

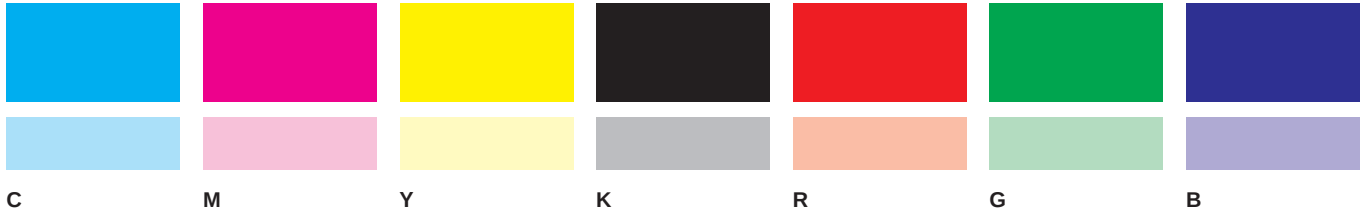
Quick check

One page to screen colour channels, detail, tone, geometry and background contamination.

Printer: _____ Date: _____ Tray / media: _____

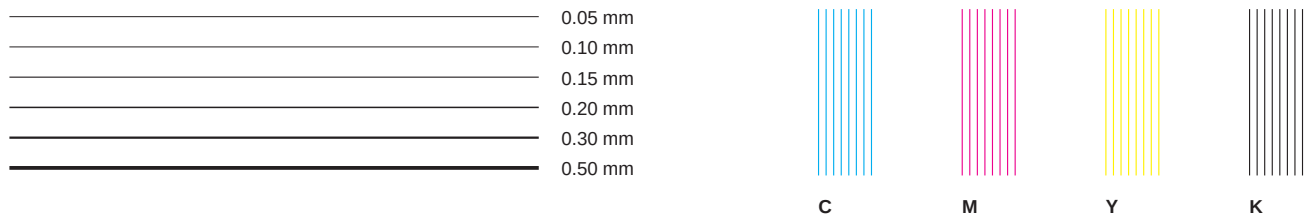
01 Colour channels and mixed colours

Look for missing colour, streaks, uneven fill or a colour that is much weaker than the others.



02 Fine detail and straightness

Thin lines may fail before thicker ones. A missing finest line alone does not prove a fault.



6 pt: 0123456789 AaBb - fine type

8 pt: 0123456789 AaBb - everyday text

03 Tonal steps

Steps should change progressively. Compare repeat prints using the same settings.



K-only grey above. CMY grey below can expose colour casts; it is not a neutral colour standard.



04 Geometry and registration screening

Check the 100 mm span with a ruler; inspect the four-colour targets with a loupe.



100 mm nominal. If wrong, check print scaling before interpreting measurements.

WHITE FIELD - leave empty to reveal unwanted specks, haze or ghost images.

Result: _____ Suspect colour: _____ Next test: _____

Colour registration

Measure C / M / Y relative to K. Black is a reference; it is not assumed mechanically correct.

Printer: _____ Date: _____ Tray / media: _____

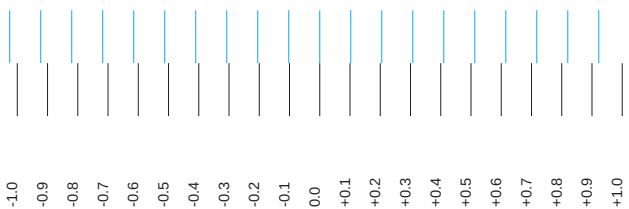
Find the numbered pair whose two halves join most cleanly. A loupe helps, especially for yellow.

The number is the geometric correction (mm); observed colour displacement has the opposite sign.

Positive X = right. Positive Y = down. These are page axes, not printer service-menu units.

