

How Counterfeit-Proof Is Your Product?

See how well your brand is protected against tampering

About LEONHARD KURZ

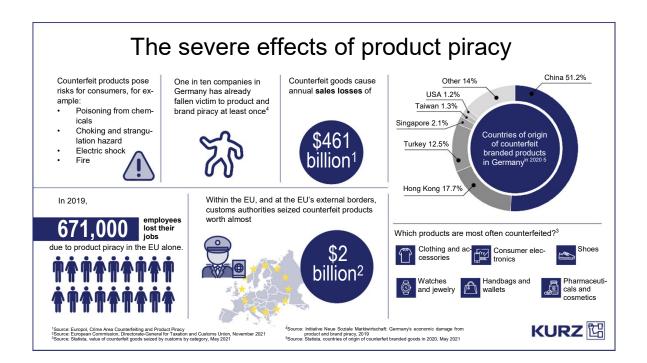
About KURZ: The KURZ Group is a global leader in thin film technology. KURZ develops and manufactures decorative and functional layers applied to carrier foil for a wide range of industries, from the packaging and printing industry through to the automotive, electronics, card, and textile sectors. KURZ offers a comprehensive portfolio of products for surface finishing, decoration, labelling, and counterfeit protection, rounded off by an extensive range of stamping machines and stamping tools. The company is also continuously investing in new technologies and developing innovative solutions for integrating functionality into surfaces. The KURZ Group has more than 5,500 employees at over 30 sites worldwide and produces under standardized quality and environmental standards in Europe, Asia, and the USA. A global network of subsidiaries, representatives and sales offices ensures short paths and individual, on-site consulting.



The Severe Effects of Product Piracy

Counterfeit goods cause **sales losses** of around **USD 464 billion worldwide** - each year! This is the conclusion of a joint study by the European Observatory on Infringement of Intellectual Property Rights and the Organization for Economic Cooperation and Development (**OECD**).

However, product piracy not only concerns companies and brand owners - the consequences, in particular, affect many people. The authorities assume that around **671,000 people in the EU alone have recently lost their jobs due to product piracy**. In addition, counterfeit products, which are often of inferior quality, frequently pose **health risks for consumers -** for example, due to **the risk of fire, suffocation, or poisoning**.





Rising numbers as a result of the pandemic

The **COVID-19 pandemic** and the associated **increase in online trade** are also fueling the problem of product piracy, as impressively demonstrated by the German Customs' figures from the 2021 <u>customs annual statistics (in German</u>). They show that the **value of confiscated counterfeits has risen continuously** in Germany alone in recent years:

- 2019: EUR 224.45 million
- 2020: EUR 238.87 million
- Value of confiscated counterfeits in Germany (in million euros)
- 2021: EUR 315.06 million

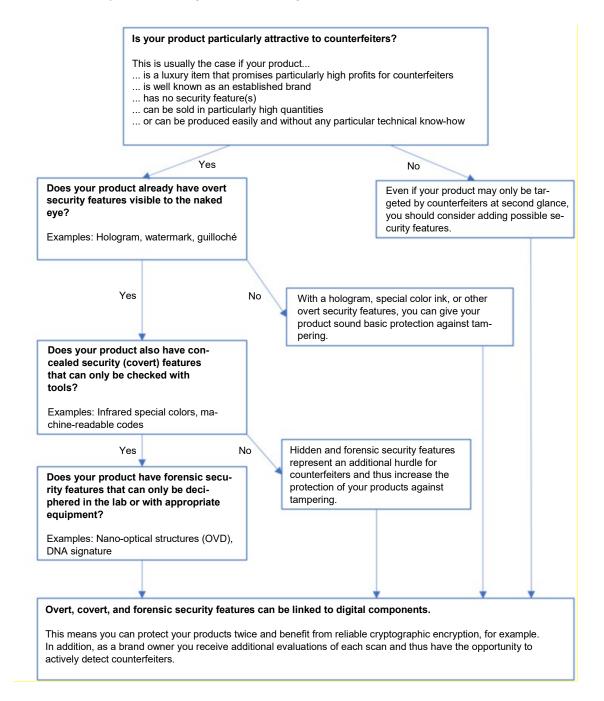
Source: German Customs annual statistics 2021

Against this backdrop, reliable protection against counterfeiting and manipulation is becoming increasingly important, as counterfeit products not only pose a **risk to the health of consumers** and mean **a loss of revenue for companies**, but they **also damage the image of established brands**. Have you ever wondered how tamper-proof your product is?



