



# ZOOM IN ON AUTOMATION

WITH IQ-501, INTELLIGENT QUALITY CARE

# ZOOM IN ON AUTOMATION

Konica Minolta's Intelligent Quality Care system is the innovation per se for print providers intent upon outdoing their competitors. Performing with the assistance of smart machine automation, the IQ-501 is all about saving time while creating extra value for your printing business and your customers.

The innovative IQ-501 for Intelligent Quality Care takes consistency and registration accuracy to a new level. The IQ-501 provides extensive automation for image position and registration on the one as well as colour control and inspection on the other hand. This is made possible with our proprietary closed-loop control system that checks and corrects printed output. Automation provided by the IQ-501 also extends to colour calibration and profiling – all designed to reduce operator time and print wastage while increasing productivity.



# ZOOM IN ON YOUR BUSINESS

## WHAT IQ-501 CAN HELP YOU AVOID



### NO MORE

daily “waking-up” or preparation of equipment plus repeated job adjustment during the day



IQ-501 can **save** your business up to **300 working hours per year**



### NO MORE

third-party colour calibration device required



**saves more time and financial outlay**



### NO MORE

need for **regular operator trainings**



**increased operator time and reduced costs**



### NO MORE

**money lost** on wasted output or print orders that are refused/ returned by customers



**enhanced customer satisfaction & your margins protected**

## YOUR BENEFITS AT A GLANCE

### – MAXIMUM PRODUCTION EFFICIENCY

Minimize job setup times and maximize throughput with the automatic colour and registration adjustments applied before printing.

### – FASTER TURNAROUND

Automate and speed up most of the preparation and make-ready of your printing press with the IQ-501 – for attractive productivity increases and faster response times.

### – NO COMPROMISE ON PRINT QUALITY

Achieve outstanding print quality for every job – let the IQ-501’s highly accurate automatic adjustment features take care!

### – CONSISTENCY ACROSS THE RANGE

Provide highly consistent quality across your entire range of print products – with the IQ-501’s real-time monitoring and automatic colour and registration adjustment.

### – MUCH REDUCED DOWNTIME

Avoid the need for regular checks during production – for smoother production runs and minimal downtime.

### – NO SPECIAL SKILLS REQUIRED

Get even novice print operators to produce precisely registered, calibrated and profiled colour prints from their very first job.

### – MINIMIZE HUMAN INTERVENTION

The IQ-501’s automated artificial intelligence technology gets it right every time: measurements are always reliable and precise and do not need operator intervention.

### – NO MORE HUMAN ERROR

The IQ-501 does not require special operating skills – reducing the chance of human errors causing misprints.

### – AVOID WASTE, SAVE TIME AND MONEY

The material waste so far unavoidable during colour and registration adjustment is no longer an issue; and time-consuming routine tasks are greatly reduced.

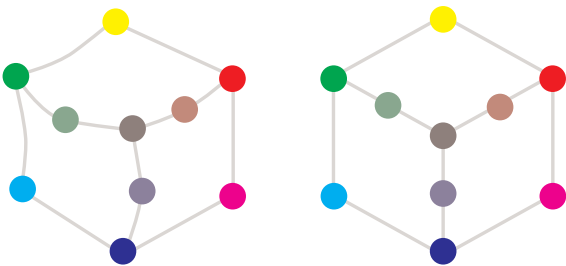
# ZOOM IN ON QUALITY

Intelligent Quality Care automatically performs all of the operations that were previously required for colour adjustments and the linearization of your printing press. This not only reduces the time required for measurements but also enables unskilled yet accurate adjustments with no fear of errors. It also contributes to the production of print products of higher quality and stability. Furthermore, due to the much improved productivity, shorter adjustment times mean a faster turnaround.