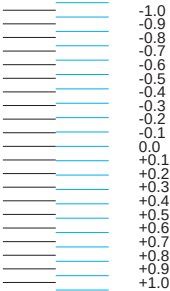
C vs K

X / horizontal correction



X correction: _____ mm

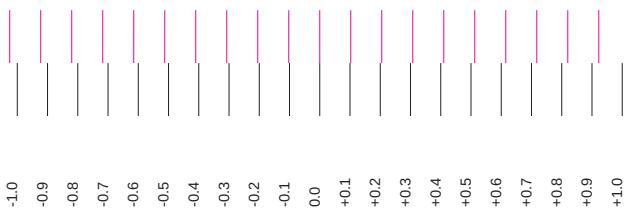
Y / vertical correction



Y correction: _____ mm

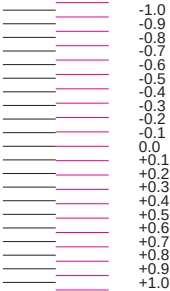
M vs K

X / horizontal correction



X correction: _____ mm

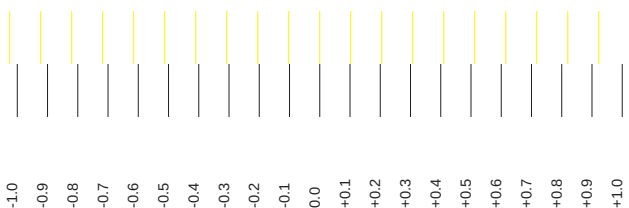
Y / vertical correction



Y correction: _____ mm

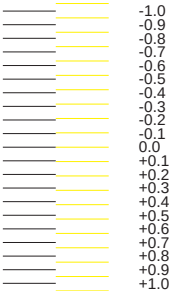
Y vs K

X / horizontal correction



X correction: _____ mm

Y / vertical correction



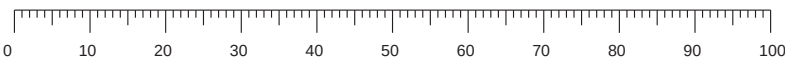
Y correction: _____ mm

Example: best X join at -0.3 means this colour printed about 0.3 mm to the right of K.

Range: +/-1.0 mm in 0.1 mm steps. Read approximately; rasterisation and toner spread limit accuracy.

If no pair joins, displacement may be out of range or the lines may be too distorted to read.

A shift may involve imaging, belt timing or calibration. Use the model-specific registration procedure.



