ESSENTRA

ESSENTIAL SECURITY SOLUTIONS
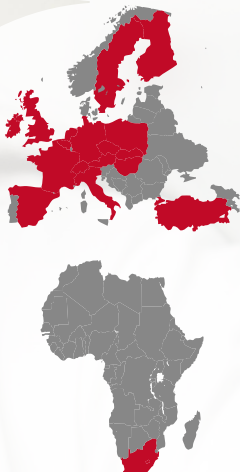
HELPING YOUR BUSINESS WORK BETTER

Whatever your particular need, Essentra has a solution.

Working with you, we bring together the best products, ideas and distribution in one unrivalled package. Our reliable service and global capability means that we deliver – wherever, whatever, however.

Little things make a big impact

Essentra provides the small yet vital components that are everywhere. These little things make the world go round. And we help it to go round smoother, smarter and faster. By being better made. By getting there on time. By solving complex problems.

We're a FTSE 250 company, with a global reach and a local understanding. Thousands of customers in healthcare, food & drink, transport and heavy industries rely on our solutions every day.

AMERICAS

EUROPE

ASIA PACIFIC

Our global reach extends to

33

countries across three regions, shipping to more than 75 countries

THE TRUE COST OF COUNTERFEITING

Brand counterfeiting and parallel trading is prolific throughout the world. And it's not just luxury brands and record labels who suffer from inferior imitations. Personal care, tobacco, food & drink, pharmaceuticals and automotive components are just some of the other sectors affected by fake copies.

HOW WE COUNTER THE COUNTERFEITERS

We work with brand owners to protect their reputation, their profit and the lives of their consumers. With their guidance, we develop a range of appropriate solutions, tailored to their unique needs. They range from 'covert' features used by customs agencies, to special labels and tapes that enhance the appeal of consumer packaging. Our authentication solutions protect more than 1.5 trillion products each year.

THE PROCESS OF PROTECTION

LISTEN
We partner with customers to work out what's needed.

PARTNER
We work alongside our customers as one united team.

DEPLOY
We monitor our solutions to ensure they perform consistently.

EVOLVE
We continuously develop our products, fine-tuning them for optimal performance.

US$
650
billion
lost by legitimate companies worldwide because of counterfeit products

US$
1.7
trillion
the value of counterfeit goods globally by 2015. That's 2% of the world's total economic output

THE BIGGER THE THREAT, THE SMARTER OUR SOLUTION

We offer different levels of security depending on the customer's business sector and the threat posed. Sometimes they require just one level, but quite often we layer technologies from several levels to build a unique solution.

Very few people aware of the security features. Detection needs specialist lab equipment

FORENSIC

Few people aware of the security features. Tools such as readers are required

COVERT

General, unrestricted awareness. Anyone can check the security feature

OVERT

Easy to access means to augment and/or personalise the brand experience

BRAND ENHANCEMENT/ CUSTOMER ENGAGEMENT

LOW-LEVEL OVERT SECURITY
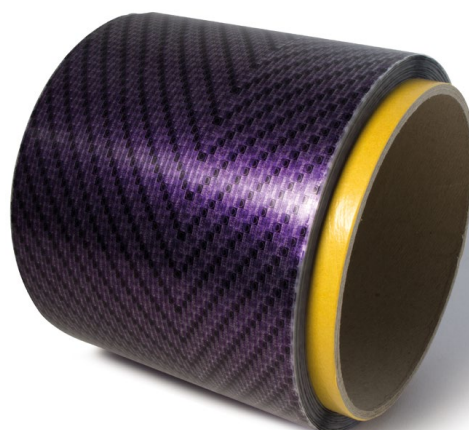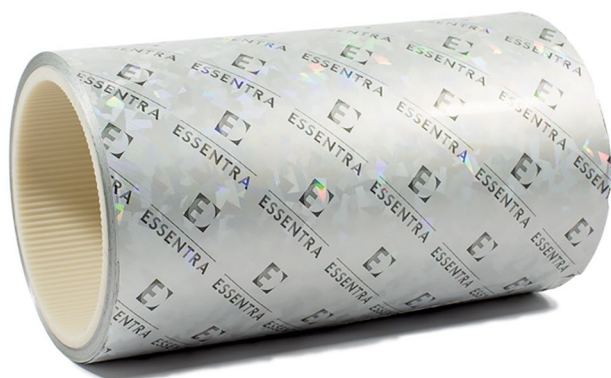
BRAND DIFFERENTIATION
Special effect inks such as pearlescent and temperature reactive products, provide decorative effects which promote the brand through consumer engagement. They also provide a basic level of authentication.

