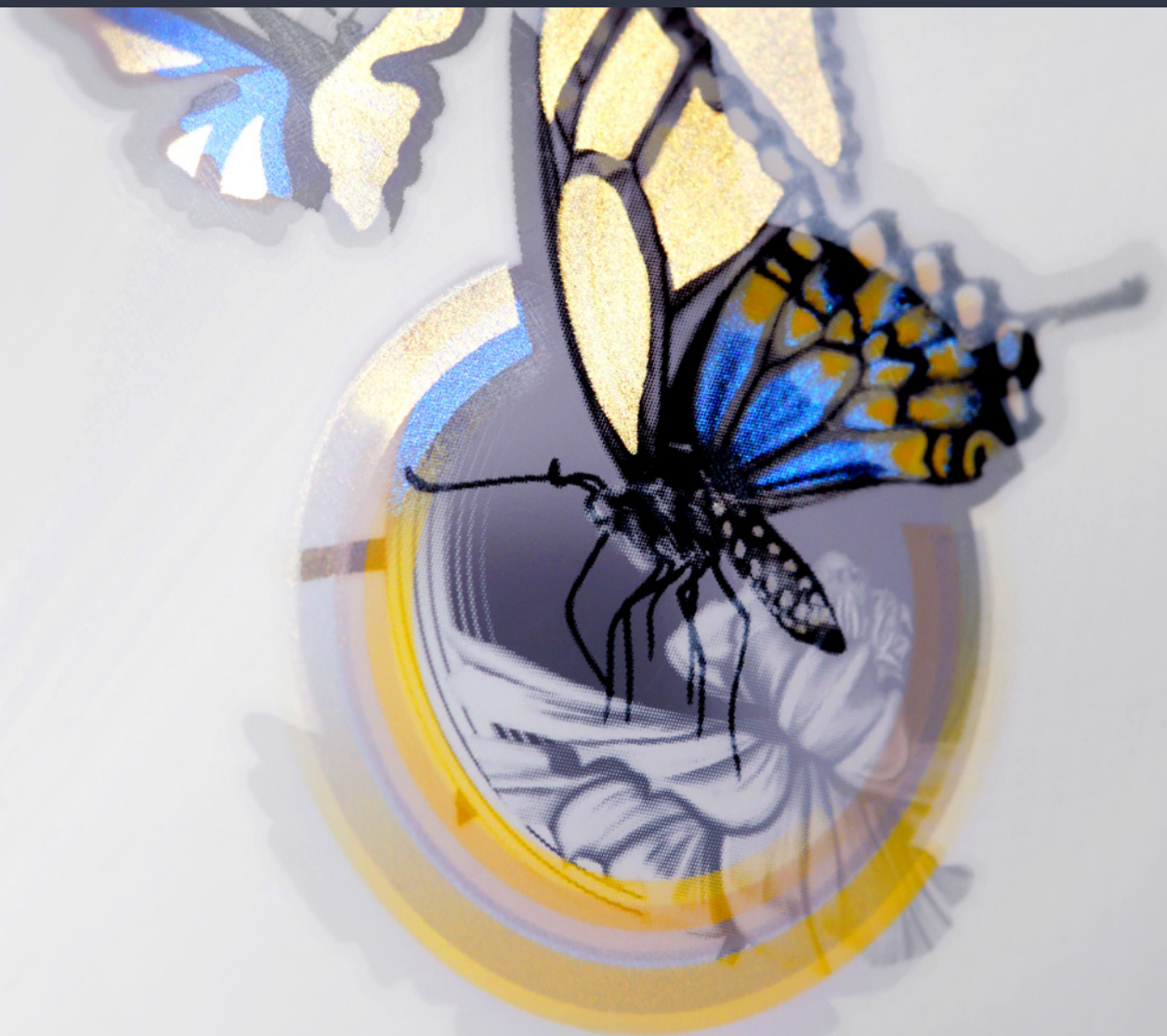




DeLaRue

## Safeguard® Design Features

Rotate, Illuminate  
and Integrate



When it comes to banknote design, innovation is critical. Security features must continuously be created, improved and updated in order to stay ahead of counterfeiters and ensure the integrity of the note remains intact.

The introduction of polymer as an alternative substrate has been one of the most successful innovations in banknote development in recent years, accounting for a significant reduction in counterfeit rates worldwide.

Safeguard®, De La Rue's polymer solution, allows for considerably improved banknote security, enabling sophisticated and robust security features to be embedded through design. The integration of original, technically advanced polymer design features ensures the security and durability of the banknote throughout its life.

