

Expert Product and Brand Protection

Successfully proven examples of tamper evidence, counterfeiting protection and track and trace solutions.

Product counterfeiting and tampering pose a threat to practically all famous brands. Yet there are innovative authenticity protection solutions available for tamper- and counterfeit-proof product identification and labelling. They help to protect brand owners from an erosion of brand image as well as from unjustified warranty and product liability claims. In addition, they allow both consumers and experts to perform reliable authenticity verifications. This issue of our "Forum Special" contains selected case studies from the wide range of Schreiner ProSecure's solutions currently being used in the field.

Your
Schreiner ProSecure team

Topics:

Tamper Evidence:
Void Closure Seal
Protection from unauthorised opening

Counterfeiting Protection:
Authenticity Seal with Covert Security Feature
Original or fake?

Track & Trace:
Securely Encrypted Identity
Worldwide web-based authenticity verification



Competitive advantage: Tamper evidence

There is every reason for doubt when it comes to what is inside a pack. Theft, tampering or the exchange of product in original packaging are commonplace today. That makes reliable tamper evidence clearly a competitive advantage.



Tampering made impossible

Packaging Seal for maximum security

QUICK-INFO

- Protection from undetected "first opening"
- No unobtrusive "masking" of a damaged seal

On their way to the customer, goods are often removed from primary or secondary packaging. The damage caused by such activities has increased immensely in recent years. The problem: conventional closure strips or adhesive tapes can be cut open and closed again easily and without this being noticed. Now Schreiner ProSecure's powerful Packaging Seal puts a stop to this.

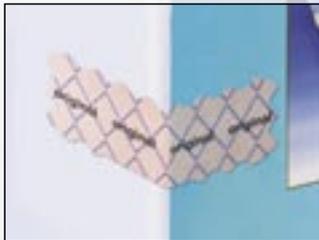
either tear or visibly damage the packaging. Neither is it possible to cut through the seal and stick another one on top without this being noticed, because each seal is unique. The individual, undulating borders, inscriptions and printed diamond patterns of the seals prevent one seal from being "masked" by another.

Specially developed security features

The seal consists of a film which has a low tear resistance and is coated with a very strong adhesive. In addition, it has security features developed specifically for application to cardboard and plastic packaging. This makes it impossible to peel off the seal without leaving obvious traces. The seal will



Reliable tamper evidence for primary and secondary packaging



Void Closure Seal

Protection from unauthorised opening

Whether or not an electronic component has been tampered with or is still in its original condition can only be determined by an expert, if at all. This uncertainty takes on critical dimensions in case of sensitive and security-relevant items such as hard disks or memories for computers. Specifically for such requirements, ProSecure has developed a Closure Seal which gives permanent evidence – the so-called Void effect – of a package or housing having

been opened. The Void effect is a customisable message, which is invisibly integrated into the coloured field of a sealing film. The effect is activated by simple application of the adhesive seal to the substrate, with no additional machines required. When the seal is peeled back for the first time, the message clearly emerges from the coloured field, remaining easily visible even after the seal has been closed again exactly: a method that is both safe and simple.

QUICK-INFO

- Adhesive is adapted to the particular bonding substrate
- Seal shows customised message



Security Seal for hardware

Precludes identity misuse

IT systems are increasingly often targets of attacks by data thieves trying to get their hands on confidential information. Threat scenarios include housings such as those of chip card touch-pads or readers being opened to access data.



This is why extensive precautions are required by law. Manufacturers and vendors of products with electronic memories must guarantee the physical protection of their equipment through tamper-proof sealing of component housings.

Tested tampering protection

For such requirements, Schreiner ProSecure has developed a special seal with a Void effect assuring protection from tampering. A customised message provides unmistakable proof-of-first-opening. The seal successfully resists even toughest tampering attempts and cannot be removed unnoticed by application of either heat or cold. The seal was tested by the Federal Office for Information Security (BSI) and awarded the highest security rating for hardware protection according to the BSI 7586 test standard. The seal can be customised to include additional counterfeiting protection features such as holograms, as needed.

