fleischhauer RFID


# RFID solutions
## tailor-made

fleischhauer
AMBITIOUS SOLUTIONS

## Tickets for Public Transport

# *Tickets in Motion*




RFID ticketing revolutionises access systems for mass transit facilities worldwide. Public transport systems such as metro or local city transport networks increasingly use contactless technology to enhance user-friendly operations and systems efficiency.

It is crucial to obtain a minimal error rate for roll and fanfolded tickets. That is why Fleischhauer uses a patented production process to guarantee an optimal reading rate for smart tickets.

RFID paper tickets can be customised as single, fanfolded or roll tickets. Fleischhauer's 50 years-plus experience in producing paper tickets for identification and access control systems guarantee problem-free operation and top printing and processing quality.


## RFID-Tickets for Sports and Event Organisations

# *Tickets, that lead inside*

Since before the 2006 football World Cup in Germany, RFID tickets have been the undisputed champions of the sports and events sector. RFID ticketing offers secure and easy access control, high data storage capacity, anti-fraud security and a deterrent to black market trading.

In addition, RFID tickets can offer all the security measures of conventional tickets, such as holograms, security colours or digital security features. Personalisation is also an optional extra, either by thermal printing or by thermal transfer processing.

In football stadiums or concert arenas, RFID tickets open the door to a new era of access control.

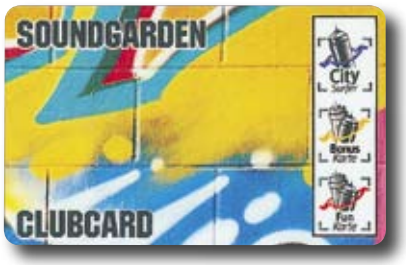
## Chip Cards for Identification and Access Control

# *Accessible* *Technology*

The contactless chip card is the standard medium for applications in the access control and time recording sector. Contactless communication is easy, quick, secure and low maintenance.

Smart cards can combine various needs such as access control, time recording and payment functions. Parallel use of diverse data media – magnetic stripes, bar code, contacting chip, or contactless chip – can be combined in so-called hybrid applications.

Flexible plastic ticketing with RFID inlay can also be used as a cheaper alternative to the contactless chip card. These plastic tickets work in exactly the same way as chip cards and are used, for example, for access control at ski lifts.

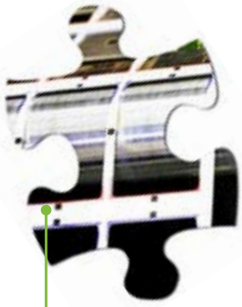


## Tailor-Made Products for Individual Applications

# my RFID

### Material

The choice and the assembling of different materials optimise the data carrier for the relevant application. The materials used define durability, printability and full integration of RFID components.

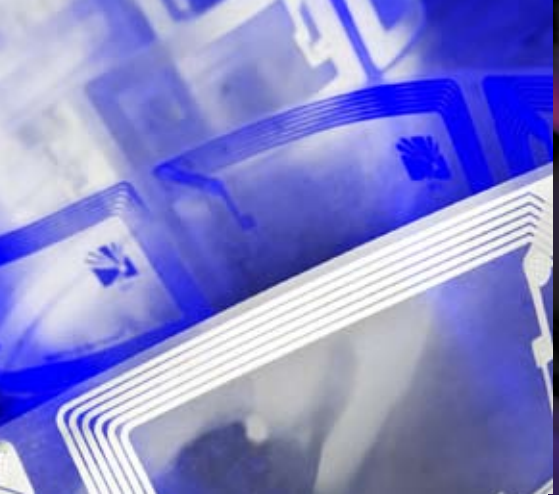


### Customising

Roll, single or fanfold format: customising of ticket products can be system-dependent and highly diverse. For continuous products such as labels or tickets, it is crucial to obtain the lowest possible error rate from the RFID transponder.


### Printing

Multi-colour printing of RFID products is possible via all standard printing processes such as offset, flexo or digital printing. Flexible implementation of these processes ensures cost-effective printing and processing of materials.

