



INDUSTRY-LEADING INNOVATION

A critical element of all issuance programs is ensuring the right choice of supplies. Financial institutions, governments, retailers, schools and other issuers depend on high-quality supplies to deliver superior output and optimize system performance.

A new industry was created when Datacard Group introduced the world's first card personalization and secure ID solutions. From then on, Datacard has worked with world-leading manufacturers to develop advanced supplies technologies designed to ensure seamless compatibility and exceptional results.

- First card personalization supplies
- First color photo ribbons for desktop printers
- First truly system-matched ribbons
- First Intelligent Supplies Technology[™]
- Hundreds of patents for systems and supplies

The innovation continues.

FAST DELIVERY, GLOBAL SUPPORT

Our global distribution network offers rapid delivery and technical support in more than 120 countries.

DATACARD® CERTIFIED SUPPLIES

MAKING THE BEST EVEN BETTER

ENSURE OUTSTANDING QUALITY

Datacard® Certified Supplies use exclusive Intelligent Supplies Technology™ to communicate directly with Datacard systems. Patented radio frequency (RF) technology allows supplies to be identified as genuine, enabling unique features that optimize quality and performance. Beware of counterfeit products or aftermarket brands, as these innovative features are only available through the use of genuine Datacard Certified Supplies.

Improve efficiency and reduce costs

Intelligent Supplies Technology[™] enables important advantages that competitive offerings can't deliver:

- **Reduce cost.** Systems recognize ribbons, reducing waste throughout the entire personalization process.
- **Optimize performance.** Systems and supplies communicate and adjust automatically for exceptional print performance and output quality.
- Improve productivity. Reduce downtime with automated "low supply" notification.
- **Increase operational efficiency.** Automated supply verification ensures supplies align with the job and can finish without unnecessary interruption, which reduces the risk of errors.

All Datacard supplies are specifically designed to maximize ease of use.

Look for our displatinum flecks
Datacard® Cert are manufactur specifications, your Datacard sections.

Look for our distinctive blue cores with platinum flecks® to make sure you are using Datacard® Certified Supplies. Our supplies are manufactured according to unique specifications, delivering the best results for your Datacard system.



Proven and tested

The Datacard R&D team applies extensive, in-depth knowledge to improve results in real-world customer environments. To earn the Datacard® brand, supplies are evaluated and system-tested to measure performance and durability. Ultimately, this improves quality, consistency and value for our customers.

Leading industry standards

Datacard works closely with industry associations to drive standards for security, durability, data management and the environment.

- American Association of Motor Vehicle Administrators (AAMVA)
- American National Standards Institute (ANSI)
- Document Security Alliance (DSA)
- Electronic Funds Transfer Association (EFTA)
- EUROPAY International
- GlobalPlatform

- International Card Manufacturers Association (ICMA)
- International Civil Aviation Organization (ICAO)
- Interpol
- · MasterCard
- National Association of Campus Card Users (NACCU)
- VISA

SUPPLIES FOR EVERY NEED

THE WORLD'S LARGEST PORTFOLIO

Datacard[®] Certified Supplies are available for all card personalization and secure ID applications, and are backed by a 100% guarantee. We offer distribution and support in more than 120 countries, ensuring fast delivery and local assistance.

CARD PERSONALIZATION SUPPLIES

Color photo ribbons

Only Datacard offers a full complement of color printing technology that produces brilliant, true-to-life photos and litho-like printing. Providing a full suite of direct-to-card or retransfer color printing options, our dye sublimation and pigment color technologies enable high definition and unique inline security printing technologies for a wide range of card substrates to meet the most demanding card issuance needs.

Monochrome print ribbons

Monochrome print ribbons incorporate high-yield thermal transfer technology to deliver outstanding results for single-color logos, graphics, text or bar codes in crisp, clean fine-line detail. These ribbons also provide superior abrasion resistance. A wide range of standard colors are available, as well as custom colors on request.

Topping foils and indent ribbons

High-gloss, matte and metallic topping foils are engineered for superior abrasion resistance and durability. Foils apply quickly with a smooth, detailed transfer to embossed characters. Indent ribbons are formulated for stamping directly onto PVC cards and signature panels, providing crisp, clean transfer to the card.

Card delivery supplies

Create ready-to-mail personalized packages completely inline with high-quality toner cartridges, as well as affixing stickers and labels designed and engineered by Datacard.

High-speed personalization supplies

Expect consistent performance at very high speeds with our UV Drop-on-Demand inks, glues, envelope sealers and scratch-off stickers.

Cleaning supplies

We have designed a complete line of cleaning supplies that meet the unique requirements of your Datacard system to optimize performance and keep it running at peak efficiency.



EXTEND CARD LIFE AND PROTECT IMAGES

Durability supplies increase the usable life of personalized cards and ID documents, minimizing the need for reissuance and lowering overall costs. Datacard high-quality topcoats, laminates and thin film overlays protect images, prevent fading and defend against abrasion, moisture and chemical attack.

DURABILITY SOLUTIONS



Topcoats

Thin, translucent, edge-to-edge topcoats protect bar codes, signatures, logos and images against abrasion, chemical attack and plasticizers. They are compatible with all card personalization printing technologies.

