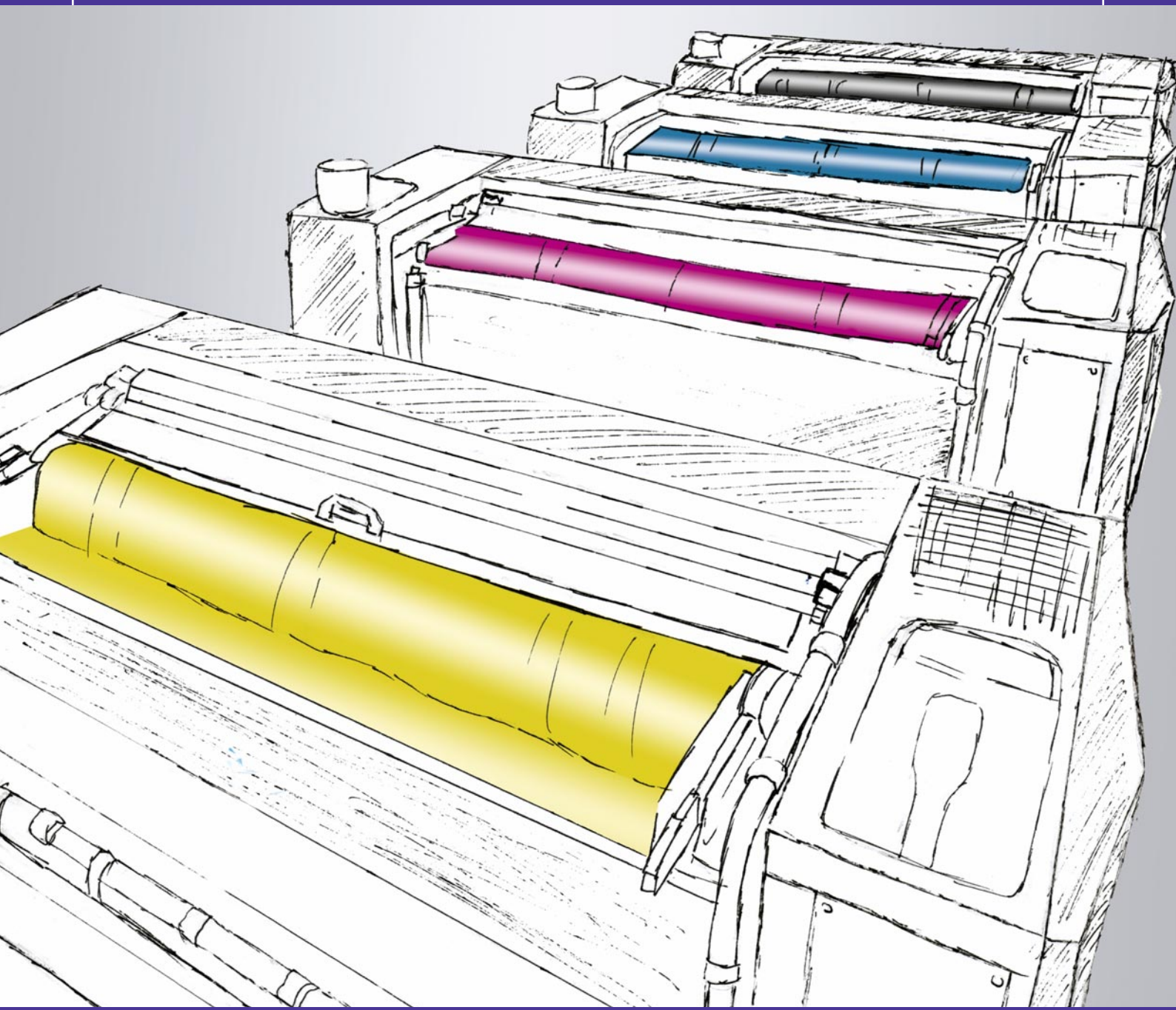
Digital Information

# InkZone



## Workflow Booster for Offset Quality and Profit

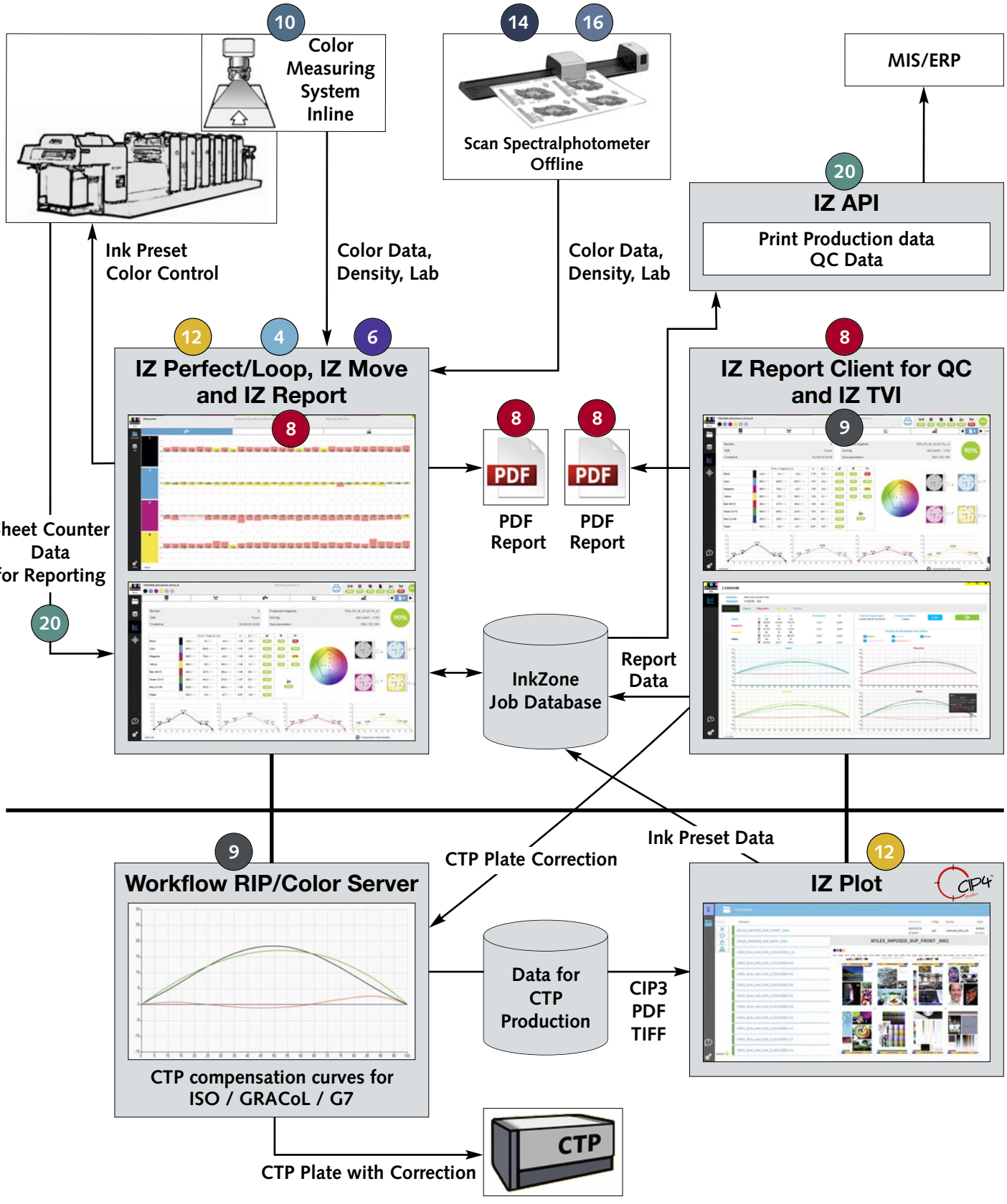
# Table of Contents

## All about InkZone for Offset Printing



*Direct Link to Digital Information's Youtube Channel.*

# InkZone Workflow



# InkZone Loop: Automated Color for Every Press

*InkZone Loop is the first closed-loop color solution for digital ink control on offset presses from all leading manufacturers. InkZone Loop enables the automatic measurement and evaluation of color bars and then direct, digital feedback of the appropriate ink-key adjustments.*

## First, Measure

InkZone Loop supports measuring systems from all leading color instrument manufacturers. With IZ Loop, you pick the measurement technology, and we help you put it to work, automating ink adjustments and showing you a visual representation of each measured sheet.

