

Accurate color from
design to proof to shelf



Kodak
Approval NX
Digital Color Imaging System

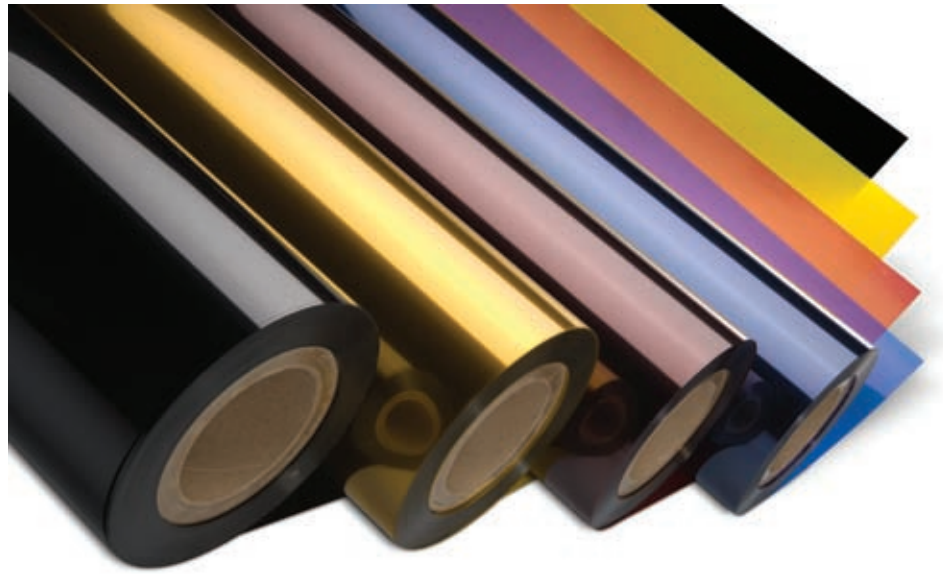
The **Kodak Approval NX** Digital Color Imaging System is a complete solution of hardware, software, and consumables that accurately proofs process, spot, and metallic colors for offset, flexo, or gravure printing. Using advanced color management techniques, the **Kodak Approval NX** System can accurately simulate millions of colors across thousands of substrates. The **Approval NX** System is capable of producing both color-accurate contract proofs and packaging mockups, helping ensure precise color between the approved packaging design and the final printed package.

Accurate process and spot color matching

Using **Kodak Recipe Color** Technology, **Kodak Approval** Digital Donors are dynamically combined to accurately predict both process and spot colors. Unlike other halftone and inkjet proofing solutions that produce spot colors as a process build, the **Kodak Approval NX** System produces a color accurate spot dot.

Recipe Color Technology accounts for variations in printing methods, inks, substrates, and screening to define specific colors incorporating color characteristics needed to print correctly on the exact substrate used in the final printed piece.

In addition, ICC profiles, device links or density and dot gain can be applied in the workflow to further predict actual press output.



The **Kodak Approval** System uses new and improved Cyan, Magenta, Yellow, Black, Orange, Green, and Blue Donors as well as Opaque White and Metallic Donors to accurately simulate process, corporate, brand, spot and special colors. The system can also create spot gloss on a proof.

Kodak Rapid Recipe Color Technology

The **Kodak Approval NX** System is a powerful tool for managing the increasing number of spot, custom and brand colors in packaging.

Kodak Rapid Recipe Color Technology provides the capability to handle complex jobs with multiple spot colors quickly and easily by simultaneously imaging up to four different densities of both process and spot colors using a single sheet of Digital Donor.

Unlike other fixed density proofing solutions, the **Kodak Approval** System is an adjustable density proofing solution, using advanced laser imaging technology to combine imaging passes of specific Digital Donors, while maintaining laydown order and helping ensure correct traps and overprints.

Expanded color range

New packaging donor sets extend the achievable color gamut to reach even more spot, customer or brand colors employed in today's visually striking package designs.

Transferring to substrates

A major advantage of the **Kodak Approval** System is its ability to transfer images onto custom stocks or substrates. Not only is it possible to image on production stock, color can be successfully managed across substrates. A proof can serve as a color accurate contract proof or as a 3-D package mockup. The **Kodak** Cutting and Creasing Table can quickly transform a flat proof into a 3-D comp resembling the final package, as it would be seen on the shelf.



With **Kodak Rapid Recipe Color** Technology, not only can you proof accurate spot colors faster than ever, you can see them on the actual substrate, eliminating unwanted surprises on press.