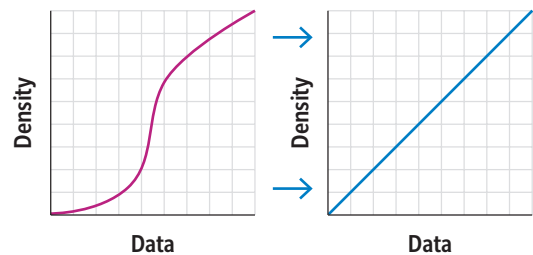
Performing the adjustments required for daily operation in a single step takes 12 minutes and produces 13 prints:

- Smooth Gradations with Gamma Auto Adjustment
- Same colour all over the sheet with Density Balance Adjustment
- Optimum colour space with Max. Density Adjustment
- Stable colours with Colour Density Control
- Neutral grey with Grey Balance Adjustment (Exact Colour)

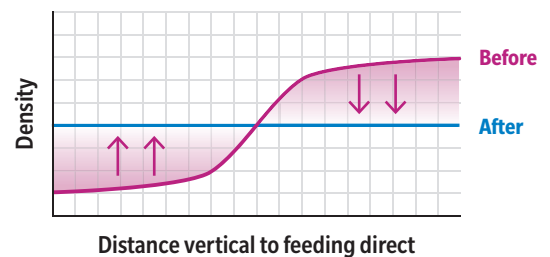
## Exact Colour



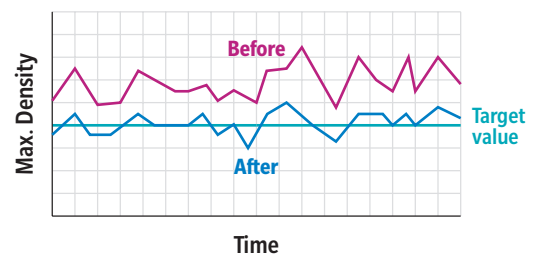
## Colour Density Control



## Density Balance Adjustment



## Max. Density Adjustment



# ZOOM IN ON PROFILING

Going for the IQ-501 Intelligent Quality Care system, you opt for state-of-the-art image processing features. Not only will you zoom in on pioneering technology, you will boost the colour quality of your complete range of print products – to the entire satisfaction of your customers!

## Hands-free printer calibration and profiling

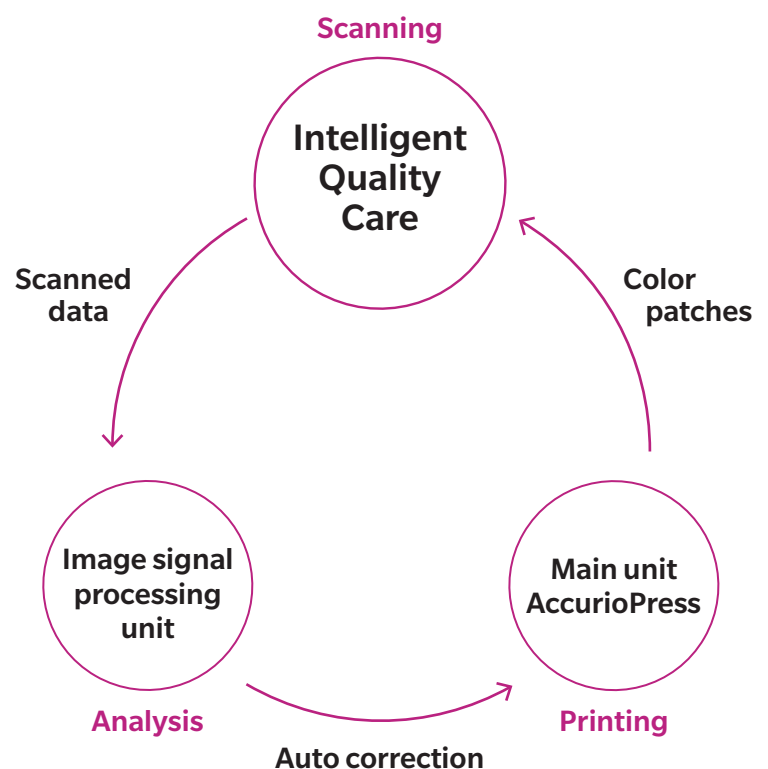
Creating a calibration and ICC profile for each new media is considered essential to obtaining the best print quality, and is fast and easy with the IQ-501. It provides direct access to several ICC profiling software applications and completely avoids the tedious manual routine of using an offline spectrophotometer.

## Colour validation

The validation is ideally done before jobs that emphasize colour reproduction or when updating printer profiles. The procedure helps ensure that printed results correspond exactly to your customers' expectations.