Pearlescent inks

Low cost

Anti-copy

Variety of colours and effects

LOW-LEVEL OVERT AND COVERT SECURITY

CONSUMER ENGAGEMENT
Variable data print, QR coding and digital watermarks allow brands to add a unique identifier to their product packaging. Customer engagement leads them to a website that can enable the brand to track and verify the product or simply direct the consumer to more information.

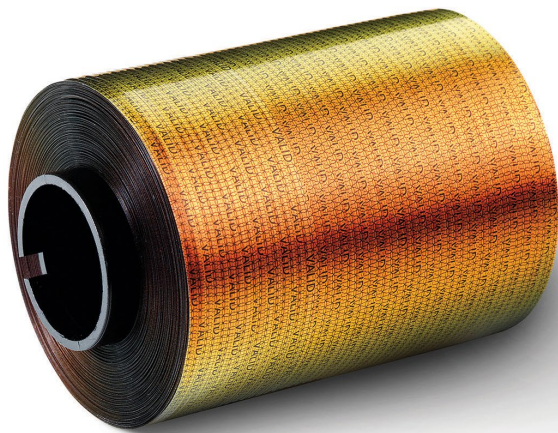**Uses popular technology for complete accessibility**

Facilitates brand engagement with customer

LOW- TO MID-LEVEL OVERT SECURITY

COLOURSHIFT

Colourshift inks appear as two or more distinct colours when viewed from different angles. It's impossible to reproduce this feature by photocopying or scanning the images.
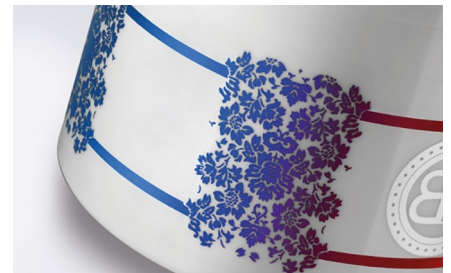
Same technique as many banknotes

Highly specialist process only available from a select number of suppliers

Strictly controlled by a rigorous code of conduct

Decorative, non-secure colourshifting options are also available

TAMPER EVIDENCE

Tampering can render products unsafe and in some cases fatal. Tamper-evident technologies can provide a clear indication to the consumer that tampering has occurred. It offers protection not only to the user but also the brand.
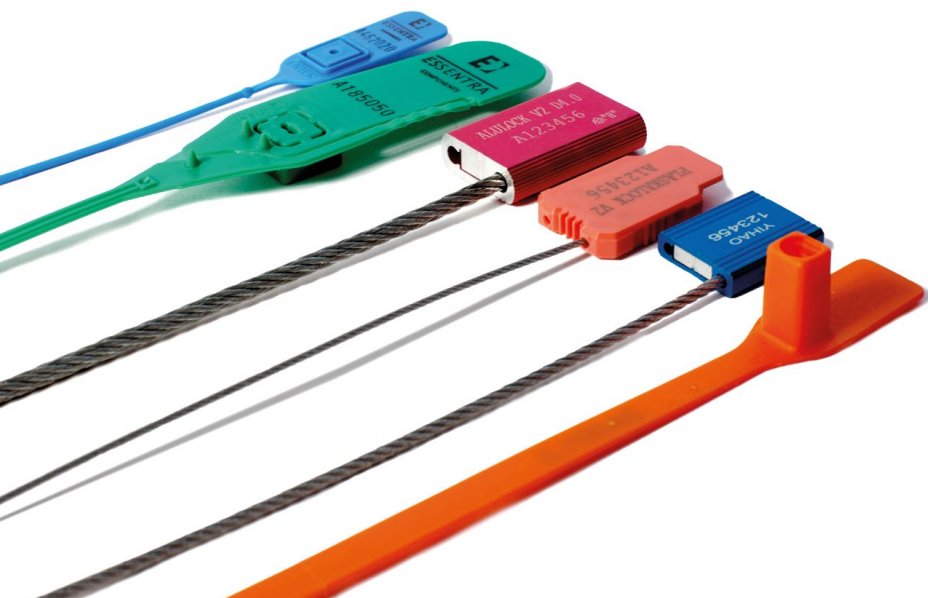
Void release

Security seals

Security slits in material
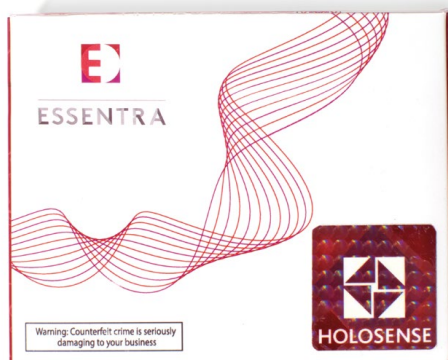
Frangible materials

Fibre tear

Tear tapes

HOLOGRAPHY

Holographic technologies can provide a wide range of finishes including fully metallised, de-metallised and high refractive index (HRI) transparent effects. Easily identifiable, holograms are primarily used as first-level authentication and are designed to enable successful verification at point of inspection. All of our bespoke holograms are designed under strict security.