By comparing measured press results against your reference conditions, InkZone Loop alerts your press operators immediately, allowing them to recognize where color adjustments are required. You can make use of the full capability of your measuring instrument, including ink density as well as other print-related data like dot gain, print contrast, ghosting, slurring, and more. InkZone Loop supports the needs of today's printer, including 4-color process work, as well as support for special and brand-specific colors. You will find that the efficiency of InkZone Loop can bring you a significant increase in productivity and quality, by combining multiple color-checking steps that until now may have been carried out manually, if at all. And with print runs getting shorter all the time, investments that can streamline your processes are increasingly important.

Once measurements are complete, InkZone Loop saves all of the measured color data, increasing your velocity on repeat jobs or runs with multiple forms. And the recorded data helps in documenting your compliance with your customer requirements or with international quality standards like ANSI/ISO, PSO, GRACol and worldwide standards.

## Next, Take Control

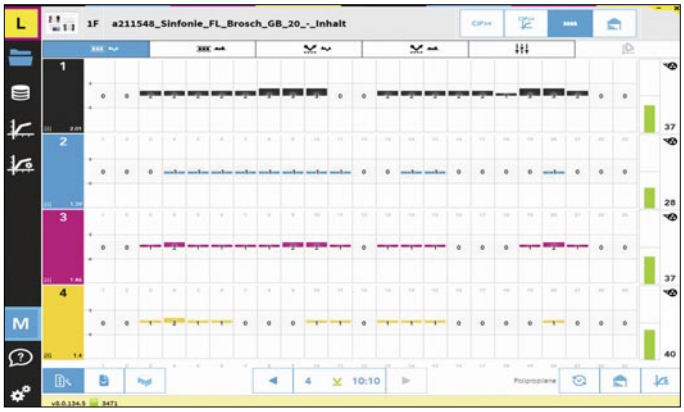
With your on-press color results in hand, and with your saved reference conditions, InkZone Loop calculates correction values, which are specific to your printing press. And then, InkZone communicates via a direct, network link to your ink console, regardless of the press manufacturer, the age of the press or its ability to support CIP or JDF standards.

So, once the operator checks the color results and the recommended press adjustments, at the touch of a button the ink keys for all printing units can be adjusted automatically. This can lead to results that are clear: a significant reduction in makeready and run waste, higher overall color quality, and consistent, stable production runs.

*InkZone Loop is compatible with almost all press consoles.*

# InkZone Loop: Automated Color for Every Press

*Input:*
*See all ink values in all zones at a glance.*



*Output:*
*Transmitting the correction values to the press console.*

## Benefits in the Pressroom

InkZone Loop's high-performance software and your selected measuring technology can work together to accurately characterize, and systematically correct, ink key settings. These results are much faster, more consistent, and permanently archived, unlike results with hand-held color devices or purely visual color control.

Immediately after each measurement, the ink and density values for all zones are displayed on-screen. The operator sees a graphic representation of all of the job colors in a format that is familiar – resembling the ink key graphics of a press console. Of course, the underlying color data can also be seen at a glance. When the operator is ready, the ink adjustments can be carried out automatically. Naturally, there's still an option to adjust ink keys manually on the console, or to exclude certain zones and printing units from the automatic control.

InkZone has two ways to set the color reference conditions, with preset customer- or standards-based values, or with the unique «OK sheet» function. With this second approach, the touch of a button is all that is required to save the status of all ink keys as color reference conditions. Then, each sheet is compared to this goal and the ink keys are adjusted via the closed-loop network, thereby assuring that the customer quality needs are met.

With InkZone Loop the operator can spend less time evaluating color and guessing at the ink settings, and more time making those critical adjustments which can make or break the profitability of either a short or long print run.

## Best Match

Immediately after the spectral color measurement, the smallest possible delta E value is determined. InkZone Loop calculates on the fly the best density and the correct in key opening to reach the predetermined, spectral reference color. Best Match is the perfect solution for printing spot colors on every offset press.

## Benefits in Pre-Media

The same technology that drives closed-loop color adjustments can also be used to actually preset the ink keys of each fountain based on the prepress plate-image data. This allows the press to get up to color quickly, and then stay there with closed-loop color control. In other words, the better the preset, the more efficient the closed loop! In many cases, the press manufacturer's ink preset solutions do not provide optimal results, costing you makeready time and effort. Replacement of existing ink preset systems with InkZone allows the same high-efficiency solution on all of your printing presses, regardless of their make or model.

## Ready for Production in Record Time

The combination of an independent solution that encompasses closed-loop control, measuring technology and a workflow interface is truly unique. With InkZone Loop, you save time and reduce waste. Reference values are attained faster, and it's easier to keep your production within narrow limits. InkZone Loop enables set-ups in record time, even on offset machines from the last millennium. It's the perfect way to protect your investment in existing equipment and system installations. Many printers are discovering that InkZone Loop is one of the best investments that can be made in your business today!

## InkZone Loop Configuration

**Compatible Color Measuring Systems**

- Digital Information: IZ ColorTrail and all instruments driven by IZ Move software.
- X-Rite: IntelliTrax D/S and Intellitrax 2 D/S, EasyTrax D/S, eXact and eXact 2.
- Techkon: RS 400, RS 800, SpectroDrive and SpectroDrive NG, SpectroJet.
- Grapho Metronic: Inline Density System M.
- KBA Koenig & Bauer: Qualitronic II.
- GICS Lab-Vision.
- Konica Minolta: MYIRO-1.

**Operating System**

- Windows 10/11 Pro

**Further Requirements**

- InkZone Loop can therefore only be used in connection with a InkZone press console connection interface like e.g. InkZone Link, IZ Strip, IZ Tape, IZ Wire, IZ Net, IZ eFloppy etc.

## Ready for Replacement

Many offset presses in daily production are equipped with legacy or defective color control systems, ready to be substituted by InkZone:

- Heidelberg Axis Control, Image Control, CPC 24.
- KBA Koenig & Bauer Densitronic.
- Manroland FDM 17, FDM 19, FDM 20.
- Komori PDC, PDC-L, PDC-S, PDC-SX.
- Ryobi & Mitsubishi RMGT PDS-E.
- GMI Clarios, Cosar and ColorQuick.

# InkZone Move

*InkZone Move is a powerful software application for quality assurance on sheetfed or web offset presses. IZ Move supports all established scanning color measurement devices. As an extension, InkZone Loop can be added, which turns off-line color control into a closed-loop process providing fully-automated integration with almost any model of offset press. With IZ Move and IZ Loop you get full control over your offset printing process.*

**Precise Quality Measurement**

InkZone Move brings more accuracy, quality and ease-of-use to the printing process at an unbeatable price-performance ratio. The software integrates with scanning color measurement devices automatically and improves the success of any press operator by offering precise adjustments for color control. The connected motorized drive which propels the color scanning instrument across the color bar assures repeatability, speed, consistency and reliability. Operator confidence will increase, measurement after measurement.

**Focus on Process Control**

As each measurement is completed, InkZone Move displays the results in real time on the monitor. The graphical presentation is clear and easy to interpret – the control screen shows the ink key zones for each press unit along with the relevant color data including density (absolute and relative), dot gain, tone value, and colorimetry (CIELAB) along with color difference (Delta-E).