QUICK-INFO

- Tampering protection for card readers and housings
- Upgrading of standard touch-/keypads to BSI-certified security touch-/keypads
- Top security rating according to BSI standard 7586
- Customisation available

Combination of counterfeiting protection and tamper evidence

Prevents grey market trading and re-imports

In order to benefit from price differences between various regional markets disloyal intermediate dealers frequently circumvent the manufacturer's intended distribution channels. As a result, goods are being shipped back and forth around the globe. A country-specific product modification or production of particular packaging, though, would result in an unreasonable increase of manufacturing costs and make global marketing more difficult. Neither could such measures preclude the risk of unauthorised re-printing of specifically designed packaging. An effective solution, though, is

provided by a counterfeit-proof label with integrated tamper evidence. Manufacturers of consumer electronics products in particular rely on country-specific authenticity seals which give the consumers additional information in their respective language. Printing of a consecutive number turns each product pack into a unique item. As a result, the proper distribution of cameras, mobile phones, MP3 players and similar articles can be verified easily and at low cost as needed.

QUICK-INFO

- Allows a clear allocation of products to regional markets
- Immediate verification of authenticity on the packaging



Advantage through active counterfeiting protection

High-quality spare parts, sensitive components or accessories in the automotive, communications and electronics industries with high turnover rates are increasingly often subjected to counterfeiting, illegal copying or exchange. Advanced counterfeiting solutions allow original products to be recognised quickly, thus preventing losses of sales and damage to brand image.



Identification of shipping units

Logistics meets security

The complex shipping networks in the automotive industry lead to increasing risks: products are illegally channelled off and stolen. Often, stolen items are substituted by counterfeit products smuggled into the system.

graphic or colour-shifting strips which are easily detectable by customs officials and quality assurance partners. In addition, special KeySecure encoding allows the distribution chain to be monitored and provides clear evidence of a component's authenticity.

To prevent such activities and minimise the rate of errors in the distribution chain Schreiner ProSecure has designed a seal that combines logistics and security: the logistics seal. It is characterised by overt security features such as holo-

The logistics seal is counterfeit-proof and may be verified anywhere in the world. Of course it can be printed with individual barcodes, thus making the seal suitable for highly versatile uses.



QUICK-INFO

- Counterfeit-proof
- Highly robust
- Monitoring of the distribution chain

Authenticity Seal with covert security feature

Original or fake?

This question is of equal importance to customers and manufacturers. A clear answer comes from Schreiner ProSecure in the form of authenticity seals such as those used by Knauf Gips KG. The company, one of Europe's leading manufacturers of construction materials, produces various stuccos and cement plasters. Since 1993 Knauf has been active in Russia, as well, and has since established itself as the market leader. A success from which others would like to benefit illegally by copying Knauf's products. This is why Schreiner ProSecure was commissioned with the development of a counterfeit-proof authenticity seal.

In conjunction with a renowned packaging materials manufacturer ProSecure's experts realised a solution which is equally secure and attractive. The seal clearly confirms the authenticity of the product, and its security features, including a thermo-reactive inscription, even attract new customers. The highlight: when heated to more than 37°C by touching it with a finger the inscription temporarily changes its colour. In addition, absolute security is assured by an invisible authenticity feature hidden in the hologram which can only be verified by means of a special reader: product counterfeiters no longer stand a chance.



QUICK-INFO

- Counterfeit-proof due to multi-stage security
- High-grade appeal that attracts customers
- Additional covert features

Absolutely secure and extremely resistant

Nano technology for integrated authenticity features

Acid, fire, explosions: no security seal can survive these extreme conditions. Yet proof of authenticity may be particularly crucial after such events, when electronic components or batteries are involved, for example. If their failure results in a technical defect, human lives may be at risk and valuable assets destroyed. Enormous damage for which the presumed manufacturer will be held liable. The problem: often the products are almost completely destroyed by a short circuit or an explosion.

Custom-tailored proof

Schreiner ProSecure offers products qualifying as proof of authenticity even after being subjected to extreme stress. Nano technology is

the key to success: minuscule particles, so-called taggants, bear the authenticity information. These taggants are added to the plastic housings during the manufacturing process. The authenticity features are inseparably bonded with the product and invisible to the naked eye. A handheld reader is used for detection as needed. This assures that clear evidence of authenticity is available even in case of a destroyed housing to give manufacturers effective protection from unjustified product liability claims.