Hidden hologram labels

Remain hidden until removal is attempted

Impossible to replace or reuse

Customisable design, shape, colour and size

Prism holographic tape

Stands out on shelf

Instant consumer verification

Difficult to replicate

High-security holography

Multilayered holograms, which can include overt and covert security features

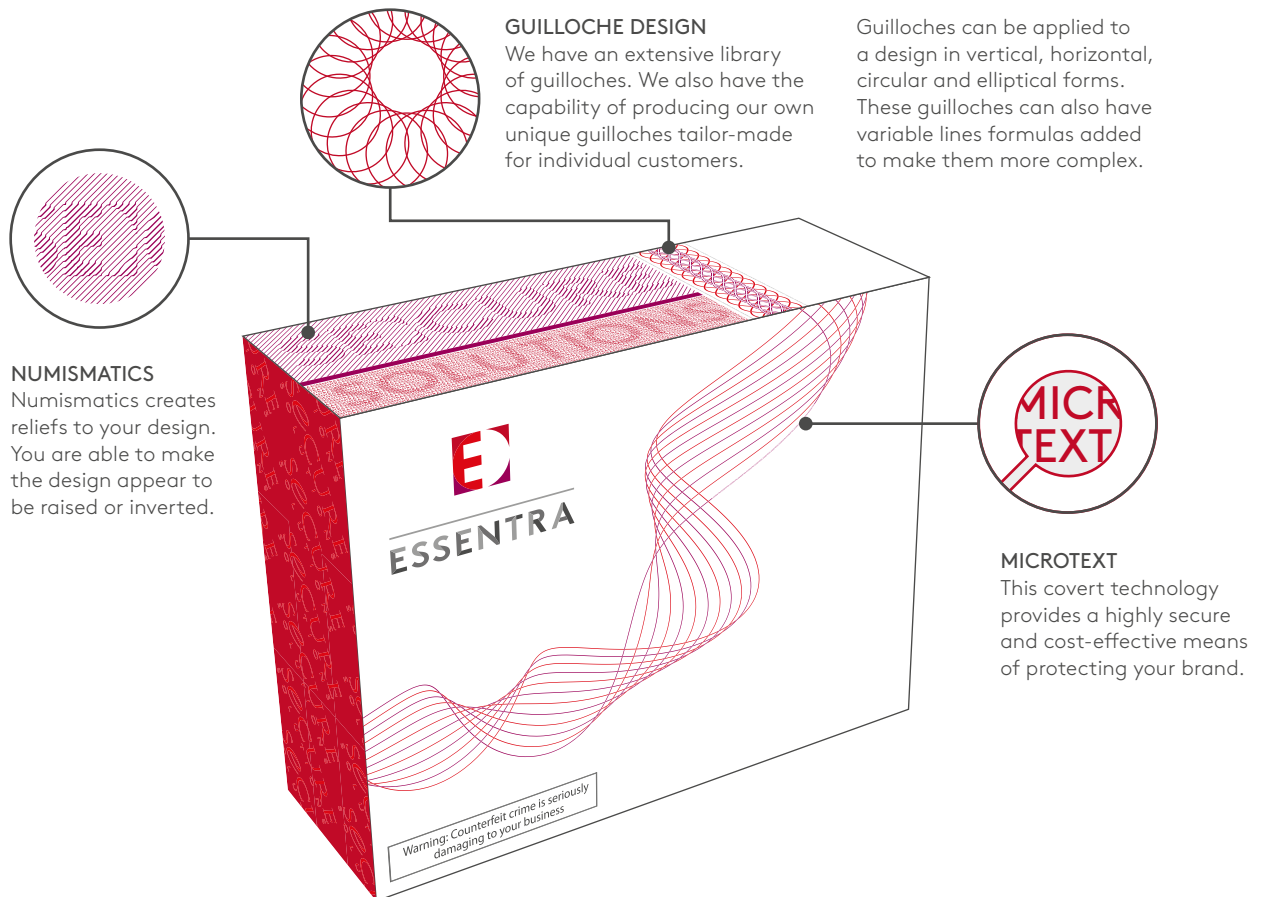**Trained user verification options**

Bespoke originations

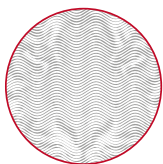**Wallpaper and registered designs possible**