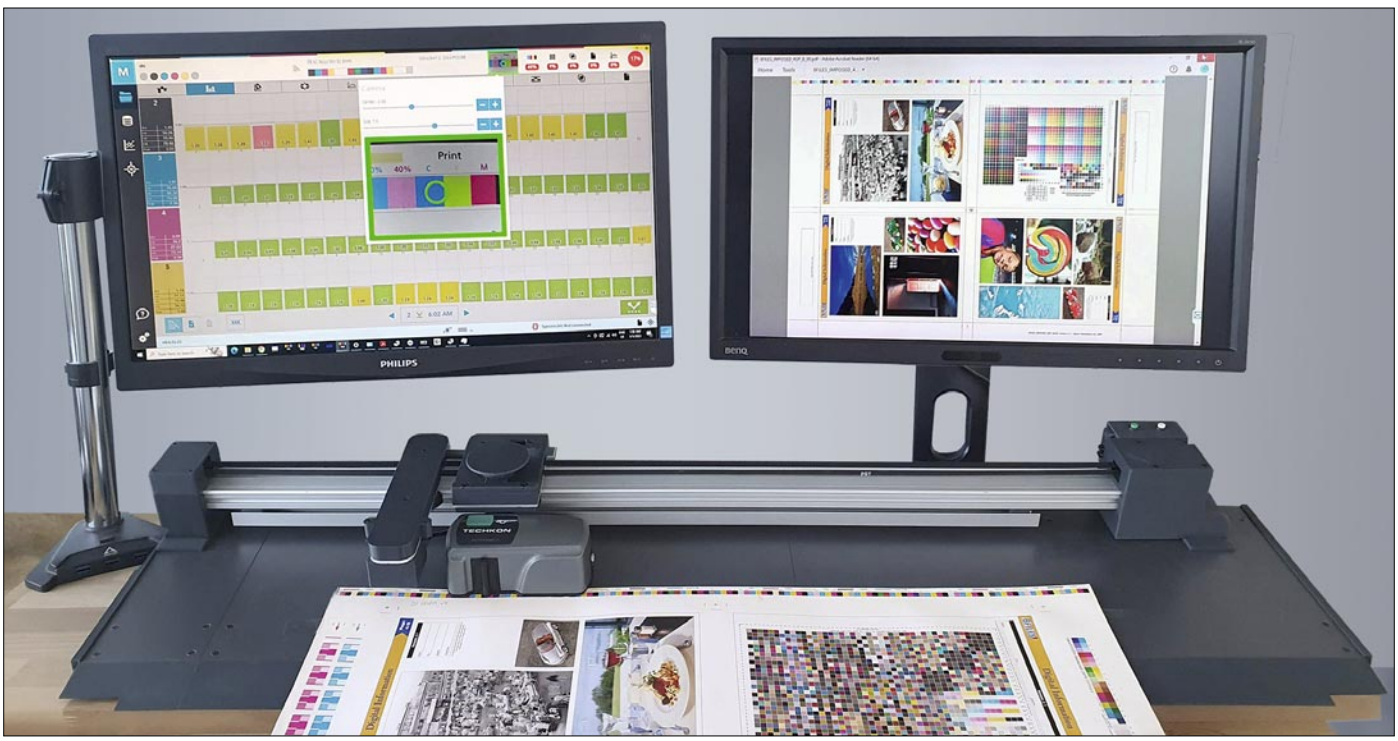
The software stores all measured data in a straightforward format, ready for further interpretation with off-the-shelf reporting applications.

**From Offline Printing to a Closed-Loop Control System**

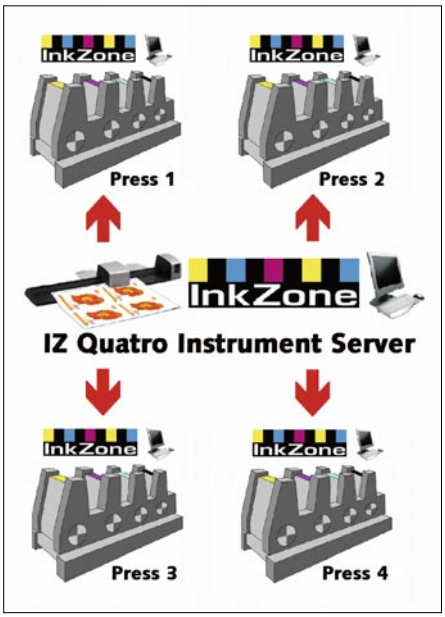
With IZ Move, operators have a powerful control and decision-making system in their hands. While the basic version is an off-line solution requiring manual ink console adjustments, with IZ Loop, the system can be upgraded to full closed-loop operation, providing calculation of the proper corrections, and then adjustment of the ink settings automatically.

**All information at a glance**

InkZone Move shows density and dot gain as tools for controlling process-




*IZ Move and IZ ColorTrail SpectroJet: Color measuring and a camera to check color bar positioning. The combination with IZ Plot allows soft proofing right at the press console.*




*IZ Quatro shares up to four presses, each equipped with InkZone, trough one scanning instrument and the IZ Move Quatro Instrument Server.*

color printing. In situations where the color measuring instrument generates spectral data, InkZone Move displays CIELAB and the corresponding Delta-E values, which is not only helpful for spot colors, but also for meeting newer printing industry standards such as ISO and PSO. InkZone Move supports all important color scanning measurement systems including: SpectroDrive, SpectroDrive New Generation and SpectroJet from Techkon, as well as IntelliTrax 1 & 2, EasyTrax and eXact Scan from X-Rite. IZ Move connects today's scanning instruments with nearly all offset presses.

### Wet-Dry Forecast

Based on the color measurement of a paper substrate in wet and dry offset ink, InkZone Move is capable of predicting final color values. An important tool for every offset press operator: Already during the printing process, InkZone Move shows the expected color parameters of the dry sheet.

*InkZone Move shows color results for every ink key immediately after scan.*

## Supported Scanning Devices

- Digital Information: IZ ColorTrail SpectroJet and MYIRO.
- X-Rite: IntelliTrax D/S and Intellitrax 2 D/S, EasyTrax D/S, eXact and eXact 2.
- Techkon: SpectroDrive and SpectroDrive NG, SpectroJet.
- Grapho Metronic: Inline Density System M.
- KBA Koenig & Bauer Qualitronic II
- GICS Lab-Vision
- Konica Minolta: MYIRO-1.

## Specifications for InkZone Move

**Visualization and Verification of**
- Deviations from target density
- Deviations in Delta E
- Visualisation LAB values
- Dot gain
- Gradation
- Best Match
- Wet-dry forecast

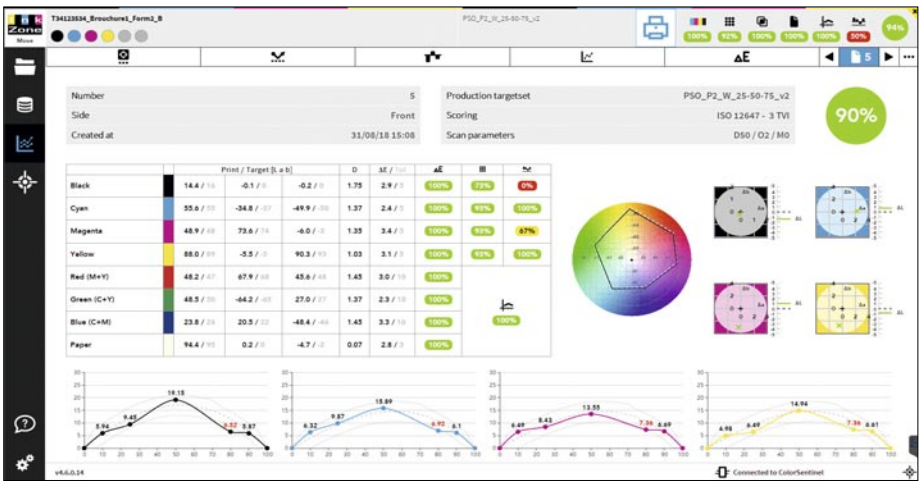
**Further Functions**
- Target according to reference values
- Target according to OK sheets
- Storage of every single measurement
- Connection to IZ Loop and IZ Perfect for closed-loop color control and online ink key preset

**Color bars**
- Patch size dependant on scanning device used
- Possible compatibility to existing color bars

**Measurement Specifications**
- Individually defined density values
- Values for dot gain increase according to standards
- Pre-defined reference values of international standard

# Printing Quality Control with InkZone Report

*The IZ Report software package, available for Digital Information's IZ Move, as well as other manufacturers' color scanning software, analyzes and displays how well current press work matches print industry standards such as ISO and/or G7. With IZ Report, color quality information can be accessed through PDF, local networks, and the IZ App for tablets, as well as by customers and print buyers. IZ Report delivers detailed print quality reports on screen and in printable PDF file format.*



*InkZone Report with scoring for a single press sheet.*

## Measure and Compare

The ability to monitor daily output to meet international standards is imperative. InkZone Report enables the collection of color data on each job and verifies if current and post print run conditions are within the defined quality operating zone. By automating the process of reading spectrophotometric and/or densitometric data, InkZone Report can store job quality information in a centralized database. From this data pool, both single sheet and complete production reports can be generated. InkZone Report shows job target values and compares them against printed job data in the solids, (Lab and delta E), dot gains, mid-tone spread and substrate. The result is a «pass» or «fail» report for each print job.