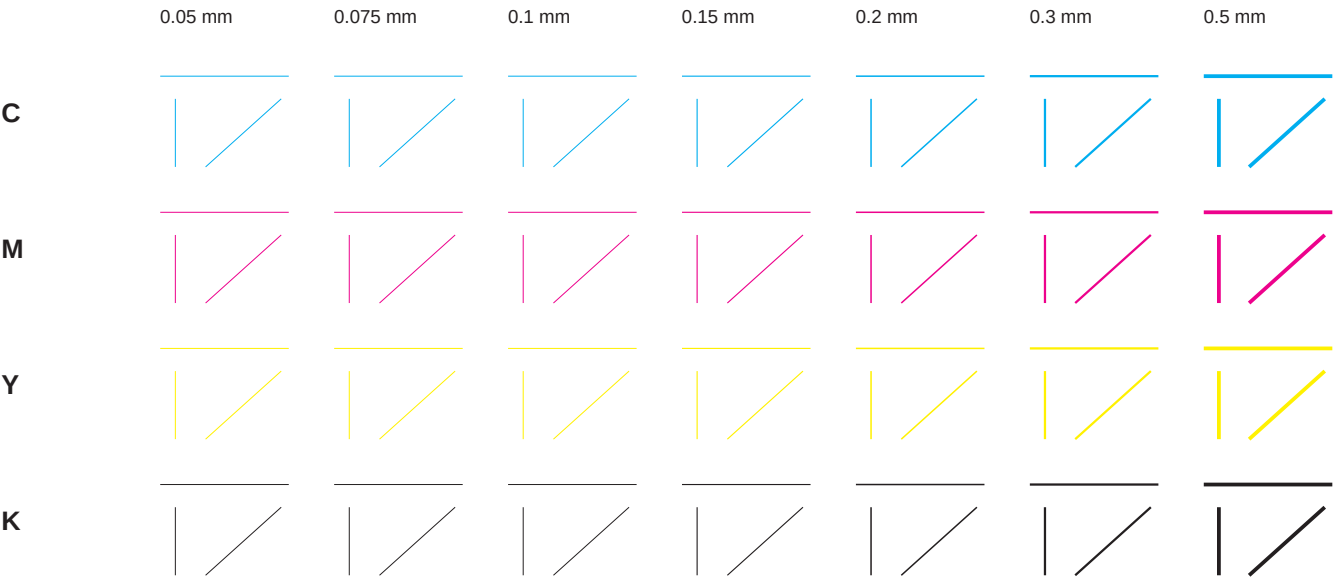
Detail and geometry

Compare orientations and colours; record the smallest repeatably clean feature.

Printer: _____ Date: _____ Tray / media: _____

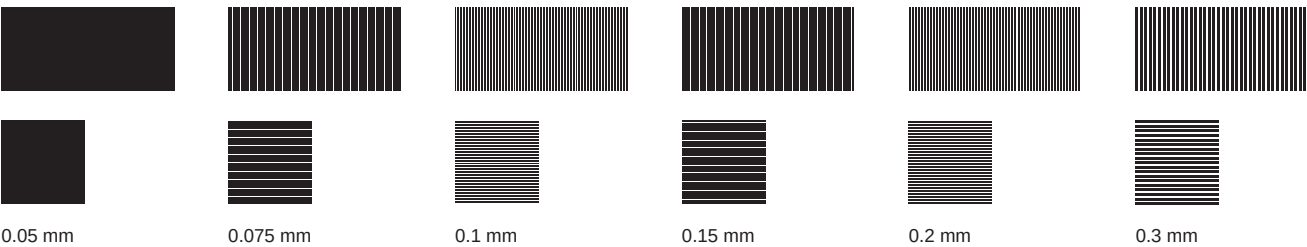
01 Line widths / C M Y K

Each cell contains horizontal, vertical and diagonal lines at the labelled width.



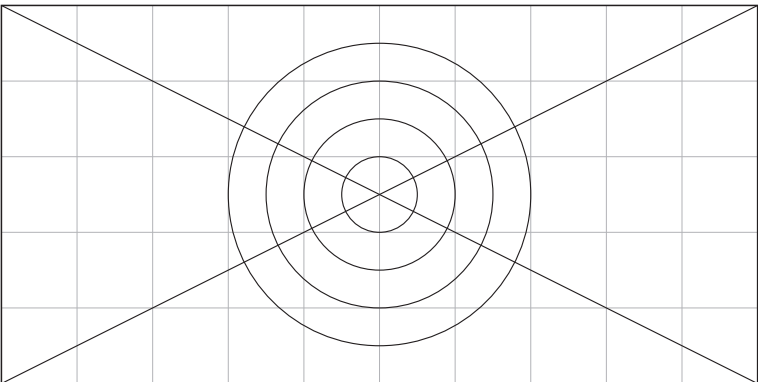
02 Line / gap pairs

Bar width equals gap width. Record where separate lines become a solid patch.



03 Straightness / scale / shape

A 100 x 50 mm rectangle with a 10 mm grid, diagonals and concentric circles.