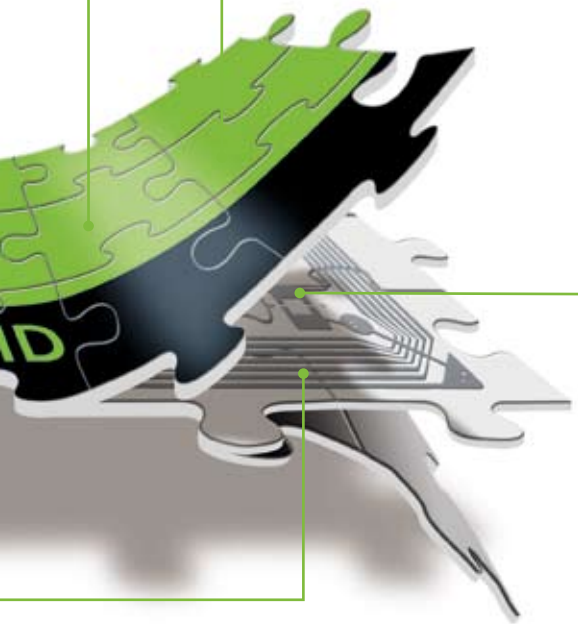


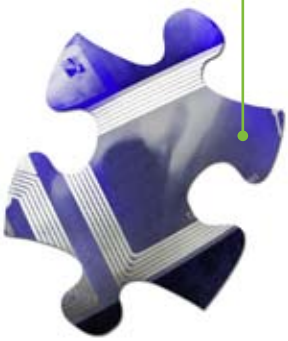
## Security Features

Use of security features such as holograms or security colours enhances anti-fraud safeguards. A variety of printed or applied security features can also be used for RFID products.

## Medium

Form follows function: the design of the RFID medium always reflects the relevant system requirements. Expected lifetime and conditions of use of RFID products are essential to define the right medium – whether chip card, self-adhesive label or paper ticket.



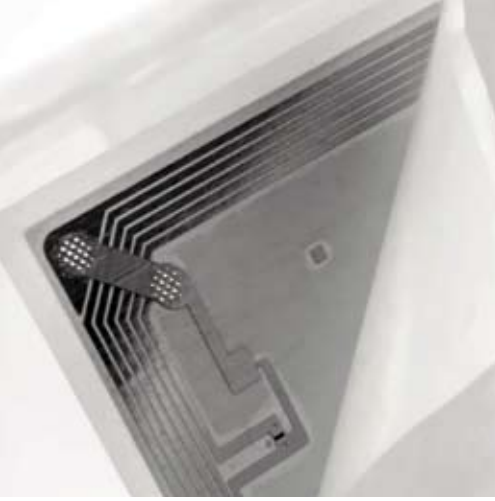


## Chip Type

The chip format or inlay type defines the data capacity and operating distance of the RFID medium. Depending on the application, either cost-efficient inlays with minimal memory are used, or chips with high data storage.

## Coding/Personalising

The chip and carrier medium (ticket, label, card) can be individually encrypted with a code or personalised with individual data. Visual personalising can be carried out during production or when in use via inkjet, thermal printing or thermal transfer processing.



## RFID Labels for Logistics and Industrial Applications

# *Labelling Information*

These days, smart labels are taken for granted as a key element in logistics and industrial applications. Contactless data storage and data transfer means an efficient and secure workflow.

From pallet labelling to item-level identification, RFID labels offer significant advantages for the entire product chain. In the automotive industry, logistics processes and in commerce, RFID labels can provide a solution where bar code labelling cannot meet the high requirements for data storage.

RFID labels are also in use in document administration and archiving systems. Simultaneous processing of multiple documents or items means easier organisation in legal practices and libraries.