*InkZone Report showing TVI over a press run.*

## Interactive Reporting

Graphics in InkZone Report are calculated from scanned color bar data and converted to an easily understandable graphic view. By clicking on specific locations within the report chart, the user can immediately see the scanned color data information represented as mathematical figures.

By using a simple scoring range with a scale up to 100% (a perfect press sheet), and the colors green, orange and red, InkZone Report displays detailed information on the quality of the current press run for the press operator within seconds. This fast quality evaluation saves time and is the perfect quality check.

InkZone Report measures the stability of color printouts and detects impact variations on print product quality.

### Supported Scanning Devices

- Any scanning instrument controlled by InkZone Move and InkZone Inline.
- Techkon SpectroDrive and SpectroJet controlled by Expresso scanning software.
- X-Rite IntelliTrax, EasyTrax and eXact Scan controlled by X-Rite Ink Key Control scanning software.
- Scanning instruments from Grapho Metronic, Manroland, Komori, Koenig & Bauer, GICS Japan and Heidelberg.

# InkZone TVI
# From Press to Plate to Print

*Standard quality control in modern offset printing involves measuring color bars using sophisticated scanning spectrophotometers. These scanners collect color information data over one or several press runs. InkZone TVI takes this information and calculates the ideal tonal value curves for every prepress workflow resulting in perfectly calibrated offset plates.*

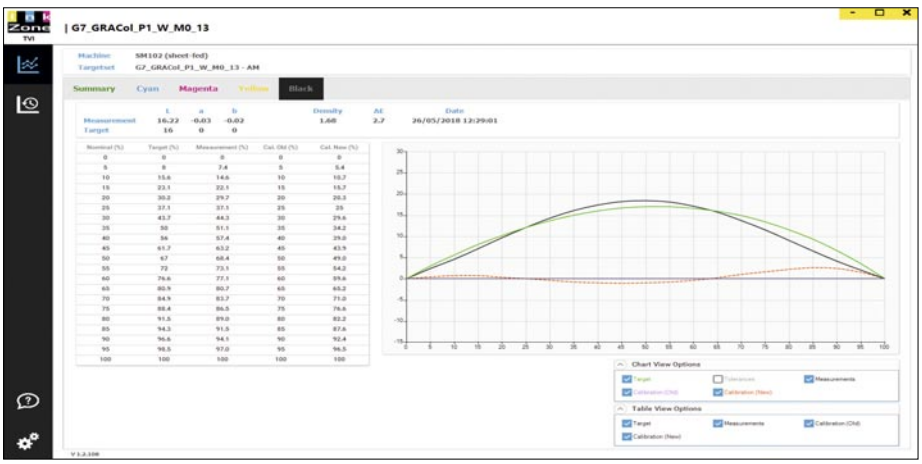
Today's international standards for offset print production (e.g. ISO, G7) are defining exact parameters for colors and TVI. To print with consistent TVI's within those standards, the prepress workflow (Rip) has to be fed with individual calibration curves to generate perfect offset printing plates.

**One color scan for everything**

InkZone TVI collects and analyzes the color data needed to build calibration curves from the color bar used on the offset press for controlling the ink keys. Every color scan's data is stored in the InkZone database and used to calculate the best calibration curve for nearly all prepress workflows and CTP devices. InkZone TVI eliminates the need to print dedicated test jobs, to do spot measurements, or to manually edit TVI curves.

One InkZone TVI license covers up to three offset presses and supports any paper type, any target, and all available prepress workflow connections. Of course, InkZone TVI supports CMYK and spot color calibration.

With this state of the art user interface and easy handling of calibration curve data, InkZone TVI is the perfect tool for every modern offset print production company.




*Visualization of optimized TVI by InkZone TVI.*

### Technical Specifications

- Installed InkZone Report Software.
- Spectral data from color bar scans out of InkZone Report.

## InkZone TVI and 3rd Party Color Servers

InkZone in key preset and closed loop color control is an open solution, capable of importing and exporting many different color data file formats. With the optional software enhancements IZ Report and IZ TVI, the complete IZ production suite can be linked to most Color Servers on the market. Popular data formats for this task are CxF and CGATS.

State of the art Color Servers are able to convert any input prepress data automated into the right color space, e.g. for your offset printing operation. This kind of color conversion can also lead to reduced ink usage: Another cost saving step for your daily production.

The offset press color characterization data can be delivered by InkZone Report/TVI. This data is based on those hundreds of press sheet color scans carried out by InkZone driving your offset presses. Color Servers are finally converting all your data automated into the perfect final output for offset printing. There is no need for regular plate curve editing anymore.

### Color Servers on the Market

- Alwan ColorHub
- GMG ColorServer
- ColorLogic ZePrA Smart Color Server
- CGS Press Matcher

Several prepress workflows are also capable of acting as color servers.
Ask your local InkZone representative.

# InkZone Inline For Sheetfed and Web

*InkZone Inline measures color bars on the paper during a print run and controls the offset press ink keys continuously. The combination of InkZone's digital ink key presets and InkZone Inline color control can significantly reduce paper waste and makeready time for nearly all sheetfed and web offset presses. Simultaneously, InkZone Inline helps pressrooms to achieve perfect color consistency throughout the complete printing process.*

InkZone Inline was developed in close collaboration with the world's most renowned manufacturers of inline color measuring technology. InkZone Inline is a cost-effective density measurement system, as well as a solution for spectral measurements. InkZone Inline is perfectly suited for retrofitting any sheetfed or web press or to replace outdated color measurement tools.

**Fast makeready**

The combination of Inline measurement on the press with automated control of the ink keys results in improved color stability, a reduction in waste, and offers complete documentation of the production run. InkZone Inline measures color at full production speed without the need to pull sheets for inspection. The print control strip on the sheet is measured with the highest level of precision.

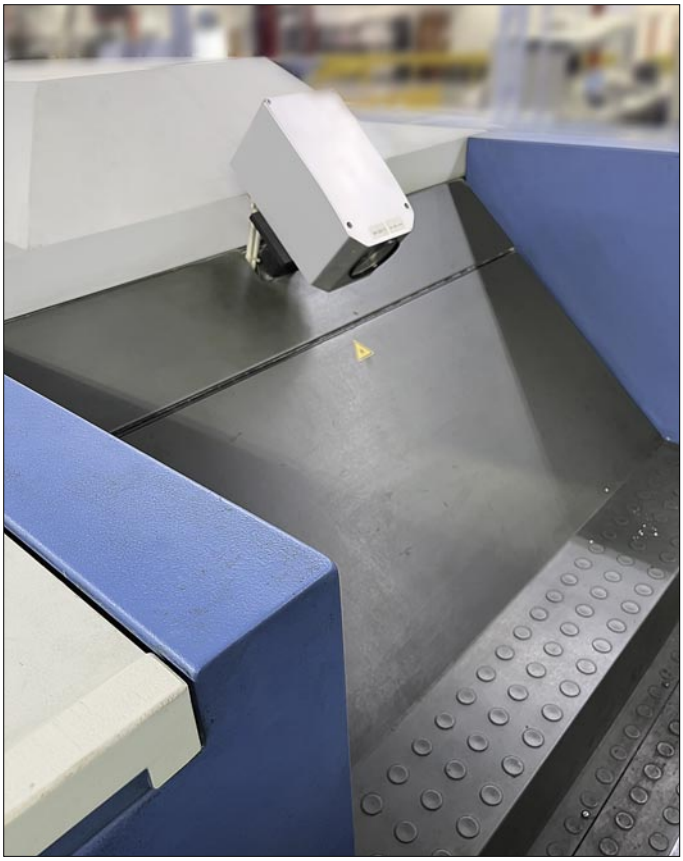
**Less stress**

InkZone Inline significantly reduces the press operator's workload. The continuous reporting function can be used for quality control and also to analyze and resolve customer complaints. Usually, InkZone Inline is installed after the last printing unit and automatically measures color in the freshly printed color bars. It is, of course, capable of controlling the color on both sides of the printed sheet.