When you move to polymer, an entirely new range of exciting design techniques and technologies are at your disposal – offering enhanced capabilities and increased opportunities for the creation of long-lasting, distinctive and highly secure banknotes.





## Polymer design

The process of designing a polymer banknote is fundamentally different to that of a paper note. With Safeguard®, state-of-the-art security features can be integrated into the substrate print in a visually striking way, creating a banknote that is at once aesthetically engaging and inherently secure.

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### **Delivering seamless integration of security features**

The remarkable versatility of Safeguard® enables various security elements to be embedded within the actual layers of the substrate print, as it is being created, while ensuring that it remains fit for manufacture and purpose. The outcome is a wide range of bespoke prints, elaborate designs and vibrant colour effects that are built into the substrate.

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### **Offering a unique and exclusive window feature**

A De La Rue polymer window is a dramatic and complex design feature that can be overlaid with additional security features, providing a distinctive anti-counterfeit solution that can be seen from both sides of the banknote and is easily authenticated by members of the public.

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### **Combining multiple design features for enhanced security**

The original artwork, illustrations and technical designs for a Safeguard® banknote are all created with polymer-specific features in mind. By combining multiple features within one note, security is maximised, while the banknote is brought to life through vivid colour, iconic themes and customisable design techniques.

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# Polymer, redefined

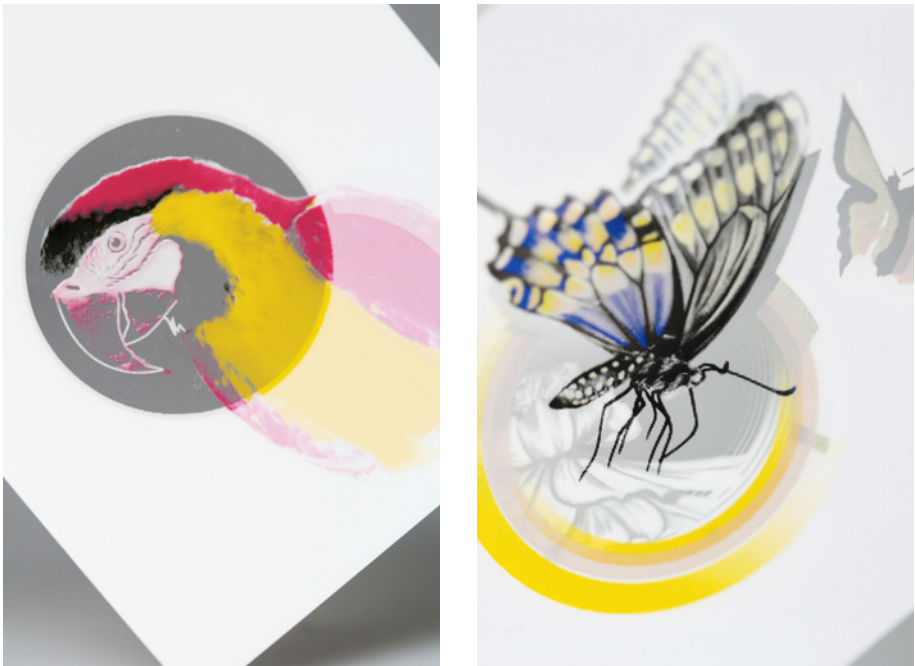
The following design techniques from De La Rue are not only pushing the current boundaries of polymer design, they're redefining them; challenging perceptions and creating new and exciting opportunities for further innovation.

Each one of the designs is deeply embedded within the individual gravure layers of the Safeguard® substrate; they are highly durable and designed specifically to engage and encourage public authentication.

## Illuminate

A first in polymer design, De La Rue's **Illuminate** uses a combination of inks, including matte and iridescent inks, to inject vivid colour and unique texture into the polymer window.