Text / K only

AaBb 0123456789

AaBb 0123456789

AaBb 0123456789

AaBb 0123456789

AaBb 0123456789

Clean minimum: _____

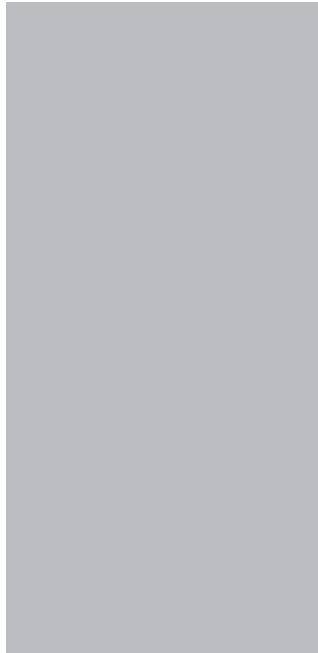
Density and uniformity

Large fields reveal streaks, banding, mottling and differences across the sheet.

Printer: _____ Date: _____ Tray / media: _____

Inspect each field for unwanted lines or patches. Halftone dot texture itself is expected.

The same defect in several colours may involve a shared path; colour-only defects narrow the search.

C	M	Y	K
			
30% nominal	30% nominal	30% nominal	30% nominal
			
100% nominal	100% nominal	100% nominal	100% nominal

01 Greys and tonal response

K-only vs CMY: compare smoothness and colour casts, not absolute colour accuracy.

0	2	5	10	20	40	60	80	90	95	100
K										
CMY										

Defect colours / position / direction: _____

Measure identical marks in the actual paper-travel direction; sheet top is not always the feed edge.

Mark the edge that entered first: _____. Measure 3+ occurrences where possible.

Average pitch = distance from first to last matching mark / number of gaps between them.

Colour: _____ Pitch: _____ mm Along feed / across feed: _____ Copy no.: _____

How to use the results

A universal screening toolkit for office printers; component diagnosis remains model-specific.

Printer: _____ Date: _____ Tray / media: _____

01 Choose the level

Quick: page 1. Detailed: add only the relevant page(s) 2-5. Keep page 6 as the reference.

Before / after: repeat the same test with the same tray, paper, driver and quality settings.

02 Print settings that make measurements meaningful

A4 portrait, Actual size / 100%, one page per sheet. Turn off Fit / shrink / borderless expansion.

Single-sided for initial tests. Use colour mode, normal or high quality; disable economy mode.

Confirm paper type / weight at both driver and printer. Record any colour-management settings.

Measure the 100 mm ruler first. The 10 mm page-1 frame checks clipping and sheet placement.

Patterns are vector DeviceCMYK. Drivers can remap them; C/M/Y/K isolation is not guaranteed.

Use a native printer test page to confirm a colour-channel finding, especially if colours are mixed.

03 What a result points toward

One colour is weak / missing

That colour path, supply or imaging; also check driver conversion.

One colour has a repeat or streak

A colour-specific path is suspect; a drum is one possible cause.

Several colours share a defect

Look at shared transfer / fusing / paper path and media settings.

Coloured fringes / poor joins

Registration relative to K. Page 2 estimates axis and displacement.

Bands / uneven fills

Imaging, transfer, media or inkjet nozzle / feed issues; compare repeats.

Ghost text / matching repeated marks

Measure pitch along feed; compare with this model's defect chart.

Broken fine lines / filled gaps

Resolution, toner spread or imaging; orientation matters.

Wrong scale / bowed grid / skew

First check scaling; then compare trays and native printer output.

Specks / haze in the white field

Background contamination or unwanted deposition; repeat to confirm.

04 Separate printer, driver and scanner problems

Print page 1 from a computer; compare a built-in printer quality page. Copy a known-clean original.

Copy-only lines suggest the scan path. Computer-only faults suggest the file, app or driver.

On inkjets, add the manufacturer's nozzle check. For duplex, add a dedicated front/back alignment test.

Repeat pitches are not universal. Follow the model manual before calibration or component replacement.

Reference guidance / consulted 06 Oct 2026

OKI: Horizontal Lines and Spots Appear Periodically (model-specific repeat distances).

Xerox: Random Deletions, Spots, Stripes or Missing Color; How To Adjust the Color Registration.

Notes: _____