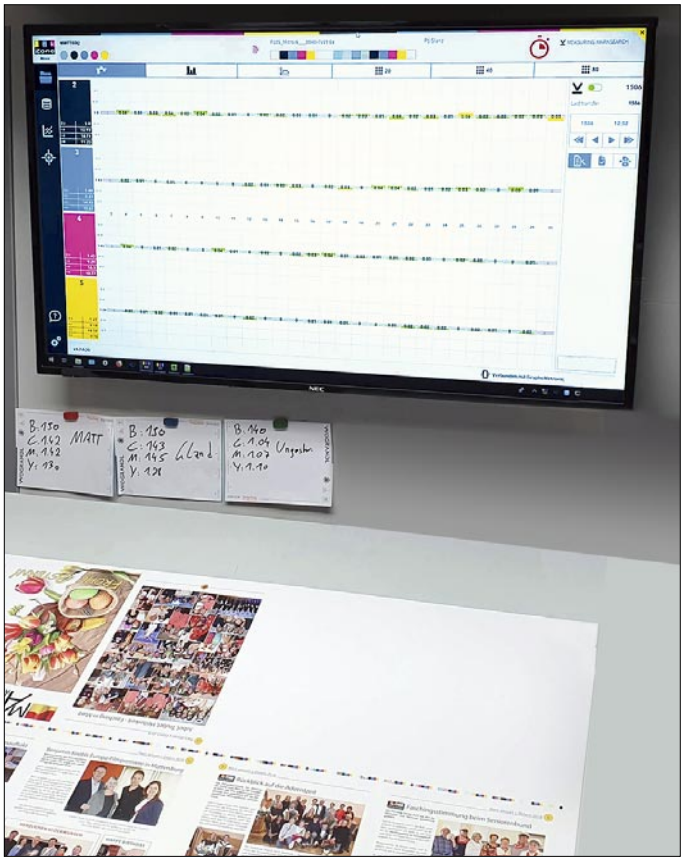
Inline color measurement and press control offers the possibility of collecting much better color data quickly and without additional work. The presses are capable of running continuously during the complete offset printing process without the need to stop and pull sample sheets. Management and press operators are able to get data that accurately reflects the color of a job throughout the complete press run. InkZone Inline is an important tool that helps to streamline the printing process and allows for complete quality monitoring.


*InkZone Inline for web…*


*…and sheetfed offset presses*



*State oft he art color bar image caption device for inline density measuring.*



*InkZone Loop Inline ensures quick and accurate color matching.*

### Printing Industry 4.0

IZ Inline is able to communicate with most prepress workflows and can deliver color reporting as well as administrative data to 3rd party ERP/MIS systems.The optional IZ SheetCount solution is able to digitally read the press manufacturers sheetcounter numbers. These values are constantly shown within IZ Move Inline and saved in the InkZone database, together with the corresponding color results.

### Don't stop the press

Inline color measuring devices are able read up to every color patch in every color bar on every sheet going through the offset press. Usually several sheet readings are combined to one measuring to be visualized in the IZ Move Inline application. IZ Loop Inline is constantly controlling the offset press. Usually fully automated without any further user intervention. This guarantees permanent high printing quality without any additional work for the press operator.

### CMYK and spot colors

IZ Move Inline is measuring standard CMYK as well as spot colors. Color targets can be either read from printed samples, color data delivered in open CxF format or selected from the integrated IZ Move Inline spot color database. IZ Loop Inline is regulating all units constantly and fully automated. Thus reaching the desired color targets in record time.

### Conclusion

InkZone Inline is ready to be installed on nearly every sheetfed or web offset press. Makeready time and paper waste can be reduced up to 25% for each press setup, day by day.

#### Supported Inline Color Measuring Devices

- KBA Koenig & Bauer Qualitronic
- Grapho Metronic IDC Inline Density Control
- GICS Lab-Vision


*Inline quality inspection and color measuring device installed left from the upper printing unit.*

# Digital Online Ink Key Preset

*InkZone Perfect delivers economical, state-of-the-art ink key presetting technology for almost all offset presses. Thanks to InkZone, you can unleash the profitability that is hiding in your pressroom.*

**Small Gap, Big Opportunity**

In many printing companies, the digital workflow stops with plate imaging. Preflight, layout, color corrections, proofs, plates and that's it. The press may have some digital controls, but in most shops, there is still a gap between the prepress workflow and the controls in the press-room. Unfortunately, this means that the valuable capability to leverage prepress output data in order to preset ink keys on-press remains unused. And because existing proprietary connections often come with high investment costs, there is little incentive to close what might be perceived as just a small gap in the flow of data. That said, many small to mid-sized companies will be throwing away the opportunity to achieve significant savings, better efficiency and greater quality. It was in response to the clear need for a comprehensive and cost-effective solution for ink-presetting and closed-loop that Digital Information developed InkZone.

InkZone is an intelligent, JDF-enabled concept for closing the prepress to press

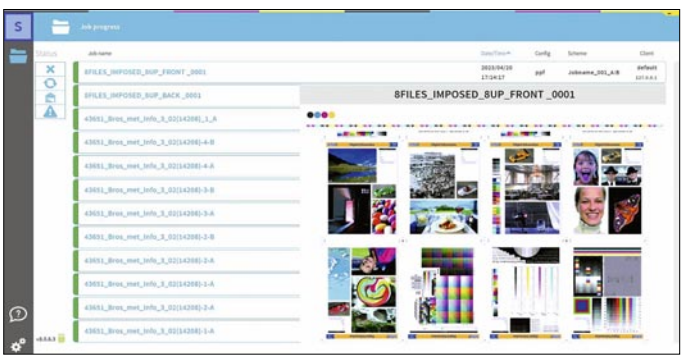
## IZ Plot: Interfacing InkZone with Prepress Workflows

The modern client-server application IZ Plot calculates ink key coverage data out of many different bitmap file formats generated by prepress workflows. Therefore in many cases the investment in a costly CIP 3 workflow output plugin can be bypassed. IZ Plot reads CIP3/4 based PPF files as well as standard TIFF or PDF data. This universal link between workflow and the InkZone driven press console works equally well inside both older and modern technology environments.

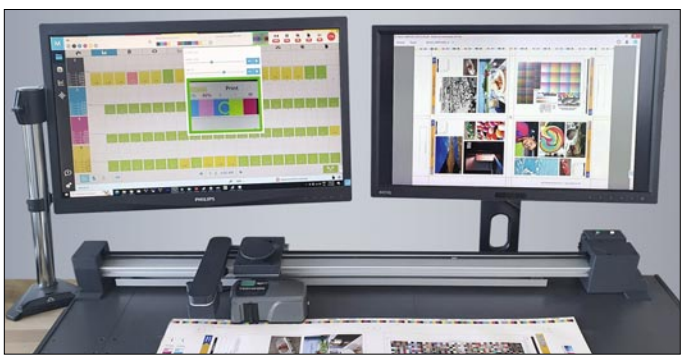
One license of IZ Plot is distributing ink key coverage data and job thumbnails fully automated to multiple offset presses connected by InkZone. Thus only one license IZ Plot per production plant needs to be licensed: Another money saving effect for InkZone customers.

Optionally IZ Plot Server is able to deliver additional administrative data or color managed PDF files directly from prepress workflows to the IZ Plot Client at the press console. Another important step to efficient data handling and faster job changes on every offset press.

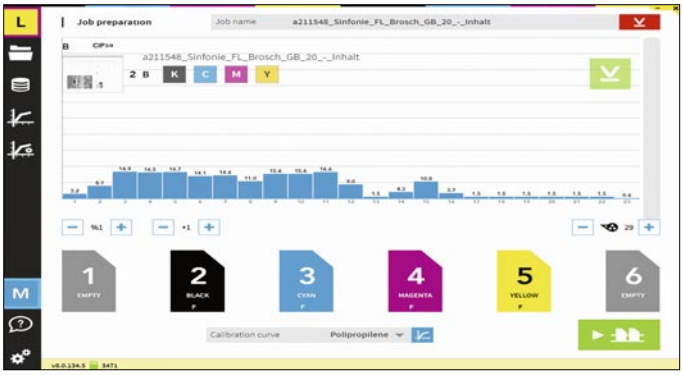
Thanks to the CIP4/JDF functionality of IZ-Plot and InkZone Perfect, virtually any prepress workflow can now be extended directly into the pressroom via straightforward InkZone-XML, even to presses of different age or origin. No need to invest in expensive, proprietary work flow plugins for outputting obsolete CIP3 files. IZ-Plot takes you directly there.