## ZOOM IN ON REAL TIME

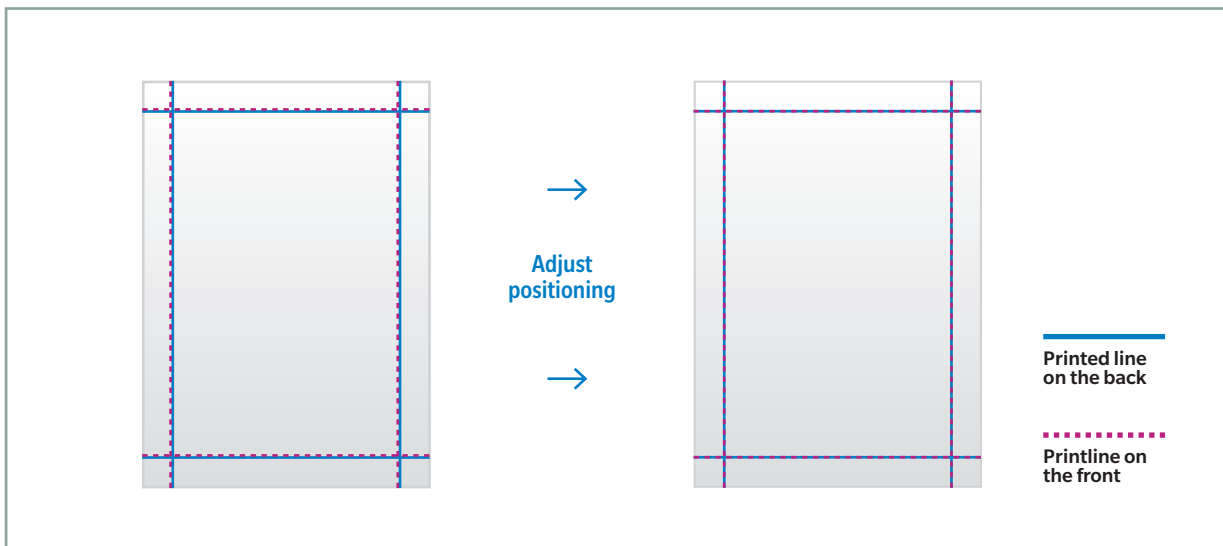
Beyond linearization and profiling – to be done before you print your jobs demanding high quality – IQ-501 even goes one step further: during printing it can monitor your job and check the colour stability on every single sheet, adjusting it on the fly if required. IQ-501 measures the quality where it really matters – on the sheet.





# ZOOM IN ON REGISTRATION

The Intelligent Quality Care unit automates one of the most challenging jobs in print preparation, duplex registration. All the operator needs to do is specify the media and tray – and the IQ-501 automatically adjusts the front-to-back registration for the job, page by page. In an instant, a perfect match is achieved for best accuracy and precision. It is also possible to automatically perform periodical adjustments at an interval of every 100+ sheets.



## ZOOM IN ON REAL TIME

Continuous monitoring and closed-loop, automated process controls check each and every print; and on-the-fly adjustments provide optimal registration results that will satisfy both your customers and yourself.

The average front and back position movement of 20 printed sheets is controlled during printing to correct the position at all times when in-position fluctuations are detected. Since the back of the sheet is corrected in the same way as the front, accurate print positioning is maintained. Furthermore, real time curl adjustment can be applied: By scanning the printed materials with IQ-501, it is possible to control the Relay Unit RU-518m de-curler function and automatically correct curling in real time.

For print applications like business card, shop card, coupon printing, where front-to-back registration requires attention, it is possible to deliver high quality print products and to suppress the cost increase caused by print waste thanks to automated adjustment on front-to-back registration.





# ZOOM IN ON AUTO INSPECTION

## Auto Quality Adjustment

Before you print demanding jobs, the automatic quality adjustment function diagnoses the image quality level of the machine and suppresses print quality problems caused by a deterioration of the image quality. As the machine itself makes judgements about simple problems or sudden problems, service calls and maintenance service hours in your production environment are reduced. This helps maximize your production operation time.

