



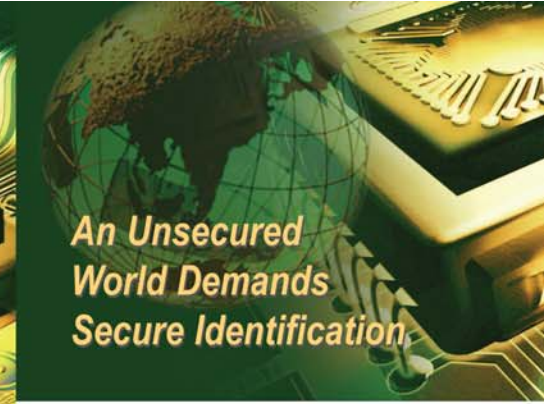
**Plastic Card Solutions with  
Advanced Security Features!**

Document Security Systems' printing capabilities on plastic materials are world-renown for applications ranging from the retail industry to the highest level of security cards issued in government agencies.

Our products are made with quality plastic formulas and range from the simplest designs to the most advanced multi-layered security features on the market today.



**Security. Innovation. Vision.  
Plastic Card Solutions**



**An Unsecured  
World Demands  
Secure Identification.**

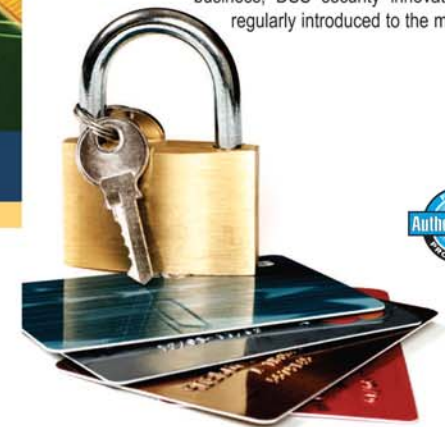
Document Security Systems' card features have been developed specifically to provide you with the highest levels of anti-counterfeiting measures combined with easy authentication. With R&D at the forefront of our business, DSS security innovations are regularly introduced to the market.



**Security. Innovation. Vision.**



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# Securing the World - One Step At A Time

## AuthentiGuard™ Pantograph 4000

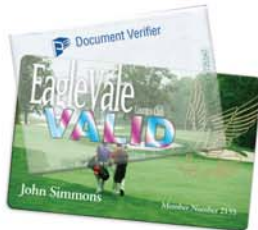
- Advanced pantograph technology developed for protecting cards against today's sophisticated duplicating methods.
- A void pantograph embeds hidden words or images into a background.
- When an attempt is made to copy or scan the card, the hidden image or word, such as "VOID" or "COPY" appear on the reproduction and indicate that the card is NOT the original.
- AuthentiGuard™ Pantograph 4000 Technology is easy to implement and cost effective.
- Ideal for ID cards, financial cards or any application where security is paramount.



Copy

## AuthentiGuard™ Prism

- Authentication technology that is not duplicated by scanning or copying.
- A word or image is hidden in a graphic element of the card. This word or image is visible only when a custom verifying lens is placed on the card.
- The image may be embedded in a solid area or in full color graphic elements.
- Common applications include cards used in airports, membership only clubs, amusement parks, or any place where an individual would verify the authenticity of a card.



Verifier exposes Prism when placed on card

## AuthentiGuard™ Laser Moire

- Patterns are embedded into the graphics of the card.
- When the card is copied or scanned, moire patterns appear. This results in unusable, skewed or pixilated reproductions.
- A special hand held viewing lens may be placed on the card to authenticate cards with Laser Moire technology.



Verifier exposes moire pattern

## AuthentiGuard™ Micro-Perf™

- Microscopic perforations in the card, such as numbers, letters, images, or unique identifiers, are not visible until the card is held to a light source.
- Micro-Perf™ images do not reproduce on photocopiers or scanners and specialty equipment is required to create it.
- This technology is very cost effective and perfect for any application including ticketing and ID cards.



## AuthentiGuard™ Block-Out

- Block-out technology foils counterfeiting attempts on color copiers by creating a solid black copy, distorted copy or no copy at all.
- Block-Out is cost effective and easy to implement.
- It is an ideal addition to ID cards, licenses, or highly sensitive government agency card applications.



## Invisible Ink

- Ultraviolet (UV) ink can be printed onto any card as a covert security feature that can only be viewed under a special light source.
- Without the special light source, the UV ink is invisible and the image can not be captured by copiers or scanners.
- This low cost feature is ideal for controlled entry environments where there is an individual examining the authenticity of a card.
- This ink is available in blue/green color when viewed with the light source, but can be special ordered in red.



Invisible ink shows hidden message under UV light

## Embedded Holograms

- Embedded holograms are appropriate for any application where forgery is a problem.
- Holograms may contain logos, government seals, or custom artwork.
- DSS holograms are laminated for added protection to prevent ruining printheads or scratch and wear.
- The depth of a hologram (diffraction foil or 2D/3D) cannot be duplicated on copiers or desktop scanners.
- Holograms are an ideal solution for schools or universities, consulates, hospitals, or company IDs.
- Available in silver, gold, clear or custom tints and available in quantities as low as 1,000

Card with Custom Embedded Hologram



## Laser Engraving

- Laser Ablation is the process of removing or burning material from the plastic to create an image, number or machine readable barcode.
- The effect is a physical characteristic that cannot be recreated, removed or altered.



## Thermochromic Ink

- When rubbed or exposed to high temperatures, thermochromic ink disappears or changes color.
- Authentication is as easy as rubbing your finger on the card to change the ink.
- This is an excellent security device for access cards to controlled environments with a security guard or other visual inspection.



Color disappears when rubbed

## DNA Matrix™

- One of the most innovative card security measures available on the market, DNA Matrix™ is a special ink that can be traced back to the card manufacturer.
- This feature is impossible to decode and can only be authenticated using a special hand held reader that shows the DNA mixed with optical labels or verified at a forensic lab.
- This application is very high-end and appropriate for government agencies, drivers' licenses, consulate cards, and high security environments.



Card Verified at forensic lab

## Watermark Technology

- Similar to watermarks used on currency, DSS's patent pending watermark technology places logos, government or corporate seals or any custom art into a card.
- Our watermarks are visible only when the card is held to a light source.
- Watermark technology is ideal for environments where maximum security is needed, such as correctional facilities or other high-security facilities.
- This technology is available only through DSS and P3 and their dealers with a minimum order of 1,000 cards.



Original

Watermark is revealed when card is held up to light