with the floppy disk drive at the press console.

8.3.1 Data format

The data is written in an ink coverage or ink slide format.

Ink coverage

DEM format

Ink slide

MCN format

8.3.2 Precondition

The console is equipped with a 3,5" floppy disk drive.

8.4 Read and write the ink preset data on the console

At the press console, read and write the ink preset data with the standard operating commands either from the floppy disk or from the shared network folder.

8.5 Konfiguration der Netzwerkverbindung

See the manual Ryobi Networking.

9 Heidelberg

9.1 Workflow

The Heidelberg console is typically equipped with a Flash Card Reader to receive ink preset data. The connection from the software to the console is configured as Online.

9.2 Online – Job card Emulator

At the console, the flash card emulator is placed into the flash card drive. Through a TCP/IP connection, the data is transferred from the software to the emulator card where the console reads the data from.

The other way around, the software reads the ink slide information from a printed job to store them into an archive and reuse in a later production run.

9.2.1 Data format

The data is written in an ink slide format.

Ink slide

CPC format

9.2.2 Precondition

The console is equipped with a Flash Card Reader.

9.3 Read and write the ink preset data on the console

At the press console, read and write the ink preset data with the standard operating commands.

9.4 Installation Flashcard Emulator

See the manual Heidelberg Networking.

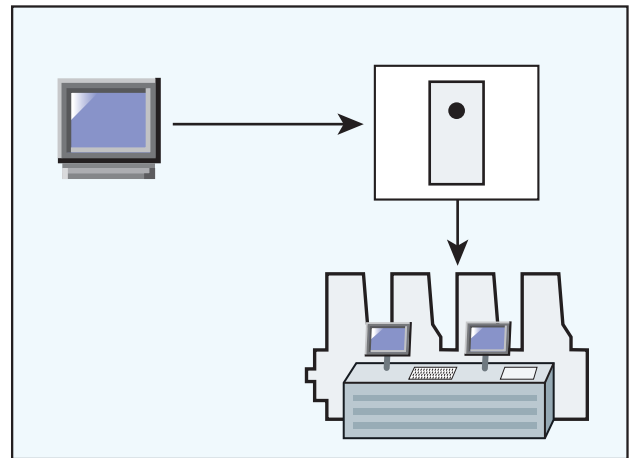
10 KBA

10.1 Verbindungsart

The KBA console is typically equipped with a 3,5" floppy disk drive to receive ink preset data.

10.2 Offline communication

The ink preset data is copied on a 3,5" floppy disk and read in with the floppy drive at the press console.



10.2.1 Data format

The data is written in an ink slide format.

Ink slide

COL und GRO format

10.2.2 Precondition

The console is equipped with a 3,5" floppy disk drive

10.3 Read and write the ink preset data on the console

At the press console, read and write the ink preset data with the standard operating commands from the floppy disk.

11 Komori

11.1 Workflow

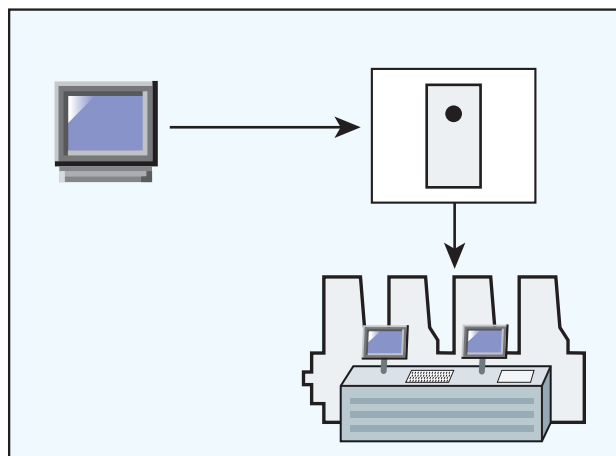
Komori consoles, running consoles based on the MS-DOS operating system, are mostly equipped with a floppy disk drive to receive ink preset data.

Newer consoles are running on the operating system Windows 98 or higher are equipped with a Ethernet network interface card..

The connection from the software to the console can be configured as Offline or Online.

11.2 Offline communication

The ink preset data is copied on a 3,5" floppy disk and read in with the floppy disk drive at the press console.



11.2.1 Data format

The data is written in an ink slide format.

Ink slide

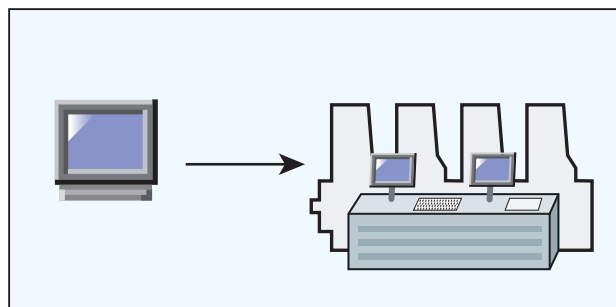
PQ0 format

11.2.2 Precondition

The console is equipped with a 3,5" floppy disk drive.

11.3 Online communication

The ink preset data is provided online through the Ethernet network connection. The console reads the data from a network shared folder.



11.3.1 Data format

The data is written in an ink slide format.

Ink slide

PQ0

11.3.2 Precondition

The console is equipped with an Ethernet network interface card.

11.4 Read and write the ink preset data on the console

At the press console, read and write the ink preset data with the standard operating commands from the floppy disk.

11.5 Configure the network connection

See the manual Komori Networking.