Just How Counterfeit-Proof Is Your Product?

By asking a few questions, you can get an initial idea of whether your own product or brand is reliably protected against tampering.





Open, Concealed, Forensic, Digital: Security Elements at a Glance

Counterfeiters are constantly developing their techniques. **Determining which is the original and which is the copy** is no longer possible at first glance, as the infamous <u>Plagiarius Award impressively demonstrates</u> year after year. It is therefore all the more important to equip your own brand with **reliable protection mechanisms** from the outset in order to make criminal activities as difficult as possible. There are various security elements to choose from.

Product or Package?

When it comes to tamper protection, you have two options: You can add security features to the product itself or to the packaging.

Professional product	Professional package
authenticity check	authentication
Minimizes the risk of	Can be done directly in the
counterfeit products hiding in	store, before purchasing and
the packaging and protects	opening the product.
against refilling.	

Twice as secure: Of course, depending on the resources available, you can also combine both variants and thus increase protection even further.



Overt Security Features

As the name suggests, overt features are visible to the naked eye without the use of tools. This represents an initial hurdle for counterfeiters and **makes it easier for consumers to recognize** original products instantly.

Examples of overt security features:

- Holograms
- Water marks
- Diffractive colors
- Guilloché



Overt security features often serve **a dual purpose**. VOID security labels, for example, are primarily a **visual security element**. However, they are also equipped with mechanical first-opening protection.

Advantages of overt security features:

- Immediate verification of authenticity possible
- No device required for authentication
- How it works for consumers is easy to understand
- Deters counterfeiters

Covert Security Features

Overt security features are immediately obvious - but counterfeiters also know right away what to look out for when targeting your product. **Concealed elements provide additional security**. Since these are only disclosed using tools, authenticity cannot be readily verified. But that's exactly where their strength lies: **If counterfeiters don't know anything about the security mechanisms, they can't circumvent or copy them**.



Examples for concealed security features:

- Fluorescent ink or UV printing
- Infrared special colors
- Micro font text
- Machine-readable codes

Advantages of hidden security elements:



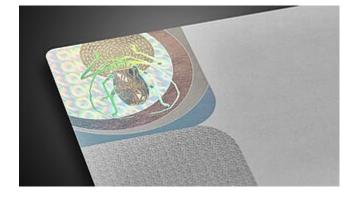
- Security through concealment: Counterfeiters don't know that the technology is present
- Although tools are required, no in-depth user knowledge is necessary

Forensic Security Features

This type of security feature is characterized by the fact that **it can only be verified** using specific procedures - for example, in **a laboratory** using appropriate equipment. For this reason, they are **only known to limited**, **authorized target** groups - for example, representatives of authorities. Forensic security features represent **a particularly high hurdle for counterfeiters**.

Examples of forensic security features:

- Nano-optical structures in OVD technologies
- Biochemical signatures
- Chemical markers (taggants)





Digital Security Features

The protection provided by the aforementioned analog security features can be further enhanced by adding a **digital component.** The advantages are plain to see: **All essential data** on the authenticity of the product can be stored **encrypted in a code** and enriched with **further information** about the supply chain. Consumers can usually scan the label with a conventional smartphone and receive comprehensive information about the product in seconds.

Advantages of digital security features:

- Dual protection using encryption algorithms
- Creating unique copy-protected identities using intelligent structures
- Bonus features such as supply chain transparency
- Easy verification of authenticity using smartphones



• Added value for customers and consumers through further information on the product or company



How do I choose the security features that fit my product?

As a general rule, you can only achieve particularly reliable protection against manipulation by combining different security elements.

However, as this is also a resource issue, priorities usually need to be set. So, ask yourself: Who is supposed to check the authenticity of your products? Consumers, B2B customers, or representatives of authorities, or institutions who have specific (laboratory) equipment?

Reliably Protect Your Product against Tampering - Get Expert Advice!

Does your product have one or more types of security elements? If there are still security vulnerabilities, can the level of protection be increased even further - and which combination is ideal for your specific circumstances? It's often not easy to keep track and find a solution that is ideally tailored to your own needs. Get expert advice on product and brand protection. Please feel free to get in touch with our team - we'll be happy to answer any questions you may have. Don't hesitate to <u>contact us</u>.