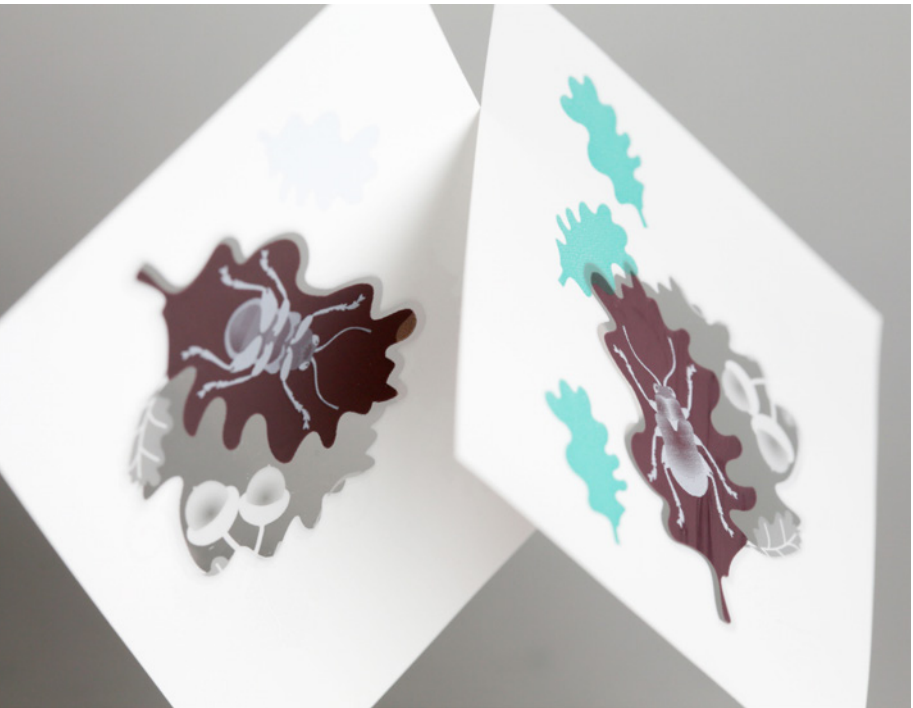
Designs are no longer limited by the muted colours of previous generations of polymer. **Illuminate** offers unlimited possibilities in window design, through the creation of vibrant, standout artwork which drives strong end user recognition and public authentication.



## Rotate

**Rotate** is a design technique that creates a fully registered image on both sides of the polymer note. The two image outlines are perfectly aligned, front and back; however within the design itself there are some notable distinctions. It's not until you rotate the note that you discover that the design on each side is not identical.

Intrinsically linking both front and back designs, **Rotate** invites the user to engage and interact with the note by creating an image that must be fully rotated and viewed from both sides in order to see the full design effect.



## Integrate

The next generation of watermarking for polymer, **Integrate** injects colour directly into the different print layers of the substrate itself. This allows for different depths of colour and shade to emerge through the note, depending on where the colour has been applied within it, and to which layer of the substrate.

By creating greater tonal depth with a more intense colour palette, this technique adds greater levels of complexity to the polymer note. It also has the potential to add further intricacy to the design by creating elaborate vignettes around the polymer window.







## Design overview

Rotate, Illuminate and Integrate use complex prints, unique designs and colour effects to layer and embed security into the very fabric of the polymer substrate design. This means that the security isn't simply added to the Safeguard® banknote – it comes from within it.

These groundbreaking features are the next generation of polymer designs, adding vivid and varied inks, intricate artwork and innovative design techniques to the substrate's already unique properties.

### Embedded into substrate

These complex design features are embedded within the substrate's layers, in a highly durable gravure process. This enhances the security and overall aesthetics of the banknote at an early stage in the substrate's production.

### Engaging

These features are easy to explain and simple for the end user to recognise and authenticate. The vibrant and technical design details are particularly memorable and provoke true public engagement.

### Pioneering designs

These unique polymer design techniques from De La Rue are the first of their kind and complexity to have ever been created on banknotes.

### Complete print registration

The features make use of tightly controlled, front-to-back print registration, a distinctive colour palette and advanced ink technologies, which are extremely difficult to reproduce.

### Ink combinations

Rotate, Illuminate and Integrate are the first polymer design features to use an innovative combination of ink technologies – including matte and iridescent inks – from the widest polymer colour palette, to create exquisite visual effects.