Typical substrates include:

- Offset stocks including coated and uncoated, text and cover up to 24 pt.
- Boards including carton, corrugated, liner, and foil board
- Plastics including PET, PVC and others
- Flexible materials including white and clear poly and shrink-wrap
- Metal (e.g. aluminum for cans), CDs and DVDs
- Specialty stocks such gold and silver foils

New **Kodak Approval** Precoat further expands the range of flexible packaging substrates suitable for color accurate proofing.

Enhanced workflow connectivity

Connectivity to nine industry leading workflow systems, including the top packaging workflows, is tested and supported to ensure file integrity is maintained by processing 1-bit TIFF data and capturing original screened information.

New **Kodak** Proofing Software offers enhanced connectivity to **Kodak Prinergy** Workflow Systems, plus the capability to accept 1-bit TIFF and screened DCS2 files from other certified workflow systems. It also drives **Kodak Matchprint** Inkjet Proofing Systems, providing a common user experience and design.

Advanced production features that run directly on the **Kodak Approval** Host Workstation, such as scatterproofing and tiling of oversized jobs, as well as **Kodak Recipe Color** Library management and automated lay down order control, assist to better manage the proof production process.

The **Approval NX** System proofs the identical data destined for flexo or CTP output devices, predicting issues such as moiré or trapping and overprinting errors before plates are made.

The **Kodak Approval** System offers total control over these variables:

Density control	Per color separation in 0.025 increments
Dot gain adjustment	1% increments (including min-dot and accurate flexo drop-off)
Screen rulings	65 -250 LPI (including 20 micron and above FM/Stochastic Screening) and object based screening
Screen angles	Any set for each color, including shifted angles and object-based screening
Dot shapes	Round, elliptical, square, line, Euclidean, and others



Kodak Approval NX Digital Color Imaging System

Technical specifications

Imaging type	Thermal laser imaging	
Maximum output image size	NX 34: 13.3" x 20.9" / 33.8 CM x 53 CM / (338mm x 530mm) NX 68: 26.6" x 20.9" / 67.6 CM x 53 CM / (676mm x 530mm)	
Output resolution	Choice of 2400 dpi or 2540 dpi	
Process digital donors	Kodak Approval Digital Cyan, Magenta, Yellow, Black	
Extended gamut digital donors	Kodak Approval Digital Orange, Green, Blue	
Specialty digital donors	Kodak Approval Digital White and Metallic	
Finishing materials	Kodak Approval Digital Intermediate Layer, Degloss Sheets, Prelaminate, Precoat and Clear Receiver	
Throughput	NX 34: 6 proofs/hour NX 68: 4 proofs/hour Quoted productivity is for four-color proofs printing at maximum output image size.	
Certified Workflows	Kodak Prinergy Workflow Systems, Kodak Brisque Software, Kodak Approval HQ-1 RIP, Esko FlexRip, Artwork Systems Nexus Workflow System, RAMPage RIP Companion, SCREEN TrueFlow Workflow System, Heidelberg Delta RIP and Heidelberg MetaDimension RIP	
Kodak Approval NX Digital Color Imaging System	Weight: 1,800 lbs (817 kg) Width: 35" (89 cm)	Length: 76" (193 cm) Height: 70" (178 cm)
Kodak 800XL laminator	Weight: 660 lbs (300 kg) Width: 48" (122 cm) Maximum temperature 275°F (130°C) Substrate: Capable of transfer to 100# or 21 pt. stocks	Length: 75" (191 cm) Height: 46.25" (118 cm)

Environmental specifications

Operating temperature	68° - 85°F (20 - 29°C)
Storage temperature	-25° - 140°F (-32 - 60°C)
Operating humidity	30% - 60% relative humidity, non-condensing (optimum performance at 35% - 45% RH) Maximum wet bulb 104°F (40°C)
Storage humidity	90% relative humidity, non-condensing. Maximum wet bulb 149°F (65°C)

Media storage

Temperature	68° - 85°F (20 - 29°C)
Humidity	30% - 60% relative humidity, non-condensing. Maximum wet bulb 104°F (40°C)

Global service and support organization

Kodak Solutions for the packaging market are supported by a world-class team of dedicated sales, professional consulting and service staff.

A world-class partnership

From packaging concept to color accurate mock up, no one else brings a more complete solution to printer-converters, trade shops and brand owners they serve. Kodak's strategic vision is to provide solutions for accurate color packaging, across any substrate, through any print process, worldwide.

This device is a Class 1 Laser Product and fully complies with EN60825-1 and US Federal Regulations 21 CFR 1040.10 - CDRH.

To learn more about solutions from Kodak:

Visit graphics.kodak.com
Or in North America, call +1-866-563-2533

Produced using Kodak Technology.

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Technical and environmental specifications subject to change.

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