Proof of authenticity that resists even extreme conditions

QUICK-INFO

- Durable and counterfeit-proof
- Extremely robust authenticity features
- Inseparable bonding with the product

Emission-free on-site marking

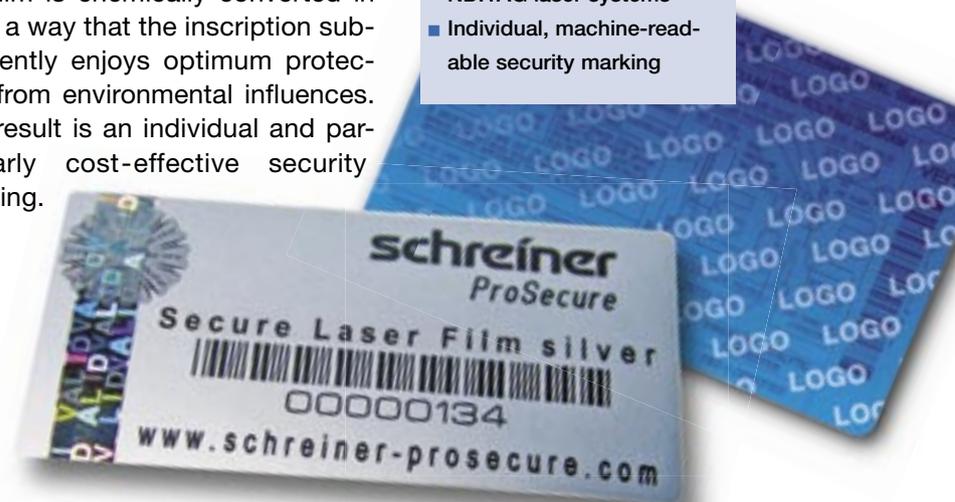
Secure Laser Film: individual, simple, efficient

Schreiner ProSecure's Secure Laser Film combines particularly robust and permanent product labelling with varied, customer-specific security features. In addition to holographic cover films, colour-shifting inks and holographic strips, these include machine-readable security inks, digital watermarks and security threads. Counterfeit-proof features which Schreiner ProSecure selects and combines according to the customer's needs after in-depth consultation. The Secure Laser Film offers the additional benefit of individual, on-site marking capability in a zero-emission process on all stan-

dard ND:YAG laser systems. In this process the laser-active layer inside the film is chemically converted in such a way that the inscription subsequently enjoys optimum protection from environmental influences. The result is an individual and particularly cost-effective security marking.

QUICK-INFO

- Suitable for all standard ND:YAG laser systems
- Individual, machine-readable security marking



Track & Trace – security: wherever, whenever

Lean and dependable distribution of goods all the way through to the consumer is a crucial factor of success for any company. Integrated Track & Trace solutions provide reliable assistance for monitoring potential diversion, re-importation or exchange of products and help to optimise delivery processes up to the point of reaching the satisfied customer.

Securely encrypted identity

Worldwide web based proof of authenticity

KeySecure is the modular Tracing System by Schreiner ProSecure. A security system that makes it possible to trace back product channels around the world. Every packaging unit receives a highly complex security code as a unique identifier – a virtual fingerprint. This code can be verified via an encrypted Internet connection or a call centre, enabling the user to authenticate the product

at any stage of distribution. The 15- or 23-digit code consists of a choice of either alpha-numerical or strictly numerical symbols.

Maximum security is assured by a five-stage firewall protection system, complex encryption and customer-specific analyses. A system which, in combination with other security features, is suitable for virtually any product.

QUICK-INFO

- 15- to 23-digit security code
- Secure data encryption
- Worldwide authenticity verification via the Internet



KeySecure allows users to identify the product via the Internet at any stage of distribution.

Focussing on distribution channels

KeySecure gives double amount of certainty

There are always two sides to product and brand protection: while the customer demands certainty with regard to a product's origin, the manufacturer wants to know where its product is being sold. By developing KeySecure, Schreiner ProSecure's experts have now come up with a solution that achieves both. The new system, for example, is being used by Jemella, the British manufacturer of hair styling and care products.

To protect its brand, the British company uses a holographic label with a unique, integrated tracing code. The code allows the consumer to reliably identify the original product via the

Internet. To make distribution channels transparent, the codes are captured in each shipping unit as well. This makes it possible to reference individual products to the respective distributors or dealers and to perform respective checks of returned products.