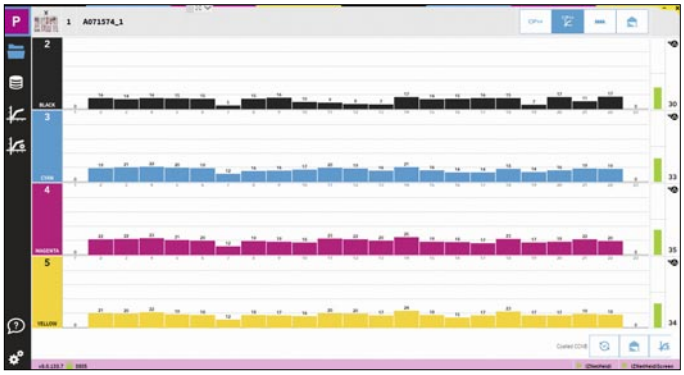

*IZ Plot Server: Fully automated data handling from any prepress workflow into InkZone Perfect connected to the offset press console.*



*IZ Plot Client: The combination IZ-Plot Server/Client brings job data to the printing machine and permits color managed soft proofing for the press operator.*




*Jobs from prepress workflows arrive via IZ-Plot in IZ Perfect. With drag & drop they are loaded into the press.*



*InkZone Perfect sends initial ink key settings and ductor/sweep values online into the offset press console.*

workflow gap. InkZone is independent of all press manufacturers. Thanks to dedicated interfaces, a unique method to make a network connection to most any press console – even on older offset presses – and a low price point, closing the workflow gap is attainable for printing operations of all sizes.

### JDF-Supported Ink Key Presetting

InkZone is based on JDF technology and is fully compliant with global workflows and international standards. The IZ Plot software sends ink coverage values in the form of JDF files into the InkZone Perfect database for conversion to calibrated machine- and print-related values for presetting the ink keys and ductor rollers. The InkZone hardware components send this data via network and in the specific format required by the press console.

### Greater Efficiency, Higher Quality, Fast ROI

With InkZone, Digital Information offers an interface between prepress and press that's equally powerful and economical. First, the solution provides networked ink key presetting, so color start-up is accomplished in a fraction of the previous time, bringing a clear increase in productivity. What's more, InkZone generates a database of your settings, allowing corrections and continuous improvement in results over time. This makes InkZone a component that's indispensable on the road to a standardized printing process. Consider the following: As you use InkZone Perfect, it compares the computed preset data with the corrected values during each press run. By reading back the values measured throughout the print run, the calibration curve for a given set of printing conditions can be continuously corrected and will gradually approach an optimum. When it comes to repeat orders, that means a further boost to the speed of set-up sequences, significant savings in paper, and a permanently stable, high-quality printing process.

An investment in extending your workflow to the pressroom with InkZone from Digital Information is worthwhile. Based on the results we have seen in thousands of InkZone installations worldwide, the InkZone solution can deliver an ROI within a few short months.

### Ready for Replacement

Many offset presses in daily production are equipped with legacy or defective ink key preset systems. Usually with no or very limited calibration tools to handle individual press conditions; ready to be substituted by InkZone:

- Heidelberg Prepress Interface.
- KBA Koenig & Bauer CIP Link.
- Manroland Pecom and Press Manager Perfect.
- Komori Bladesetter, PQC CIP Communicator.
- Ryobi & Mitsubishi RMGT IVS Ink Volume Setter and Ink Saver.
- Lithotel Colorlinx.

### Online Connection for Every Offset Press

Using the appropriate hardware components, ink key presetting with InkZone can be realized on almost all offset presses. The IZ Link, IZ Strip, IZ Tape, IZ Net, IZ eFloppy and IZ Wire connections support press consoles/offset presses from almost all manufacturers.

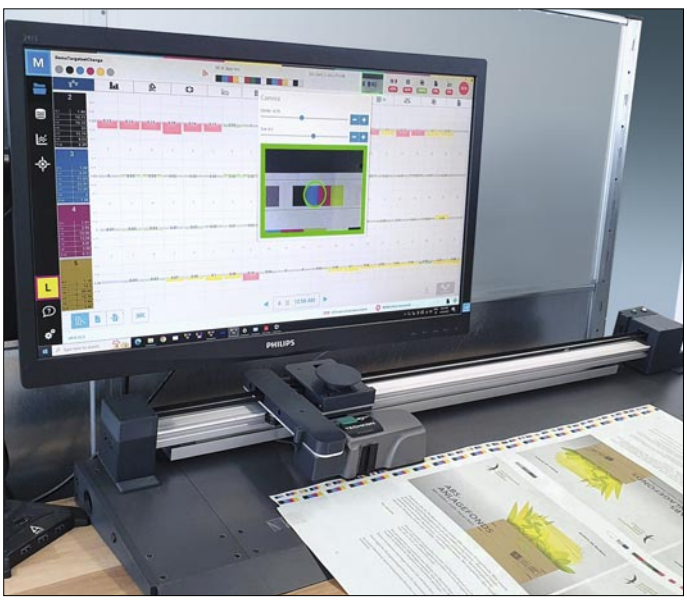

*InkZone Perfect comes with connections that are suitable for networked ink key presetting on almost every printing press.*

# High-End Color Measuring for Offset Printing

*Combining a color scanner and vacuum system with Techkon's Spectrojet scanning spectrophotometer brings efficiency and color stability to the offset printing press. The IZ Move software package visualizes all parameters of the print run in real time. Optionally, IZ Move can both document the color processing with IZ Report as well as calibrate the prepress workflow with IZ TVI. Automated color measuring is elegantly combined with InkZone's best-in-class ink key presetting and closed-loop color control functions. Being a modular and modern solution, the InkZone production suite for complete color control is a quality booster for almost any offset press. IZ ColorTrail SpectroJet is a groundbreaking, cost-effective solution.*

**InkZone ColorTrail combines automated scanning of the color bar with a vacuum system and the SpectroJet spectrophotometer: another great advance of InkZone's functionality on the printing press.**

- Supports offset presses with a color bar length of up to 200 cm.
- Modular: The system can be enhanced with InkZone's ink key presetting (IZ Perfect) and closed loop color control (IZ Loop) solutions.
- The entire color bar is measured within seconds and visualized inside the InkZone Move software.
- A digital camera checks the accurate control strip position and shows immediate warnings regarding incorrect measurements.
- A perfect retrofit solution for existing printing presses: Accurate color control for old and new offset machines..
- Excellent substrate fixation with vacuum system.
- Measurement of density (M3) and ISO compliant spectral data according to M0/M1 standards.
- Perfectly suited for short and long print runs.
- Significantly reduced paper waste by accelerating perfectly consistent color control: less complaints and more happy customers.
- Excellent price/performance ratio: ROI within a few months.
- CMYK and spot color database for printing on different substrates.

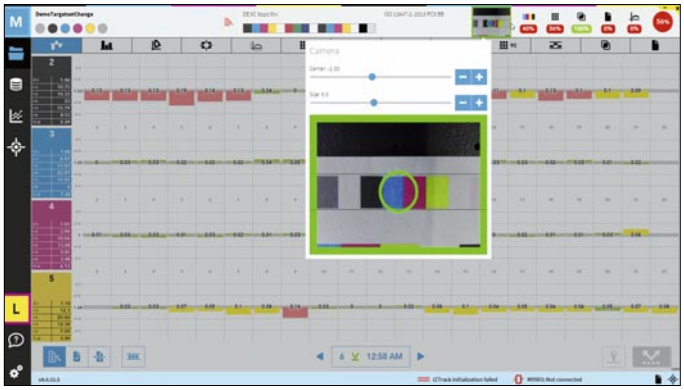


*InkZone Move visualizes all color measurements of the SpectroJet spectrophotometer in real time.*

*Offset press with InkZone ColorTrail and the Techkon SpectroJet spectrophotometer.*

# InkZone ColorTrail with Techkon SpectroJet

*Techkon's SpectroJet spectrophotometer mounted on the InkZone ColorTrail automated track.*



*A camera checks the color bar position constantly. IZ Move shows automated warnings about scan errors.*

### Specifications of SpectroJet spectrophotometer

- Spectral range 400–700 nm, wavelength pitch 10 nm.
- Color patch size 4 x 4 mm (height x width).
- Measurement conditions M0, M1, M2 and M3.
- Viewing system 0°.45° (angular illumination).
- Scanning length up to 200 cm.
- Density range 0.0 D–2.5 D.
- Data transmission and power supply with IZ Track: USB port.