LOW- TO MID-LEVEL OVERT AND COVERT SECURITY

SECURITY DESIGN AND PRINT

We use banknote grade security design software to create a wide range of fine-line designs that are extremely difficult to replicate.
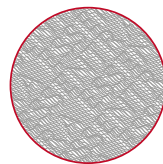
GUILLOCHE DESIGN

We have an extensive library of guilloches. We also have the capability of producing our own unique guilloches tailor-made for individual customers.

Guilloches can be applied to a design in vertical, horizontal, circular and elliptical forms. These guilloches can also have variable lines formulas added to make them more complex.

NUMISMATICS

Numismatics creates reliefs to your design. You are able to make the design appear to be raised or inverted.

SOLUTIONS

ESSENTRA

Warning: Counterfeit crime is seriously damaging to your business

MICROTEXT

This covert technology provides a highly secure and cost-effective means of protecting your brand.
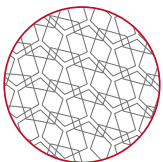
OTHER SECURITY DESIGN TECHNIQUES INCLUDE

Special rasters
With line raster, a pattern is placed over either line artwork or a bitmap image. Changes are generated in the stroke widths of the pattern which is determined by the greyscale pattern the image is placed over.

Quick background
Quick background generates a relief image using line artwork or bitmap images as a template. A line pattern or guilloche is placed over the top of the template. Then a relief image of the template is embossed into the line pattern creating a relief image.
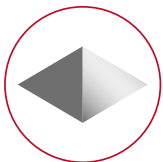
Crystal pattern
The crystal patterns module creates complex, random symmetrical patterns from shapes created by the designer. These patterns can be one colour or as many colours you wish to be within your pattern.

Special warp grid
Creates three-dimensional effects to any kind of line artwork. Special warp grids give an extra dimension to your design so making the recreation of the pattern very difficult.

Opposite ink selector
This tool produces ink pairs which are on opposite sides of the colour gamut. If a colour copier machine is used to counterfeit the design then the copier can be adjusted to copy one of the colours correctly but the other colour would not look like the original design.

MID-LEVEL COVERT SECURITY

INVISIBLE TO VISIBLE INKS

Images printed with invisible to visible inks can only be seen when illuminated with a specific wavelength of light. Typical examples of this are UV-visible and infrared-visible inks. The technology can also provide increased levels of security by using more sophisticated detectors and more bespoke inks. For example, UV inks are available that only respond to specific frequencies of UV light.

UV ink

Available in a range of colours

Sophisticated print capability including fine-line designs

Difficult to replicate

HIGH-LEVEL COVERT-FORENSIC SECURITY

PATRON® TAGGANTS

We offer a Patron® Taggant system for detection by hand-held readers. This system does not produce a visible response when illuminated with UV or IR frequencies and can only be detected by specific devices such as Patron® Taggant ink detectors. The range of potential applications is enormous. Successful implementations of the system have been completed in a wide variety of products including labels, tapes, injection-moulded plastics and applications to metal substrates.

Patron® Taggant readers

Two designs available, hand-held readers (HHR) and taggant pocket readers (TPR)

Small, discreet design

Ideal for authenticating FMCG

Dependent on unit, authentication can be signalled by light and text (HHR) or light and vibration (TPR)

Taggants

A rare substance with a highly controlled supply for the security industry

Proven in more than 180 countries

One of the world's most secure solutions

SECURITY AND AUTHENTICATION

Your brand, products and consumers need protecting. So we work with you to provide that reassurance and deter counterfeiters. From the simplest interference evidence to the most sophisticated authentication technologies, we have it covered.

