TAMPERPROOF ENCODING WITH LASER MARKING

Our Security Labeling Solutions for the Automotive Industry

tesa



Process optimization using state-of-the-art laser technology for labeling solutions

Whether it is VIN, certification, service, security, or warning and instruction information, a variety of labeling systems are required throughout a vehicle. Some have to be absolutely tamperproof and others have to resist extreme external influences, e.g. in the engine area. We offer a comprehensive assortment of laser labels to fulfill all requirements, combining the knowledge of laser marking technologies with expertise in self-adhesive films.

Automotive warning and instruction labels

Tire pressure and fuel information, engine compartment service instructions, as well as airbag, engine and airconditioning warnings are only some examples of the wide range of labels in use throughout the vehicle. Our warning and instruction labels contain user information; they caution the driver against safety hazards and provide service instructions. The cross-linked acrylic label material is ideally suited for a long-lasting and highly resistant application.

Automotive security labels

Our laser labels are also available with customer-specific visible and hidden security features integrated into the labels to maximize security against tampering. Throughout the vehicle, our security labels are used for very critical information such as nameplates and vehicle identification numbers (VIN), they securely mark parts, and can of course also be used as warning and instruction labels if desired. They are also available as a label set solution.

Automotive glass marking

In addition to the standard security labels used on metal and plastics, we offer the unique tesa® 6926 glass marking laser transfer film for windowpane marking. It enables a tamperproof encoding of car windowpanes with vehiclespecific data. The lettering is extremely resistant to abrasive wear, weather, temperature, and chemical influences. The marking is done without corrosive substances and does not mechanically influence the glass.







Product and security features

Product

features

Security

features

High-speed laser engraving and cutting of the desired format in one step ensures maximum production efficiency and a high degree of flexibility in terms of content and dimensions High contrast and resolution ensures that the label is correctly and easily read Achtung Warning Laser label set: all labels for one specific car on one sheet ensures that no label is forgotten Resistance against thermal, chemical, and physical influences to survive the entire vehicle lifetime Controlled production and distribution channel for a maximum level of security Tamper evidence: label is destroyed upon tampering; manipulation leaves visible traces; no label transfer possible Customized logo design: material is available with customer-specific logo design with visible and hidden security features Customized micro scripting: hidden customer-specific micro scripting maximizes security **UV footprint:** proof of label removal by permanent marking of substrates

Automotive laser labels for warning and instruction as well as security applications

Depending on the type of application, our laser labels are available in different grades, either for standard warning and instruction content or for demanding security information. Our laser labels combine a high-performance adhesive with a data carrier that is destroyed upon tampering. They comply with the legal (NHTSA, EU, GB) and manufacturer-specific regulations of the automotive industry.

Laser label product range

	tesa® 6957	tesa® 6940	tesa® 6947	tesa® 6930	tesa® 6937	tesa® 6931	tesa® 6910	tesa® 6926
Technical data								
Category	Rapid	Rapid	Rapid	Standard	Standard	Basic (color change)	Basic (color change)	Glass marking
Max. marking speed [mm/s]	4,000	4,000	4,000	1,000	1,000	1,000	1,000	500
Laser hardware	Nd:YAG CO ₂	Nd:YAG CO ₂	Nd:YAG CO ₂	Nd:YAG CO ₂	Nd:YAG CO ₂	Nd:YAG	Nd:YAG	Yb:YAG
Available colors top layer	Black glossy	Black glossy	Black glossy, black matte	Black glossy, black matte, silver glossy, silver matte	Black glossy, black matte, silver glossy	Transparent white	Transparent white	Black
Backing	Double- layered acrylic	Double- layered acrylic	Double- layered acrylic	Double- layered acrylic	Double- layered acrylic	Acrylic	Polyolefin	Laser- sensitive composites
Tamper evidence	•	•	•	•	•	•		
Customized logo and micro scripting	•		•		•			
UV footprint (on request)	•	•	•	•	•			
High heat resistance	•							
High-speed marking	•	•	•					
Different thicknesses		•	•	•	•			

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All technical information and data above mentioned are provided to the best of our knowledge on the basis of our practical experience. They shall be considered as average values and are not appropriate for a specification. Therefore tesa SE can make no warranties, express or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. The user's nethod of application. If you are in any doubt, our technical support staff will be glad to support you.







Our management system is certified according to the standards ISO 9001, ISO/TS 16949, and ISO 14001. All our products delivered to automotive customers are listed in the International Material Data System (IMDS).

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