Diagnostic charts are printed and image quality diagnosis is performed automatically for issues such as streaks and spots; and if the diagnosis finds any critical issue, it will start a self recovery to correct itself. Information such as the image quality level of the machine can be automatically transferred to the nearest service department.

## ZOOM IN ON REAL TIME

In addition to the Real Time Colour and Registration Adjustment, Auto Inspection Technology (AIT) consisting of UK-301 and RU-702 can be installed on the IQ-501 to perform a real-time inspection on a section of every single sheet. This significantly reduces inspection time, achieves highly reliable inspection with high precision, and saves manpower needed for 100% inspection. In order to maintain the product quality, inspection work used to require a lot of man-hours and effort. However, such lengthy inspection work can now be reduced and an even better relationship built with customers through short delivery times and fewer quality issues. Adding the Variable Data Inspection Kit UK-312 allows real-time comparison of the actual printed matter with the CSV file containing the variable printing data (VDP). This then provides automatic confirmation of whether the variable printing of bar codes and numbers was performed correctly. Adding the Inspection Enhancement Kit UK-311 enables the inspection of variable fields.





# 10 GOOD REASONS TO INVEST IN IQ-501'S INTELLIGENT QUALITY CARE SYSTEM

What is it that the IQ-501 does, that printing systems from other manufacturers cannot offer? Understand the IQ-501's specific advantages, and you'll realize that this ingenious tool will quickly revolutionize your production workflows! Seems too good to be true? Put the IQ-501 to the test and you'll find out otherwise!



## 1. MAXIMUM PRODUCTION EFFICIENCY

The automatic colour and registration adjustments applied before printing minimize job setup times and maximize your throughput.



## 2. FASTER TURNAROUND

With the IQ-501, you automate and speed up most of the preparation and make-ready of your printing press, for increased productivity on your part and faster response times for your customers.



## 3. MUCH REDUCED DOWNTIME

Smoother production runs and no more need for regular checking during production cut downtime to a minimum.



## 4. NO MORE HUMAN ERROR

Special operating skills are not necessary for the IQ-501, reducing the chances of human error causing misprints.



## 5. MONEY SAVED

The waste of material so far unavoidable during colour and registration adjustment is no longer an issue; and time-consuming routine tasks are greatly reduced.



## 6. CONSISTENCY ACROSS THE RANGE

With real-time monitoring and automatic colour and registration adjustment, the IQ-501 delivers highly consistent quality across your entire range of print products.



## 7. FEWER SERVICE CALLS

The IQ-501's automated cloud-based data collection helps avoid many onsite service calls; most issues can be solved remotely.



## 8. NO SPECIAL SKILLS REQUIRED

Even novice print operators can produce precisely registered, calibrated and profiled colour prints from their very first print run.



## 9. HUMAN INTERVENTION MINIMIZED

The IQ-501's automated artificial intelligence technology gets it right every time: measurements are always reliable and precise and do not need operator intervention.



## 10. NO COMPROMISE ON PRINT QUALITY

From now on, you'll find it easy to achieve outstanding print quality in every print run. Let the IQ-501's highly accurate automatic adjustment features take care!



KONICA MINOLTA

# IQ-501 SUPPORTS THESE KONICA MINOLTA PRESSES:



AccurioPress C4070



AccurioPress C4080



AccurioPress C83hc



AccurioPress 6120



AccurioPress 6136/P



AccurioPress C7090



AccurioPress C7100



AccurioPress C12000



AccurioPress C14000

DEVICES	AUTOMATIC ADJUSTMENTS					REAL TIME ADJUSTMENTS			
	Auto Duplex Registration	Auto Colour Adjustments	Auto Quality Adjustment	Auto Profiling	Auto Colour Validation	Auto Inspection Technology	Real time Colour adjustment	Real time Registration adjustment	Variable Data Inspection
AccurioPrint C4065	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖
AccurioPress C4070	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
AccurioPress C4080	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
AccurioPress C83hc	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
AccurioPress C7090	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
AccurioPress C7100	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
AccurioPress C12000	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
AccurioPress C14000	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
AccurioPress 6120	⊕	⊕	⊕	⊖	⊖	⊕	⊕	⊕	⊕
AccurioPress 6136/P	⊕	⊕	⊕	⊖	⊖	⊕	⊕	⊕	⊕