THE BIGGER THE RISK, THE SMARTER OUR SOLUTION

We offer different levels and types of security dependent upon the potential risk and method of counterfeiting. Essentra advocates layering solutions to offer the highest form of protection to brands and consumers.
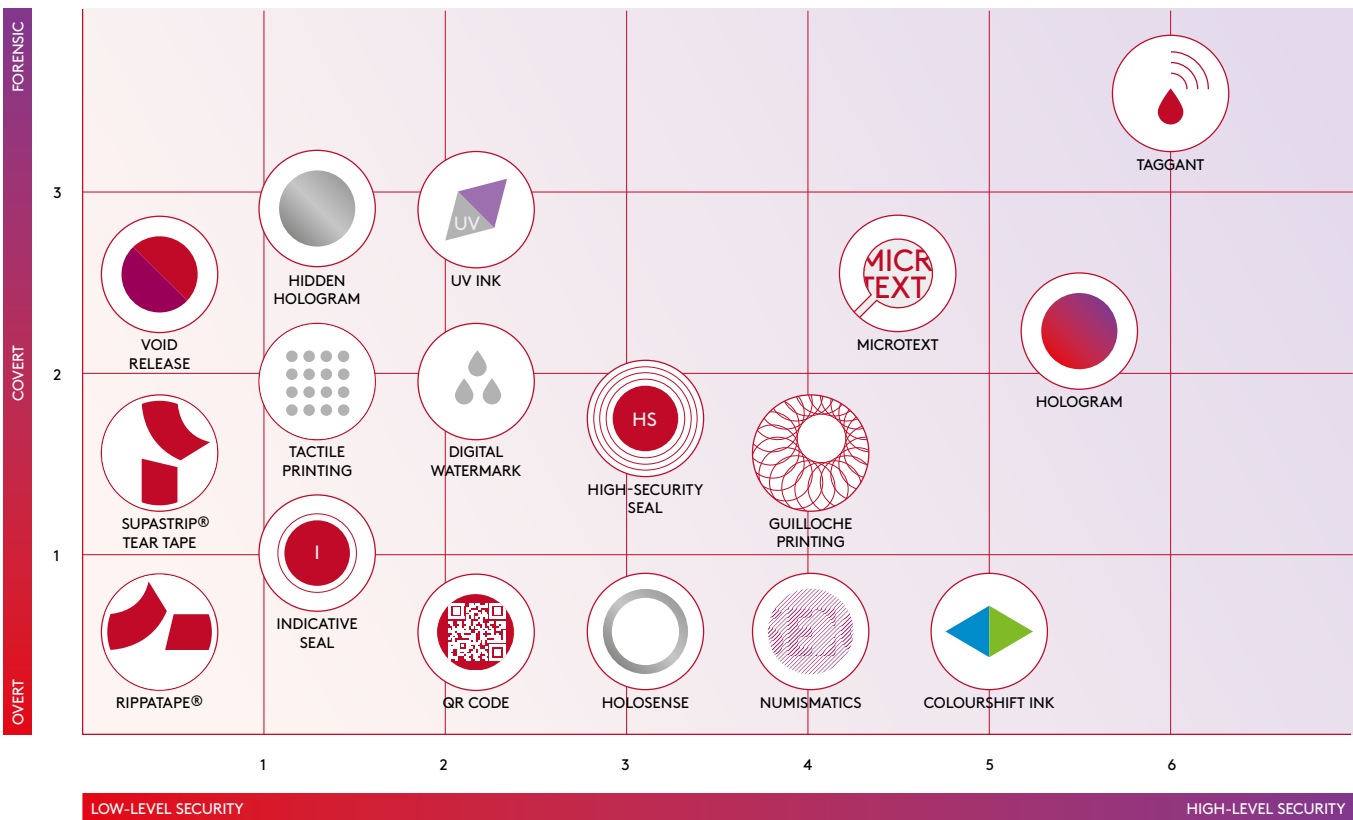
SECURITY SEALS

HS **HIGH-SECURITY SEAL**
Made of material such as metal or metal cable that aims to delay intrusion. **Example:** barrier seals.

S **SECURITY SEAL**
Made of material that provides limited resistance to intrusion and requires lightweight tools for removal. **Examples:** fixed length seals, variable length seals.

INDICATIVE SEAL
Made of material that can be easily broken by hand or by using simple snipping tools. **Example:** special purpose seals.

FORENSIC

COVERT

OVERT

3

2

1

TAGGANT

VOID RELEASE

HIDDEN HOLOGRAM

UV INK

MICROTEXT

HOLOGRAM

SUPASTRIP® TEAR TAPE

TACTILE PRINTING

DIGITAL WATERMARK

HIGH-SECURITY SEAL

GUILLOCHE PRINTING

RIPPATAPE®

INDICATIVE SEAL

QR CODE

HOLOSENSE

NUMISMATICS

COLOURSHIFT INK

1   2   3   4   5   6

LOW-LEVEL SECURITY   HIGH-LEVEL SECURITY

ESSENTRA

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