Datacard® CardGard™ UV-Curable Topcoats

Developed exclusively by Datacard, this patented formulation uses an advanced UV-curing process to provide up to four times the durability and wear resistance of standard topcoats.

Laminates

Laminates offer the strongest defense against abrasion and chemical attack. Our unique formulation provides optimal tamper- and moisture-resistance, exceeding ISO 7810 and 10373 requirements. Our laminates also meet stringent ANSI INCITS 322 card structure integrity testing standards, with an innovative design that provides the largest area of protection.





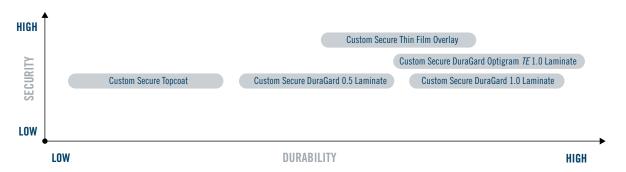
DEFEND AGAINST FRAUD AND COUNTERFEITING

Government agencies and other organizations around the world trust Datacard Group to provide highly secure identification solutions for card and passport issuance. With solutions deployed in more than 325 projects in over 90 countries, Datacard systems and supplies are used to personalize and deliver more than 10 million cards, five million smart cards and 35,000 passports every day.

Our Intelligent Supplies Technology^T takes the integrated technology of Datacard^T systems, software and services to an advanced level of security, enabling unique operational security checks during card production through the use of RF identification. This feature enables supply identification and tracking for all custom security topcoats, laminates and thin film overlays.

MAXIMIZE SECURITY

For advanced protection in security supplies, Datacard offers an extensive suite of secure optical variable device (OVD) offerings to meet the most unique and demanding requirements of critical government applications.



THE ANATOMY OF SECURITY

Our custom security topcoats, laminates and passport overlays provide a logical combination of overt, covert and forensic security features that range from simple to complex. These supplies also offer outstanding chemical and abrasion resistance as well as revolutionary tamper resistance and tamper-evident characteristics for protection against alteration and forgery.

Level 1 - OVERT FEATURES

Visible or tactile features are obvious to untrained observers and critical for first-line visual inspection.

Examples include:



- → **Kinetic patterns:** Patterns that appear to animate when rotated.
- Diffractive switch images: Two or more images that occupy the same area and shift from one image to the other when viewed from different angles.
- Rainbow coloring: Images, lines or text that refract light, utilizing the full color spectrum. When the viewing angle changes, so does the rainbow coloring.
- Achromatic coloring: Images, lines or text that have no color refraction, comprised of only neutral grays, white or black.

- → Guilloche patterns: High-resolution security printing created from complex geometric or mathematical patterns. Each line provides a continuous visual color shift that moves in synchronized animation.
- **Pseudo color:** Color that appears in holographic artwork only at a specific angle.



- → High-resolution transparent holograms:

 Complex light-diffracting imagery that exhibits dimensionality, available in two- and three-dimensional formats.
- Unique "TE" feature: Unique die cutting and perforations that exhibit tamper evidence, destroying the laminate if any attempt of removal is made.

Level 2 - COVERT FEATURES

Concealed features can be seen by a trained inspector using simple tools, such as a UV light or a magnifying glass. Examples include:



- Microtext: Text that varies in size from 60 to 100 microns that can be deciphered only through use of a magnifier or eye loupe.
- Latent (ghost) images: Images or text that can be viewed with the aid of a higher-powered light source (flashlight) from an extreme angle.



- UV security printing: Imagery or text that fluoresces in a specific color with the use of a black light.
- Laser retrievable: Imagery or text embedded in a hologram that cannot visually be seen until illuminated at a distinct angle by a high-powered laser pen.

Level 3 - FORENSIC FEATURES

Deeply hidden features are detectable only through forensic inspection.* Examples include:

- Nanotext: Text that is less than 30 microns in height and can be seen only through the use of a high-powered microscope.
- Secure Text[™]: This feature contains a millioncharacter document in a five millimeter by five millimeter square.
- * Other highly sensitive forensic security features are available. Please contact Datacard for more information.

PROVEN PERFORMANCE

TRUST DATACARD® CERTIFIED SUPPLIES

Only Datacard® Certified Supplies are specifically engineered to work with Datacard systems. These superior, system-matched supplies deliver:

- Unmatched quality and value. Our supplies continuously deliver exceptional results, smooth operation at high speeds and excellent total yield. Exclusive Intelligent Supplies Technology™ helps minimize costs and avoid downtime.
- Consistent performance. Stringent quality control measures help ensure our supplies meet or exceed expectations for quality and reliability.
- Continuous innovation. Datacard provides the best supplies for our systems and continues to discover new ways to improve productivity, durability and security.

To purchase Datacard® Certified Supplies or learn more about how our supplies can improve your program, please contact your local Datacard representative or find us online at www.datacard.com.



A HERITAGE OF INNOVATION AND CUSTOMER SUCCESS

Datacard Group is building on a 40-year heritage of innovation and customer success. Our portfolio of solutions, backed by expert service and support, enable card and secure ID programs for financial, government and other institutions worldwide. With an unmatched commitment to customer satisfaction, Datacard remains the industry's best-selling brand of secure ID and card personalization solutions. www.datacard.com

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