### Ready for Replacement

Many offset presses in daily production are equipped with legacy or defective color control systems, ready to be substituted by IZ ColorTrail:

- Heidelberg Axis Control, Image Control, CPC 24.
- KBA Koenig & Bauer Densitronic.
- Manroland FDM 17, FDM 19, FDM 20.
- Komori PDC, PDC-L, PDC-S, PDC-SX.
- Ryobi & Mitsubishi RMGT PDS-E.
- GMI Clarios, Cosar and ColorQuick.

### Specifications of InkZone ColorTrail with the SpectroJet spectrophotometer

- Scanning length up to 200 cm.
- Perfect tracking control and measurement visualization exclusively performed by the IZ Move software package.
- Fully automated scanning start by IZ Move.
- Black backing scanning surface.
- Motorized movement of the SpectroJet spectrophotometer.
- In most cases, the complete system can be installed on the press console's existing desk. Adding of a base plate may be necessary.
- A vacuum system is recommended to be installed for IZ ColorTrail with the SpectroJet.

*Link to the video with IZ ColorTrail and the SpectroJet.*

# An automated vacuum system for InkZone ColorTrail

The vacuum system for IZ ColorTrail with SpectroJet allows secure fixation of the substrate. The impact of slight paper imperfections is eliminated; the sheets remain perfectly attached throughout the color scan. The amount of substrate-related incorrect measurements is drastically reduced due to the stabilized sheet positioning. Preventing inaccurate measurements enables both faster achievement of the desired target color as well as more stable press runs with every printing job.

*Back side of the vacuum system with magnetic fixation.*

*Two rows of vacuum holes for substrate fixation.*

*A powerful vacuum pump holds a firm grip on the paper.*

### Technical data of vacuum system

**Air suction system for IZ ColorTrail with SpectroJet**

- Supports the combination of IZ ColorTrail with SpectroJet exclusively.
- Workflow exclusively controlled by the IZ Move software package.
- Robust base unit in any length matching IZ ColorTrail.

**Vacuum pump**

- Power connection 110/220 volts, 0.45 kW.
- Weight 13 kg.
- Maximum vacuum 120 mbar.

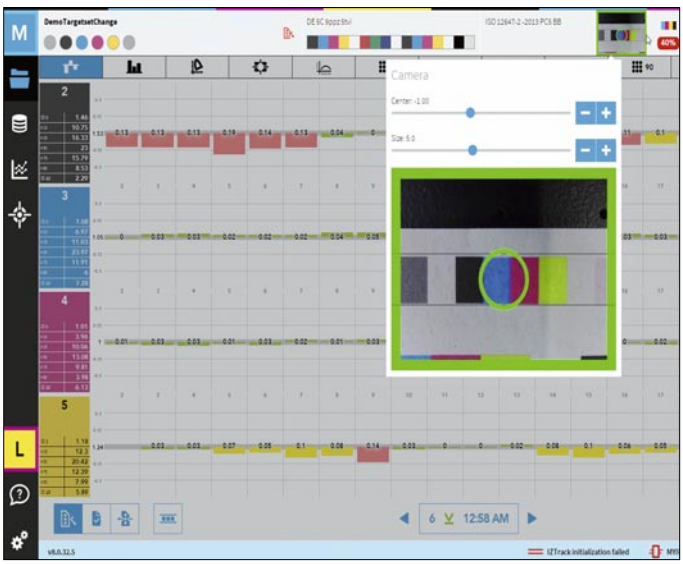
# Affordable Color Measuring for 2up/4up Offset Printing

*Combining a color scanner and vacuum system with* MYIRO *Konica Minolta's MYIRO scanning spectrophotometer brings efficiency and color stability to the offset printing press. The IZ Move software package visualizes all parameters of the print run in real time. Optionally, IZ Move can both document the color processing with IZ Report as well as calibrate the prepress workflow with IZ TVI.*

InkZone *Automated color measuring is elegantly combined with InkZone's best-in-class ink key presetting and closed-loop color control functions. Being a modular and modern solution, the InkZone production suite for complete color control is a quality booster for almost any offset press. IZ ColorTrail MYIRO is a groundbreaking, cost-effective solution.*

**InkZone ColorTrail combines automated scanning of the color bar with a vacuum system and the MYIRO-1 spectrophotometer: another great advance of InkZone's functionality on the printing press.**

- Supports offset presses with a color bar length of up to 75 cm (4up size).
- Modular: The system can be enhanced with InkZone's ink key presetting (IZ Perfect) and closed loop color control (IZ Loop) solutions.
- The entire color bar is measured within seconds and visualized inside the InkZone Move software.
- A digital camera checks the accurate control strip position and shows immediate warnings regarding incorrect measurements.
- A perfect retrofit solution for existing printing presses: Accurate color control for old and new offset machines.
- Excellent substrate fixation with vacuum system.
- Measurement of density and ISO compliant spectral data according to M0/M1 standards.
- Perfectly suited for short and long print runs.
- Significantly reduced paper waste by accelerating perfectly consistent color control: less complaints and more happy customers.
- Excellent price/performance ratio: ROI within a few months.
- CMYK and spot color database for printing on different substrates.

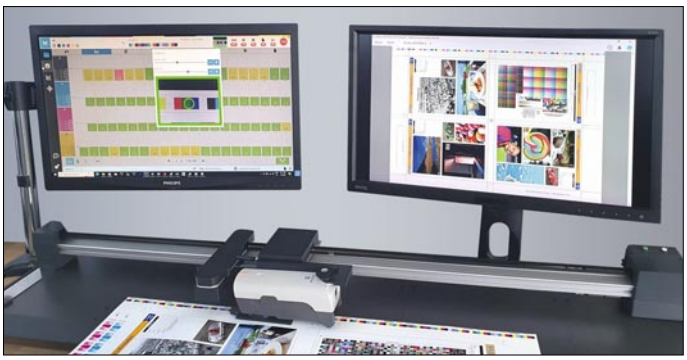


*A camera checks the color bar position constantly. IZ Move shows automated warnings about scan errors.*

*Heidelberg Speedmaster 52 offset press with IZ ColorTrail and the MYIRO spectrophotometer.*

# InkZone ColorTrail with the Konica Minolta MYIRO-1

*Konica Minolta's MYIRO-1 spectrophotometer and IZ ColorTrail.*



*A camera checks the perfect color bar position during the Scan. IZ Plot brings soft proofing right to the press console.*

### Specifications of MYIRO-1 spectrophotometer

- Spectral range 380–730 nm, wavelength pitch 10 nm.
- Color patch size 6.5 x 6.5 mm (height x width).
- Measurement conditions M0, M1 and M2.
- Viewing system 45° a: 0° (angular illumination), conforming to ISO 13655, etc.
- Scanning length up to 75 cm (4up).
- Density range 0.0 D–2.5 D.
- Data transmission with IZ Track: USB port plus power supply 18 Volt.

### Ready for Replacement

Many offset presses in daily production are equipped with legacy or defective color control systems, ready to be substituted by IZ ColorTrail:

- Heidelberg Axis Control, Image Control, CPC 24.
- KBA Koenig & Bauer Densitronic.
- Manroland FDM 17, FDM 19, FDM 20.
- Komori PDC, PDC-L, PDC-S, PDC-SX.
- Ryobi & Mitsubishi RMGT PDS-E.
- GMI Clarios, Cosar and ColorQuick.

### Specifications of IZ ColorTrail with the MYIRO-1 spectrophotometer

- Scanning length up to 75 cm (4up).
- Perfect tracking control and measurement visualization exclusively performed by the IZ Move software package.
- Fully automated scanning start by IZ Move.
- Black backing scanning surface.
- Motorized movement of the MYIRO spectrophotometer.
- In most cases, the complete system can be installed on the press console's existing desk. Adding of a base plate may be necessary.
- A vacuum system is included in the delivery of IZ ColorTrail for the MYIRO-1.

*Link to the video with IZ ColorTrail and the MYIRO-1.*

# An automated vacuum system for InkZone ColorTrail

The vacuum system for IZ ColorTrail with MYIRO allows secure fixation of the substrate. The impact of slight paper imperfections is eliminated; the sheets remain perfectly attached throughout the color scan. The amount of substrate-related incorrect measurements is drastically reduced due to the stabilized sheet positioning. Preventing inaccurate measurements enables both faster achievement of the desired target color as well as more stable press runs with every printing job.