QUICK-INFO

- Online authenticity check
- Referencing of product and distribution region

RFID solutions for modern logistics

Efficient protection through intelligent labels

Whether overproduction, pilfering or errors in supply chain management: RFID solutions from Schreiner ProSecure are the answer to numerous security risks in production and logistics. The intelligent labels developed in close collaboration with Schreiner LogiData are equipped with state-of-the-art chip technology and allow remote data acquisition and monitoring of all movements of goods.

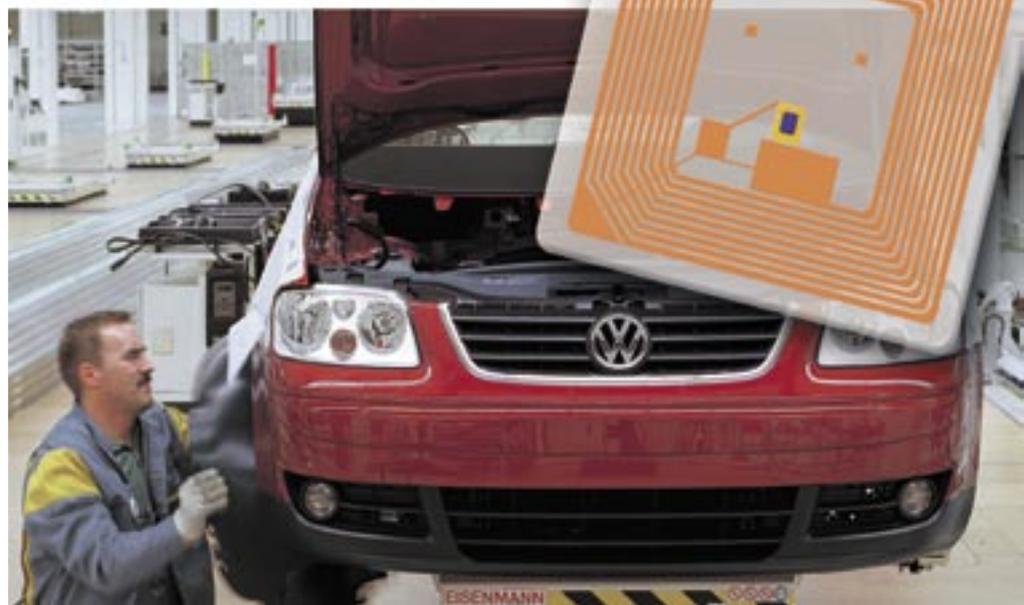
Even complete bulk data acquisition is possible: the system records hundreds of products on a pallet simultaneously. If parts of a shipment are missing, the system immediately recognises and reports this. What is more, the radio signals even allow misrouted batches to be located and returned to the normal flow of goods.

But how does this work? The system registers all RFID signals and continuously compares them with production data. In addition, RFID labels can be programmed as needed via stationary readers and mobile PDAs, with innovative encryption technologies guaranteeing the protection of confidential information.

QUICK-INFO

- RFID-based protection of goods
- Encrypted data storage
- Remote product authentication

Use of intelligent RFID labels in automotive production.



Concentrated Competence, a Pool of Innovative Power.

schreiner
ProSecure

- Solutions for Authenticity Protection of Products and Brands
- Solutions for Document and Value Protection
- Effective PIN Protection
- Track & Trace Solutions
- Tamper Evidence
- Consulting and System Integration of Hard- and Software
- Comprehensive Security Management
- Individual Risk and Process Analysis

Schreiner ProSecure, a division of Schreiner Group, is a supplier of innovative, self-adhesive security solutions for product, brand and document protection with worldwide activities. Customers from the pharmaceutical, automotive and telecommunications industries as well as banking and the public sector value the company for its system solutions. As a long-standing development partner to the engineering industry, Schreiner ProSecure offers comprehensive competence with regard to consulting, application and implementation.

Integrated quality and security management guarantee that customers can rely on a high security level of manufacturing and confidentiality in handling all data and products.

Innovation, Quality, Performance and Enthusiasm: These are the core values to which Schreiner Group subscribes. The extensive know-how and performance portfolio of all group members, including research and development, is fully available for Schreiner ProSecure to draw on as needed.