### Suitable for all

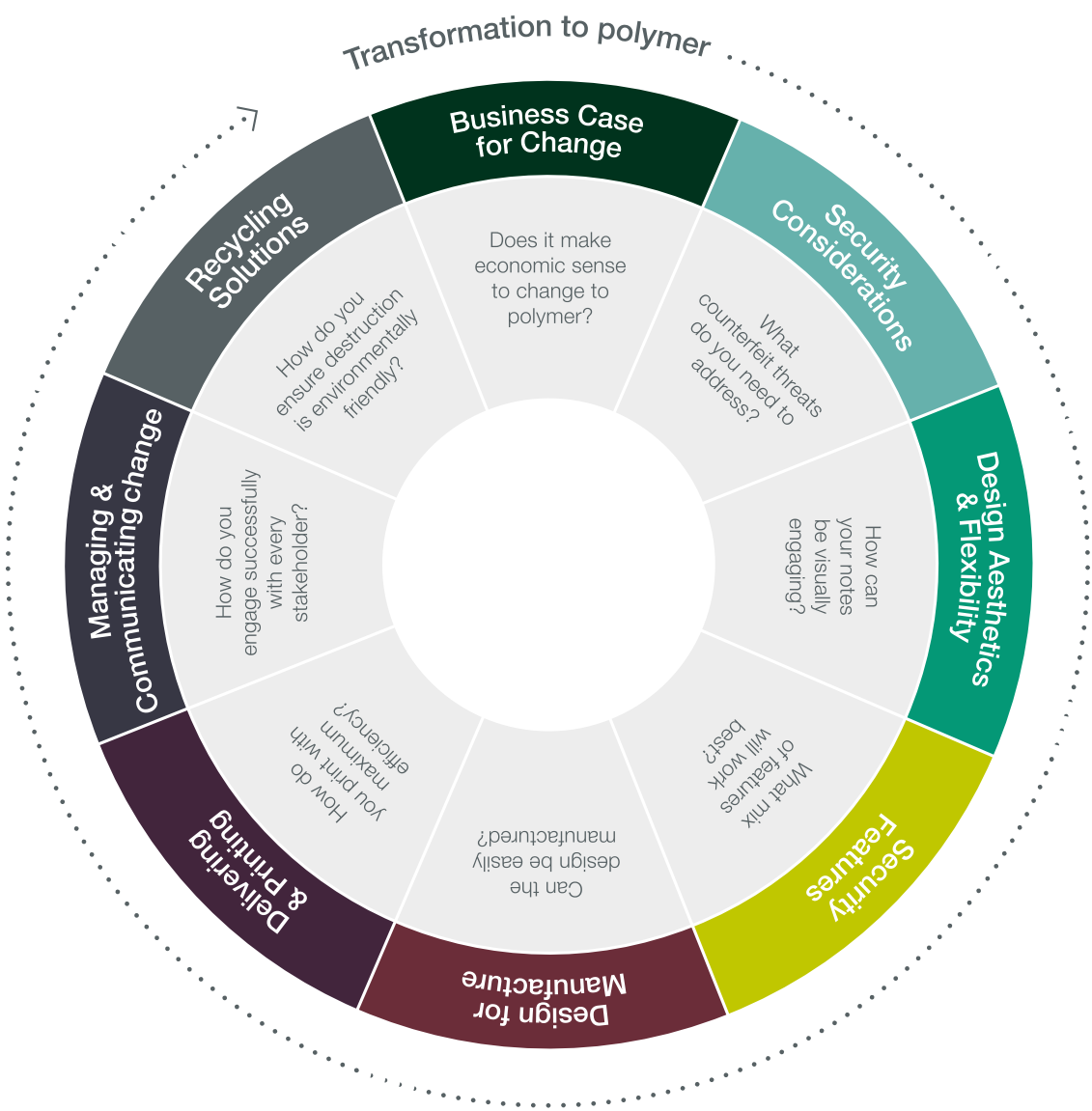
The features are suitable for all denominations, with the potential for increasing the complexity of the designs as you move to higher denominations. This enables all your banknotes to have maximum impact, while still maintaining the highest levels of security.

# Why De La Rue?

Safeguard® cements De La Rue's position as a global leader in polymer design and substrate innovation, with a deep understanding of the technical construction of banknotes, as well as the integration of essential design and security features.

However the design of a polymer banknote is only one stage of the overall transformation story – and making the transition to polymer requires consideration and planning.

De La Rue is highly experienced in assisting central banks in moving from paper to polymer substrates. With our history and expertise in the design and production of both paper and polymer banknotes, you're guaranteed expert guidance and unwavering support throughout every step of the transition.



De La Rue is a leading provider of sophisticated products and services that keep nations, their economies and their populations secure. At the forefront of cash supply chain management and security, De La Rue is a trusted partner of governments, central banks and commercial organisations around the globe.

De La Rue is listed on the London Stock Exchange (LON:DLAR).

For further information please contact your regional account manager directly, e-mail [marketing@uk.delarue.com](mailto:marketing@uk.delarue.com) or visit [www.delarue.com](http://www.delarue.com)

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