*Back side of the vacuum system with magnetic adhesion.*

*Two rows of vacuum holes for substrate fixation.*

*A powerful vacuum pump holds a firm grip on the paper.*

### Technical data of vacuum system

**Air suction system for IZ ColorTrail with MYIRO-1**

- Supports the combination of IZ ColorTrail with MYIRO-1 exclusively.
- Workflow exclusively controlled by the IZ Move software package.
- Robust base unit in any length matching IZ ColorTrail.

**Vacuum pump**

- Power connection 110/220 volts, 0.45 kW.
- Weight 13 kg.
- Maximum vacuum 120 mbar.

# The Vacuum Solution for all SpectroDrives

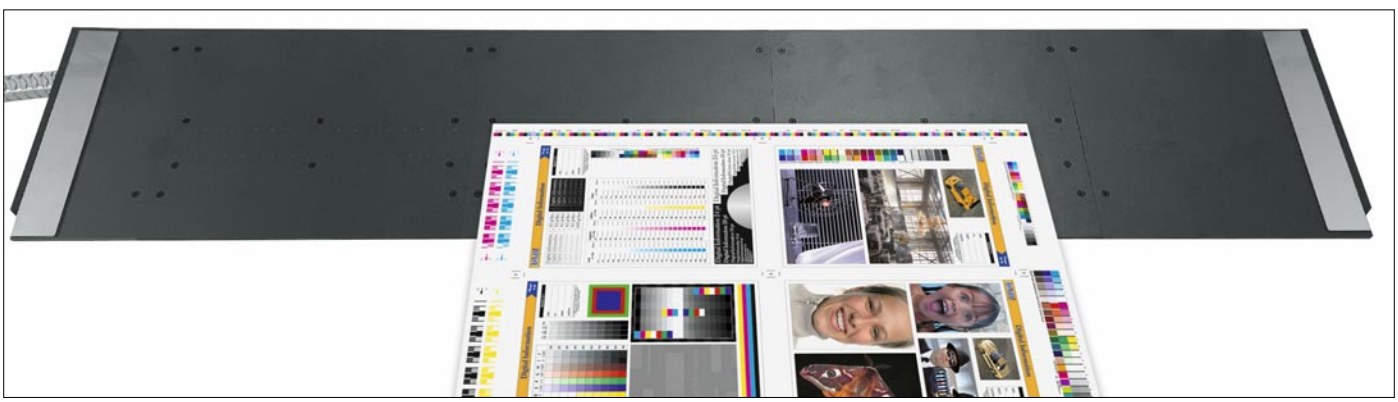
*IZ Vacuum for Techkon's SpectroDrive allows a safe fixation of any substrates. Its suction plate is fitted with a powerful suction pump, with a double-row hole system allowing the SpectroDrive to glide smoothly across the sheet. The sheet rests firmly fixed for the entire scan, eliminating substrate warping. This stable sheet positioning drastically reduces substrate related measurement errors so target colors can be attained far more quickly, guaranteeing a stable print run with less waste – job after job.*

*IZ Vacuum's powerful suction grip locks the sheet firmly into position, keeping the sheet perfectly flat.*

## Technical details of IZ Vacuum

- All Techkon SpectroDrive systems currently on the market including the original SpectroDrive (supplied from 2012–2016), as well as the current SpectroDrive NG (supplied from 2016–present), can be retrofitted with IZ Vacuum.
- IZ Vacuum is software-independent and can be used with any scanning software. I.e., Techkon Expresso, Bodoni pressSIGN, IZ Move and other products from known manufacturers.
- IZ Vacuum is available in any measurement length required – according to the SpectroDrive's measuring bar already fitted or to be ordered.
- The SpectroDrive's flexible mount uses magnetic pull with proven reliability.

*The double-row vacuum hole system.*



*InkZone Vacuum in operation on a Manroland R900 XXL console.*

*A powerful suction pump firmly secures the paper position.*

## Specifications

**IZ Vacuum**

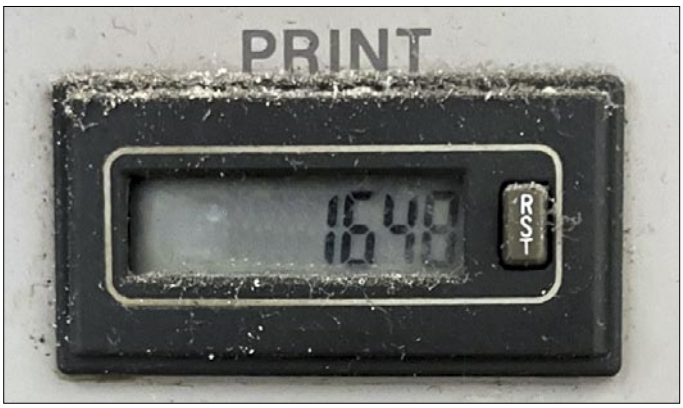
- Supports all generations of Techkon's SpectroDrive system available on the market.
- Software-independent.
- Sturdy, reliable unit available in any length required.
- Compatible with Techkon's magnetic mounting system.

**Vacuum pump**

- Power supply 110/220 Volt, 0,45 kW.
- Weight 28.6 lb / 13 kgs.
- Maximum vacuum 120 Mbar.

# Solutions for the Printing Industry 4.0

## InkZone SheetCount gets the numbers




*IZ SheetCount gets the numbers of printed sheets online from offset presses in real time. This data can be handed over digitally into IZ Move or to 3rd party solutions.*

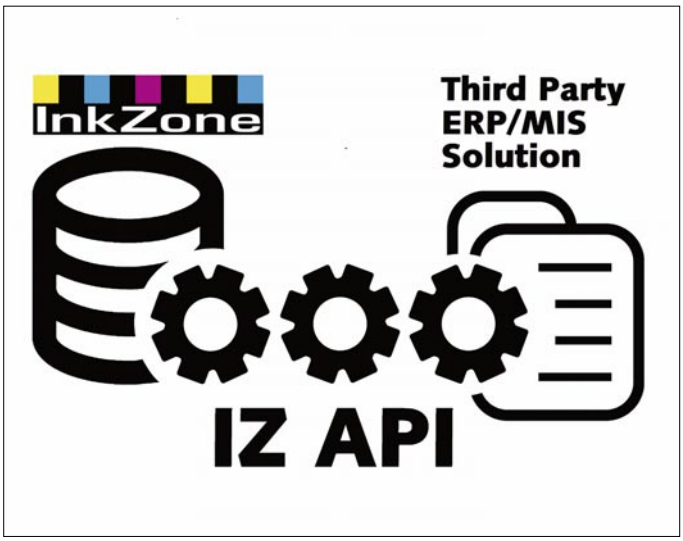
In today's printing market, the cost of paper is an important factor. Knowing the exact amount of sheets going through the offset press is therefore essential for every printer.

IZ SheetCount connects the press online through a digital interface and communicates this data to the IZ Move color scanning software. For the first time it is possible to link the counted sheet numbers to the color quality produced at any moment. All this data is saved into the InkZone job database and can be checked at any time.

For the first time, printers can proof to end users about the color quality produced in combination with the press sheets counted by the offset press itself and delivered by IZ SheetCount.

Optionally this information can be communicated to third party systems, e.g. ERP/MIS solutions for accounting and invoicing.

## IZ API links 3rd party ERP/MIS systems with InkZone




*IZ API: An open data exchange interface between InkZone and third party ERP/MIS solutions.*

Most printing companies have at least two separate IT systems in daily operation: One prepress workflow for publishing data handling, color management, printing plate production, etc. and one ERP/MIS solution for order processing, invoicing, management information and so on.

IZ API is the perfect link in between: Job information is going from prepress workflow (CIP3/4) into InkZone and the press, from there several production parameters can be handed over by IZ API into the ERP/MIS system. Possible parameters are job name, printing colors in job, color rotation in press, color information, number of printed sheets, printing quality, etc. With IZ API there is now an easy solution to close the gap between technical printing workflow and ERP/MIS administration software.

### Technical Specifications

- Installed IZ Move Report Software.
- Installed IZ Move TVI Software.
- IZ API is able to communicate with EPR/MSI systems by either XML or JSON data interchange format.

**Digital Information**

Vulkanstrasse 120, CH-8048 Zurich, Switzerland

Phone +41 43 818 20 00

www.digiinfo.com, info@digiinfo.com

Direct Link to Digital Information's Youtube Channel.

Direct Link to Digital Information's Website.