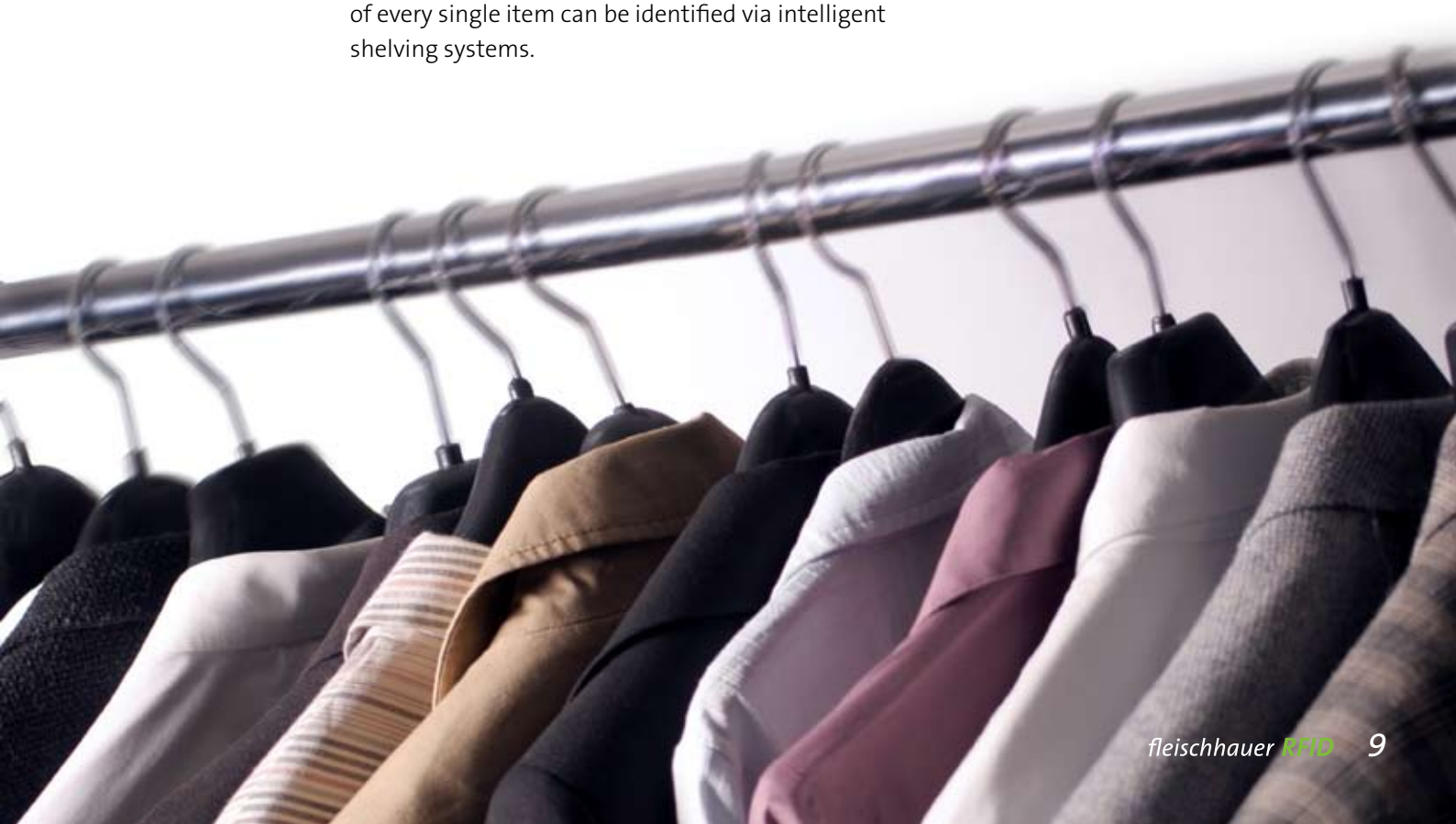

## Textile Labelling and Product Security

# *Excellent* *Article Surveillance*

The advantages of RFID technology are also used in textile labelling. Where bar code labels are in use today, the intelligent RFID label provides solutions beyond basic inventory logistics.

Easy location of an individual item saves staff costs. Quick answers to product quality reduce advisory services. Efficient means of theft-proofing boosts commercial profitability.

RFID labels assist monitoring of item availability, helping to avoid “out of stock” situations. The location of every single item can be identified via intelligent shelving systems.



## Coins and Tags - Robust RFID Solutions

# *Forms and Functions*

RFID solutions come in all shapes and sizes and are ready for instant use. For coins and tags, the transponder is protected from liquids and mechanical impact by a plastic casing. These data carriers are especially durable and they are a bonus, especially for long-term usage – e.g. in swimming pools and car parks.

Other special model types are available as RFID key rings, coins with wristband or other configurations, where the requirement is for robustness and low maintenance needs. Re-usable RFID coins as media for secure lockers and access control systems reduce operating costs and are environmentally friendly.

A special production process facilitates the use of any chip type in various coin formats as well as individual design and multi-coloured print finishes.

## Fleischhauer – Competence in RFID

# *High Frequency Innovation*

Fleischhauer is a specialist manufacturer of RFID tickets and labels, contactless chip cards for ID and access control systems, and other machine-readable data carriers. Fleischhauer has more than 15 years experience in the manufacture of RFID products. The corporate culture of innovation and unique performance in RFID are proof of a track record with numerous product developments.


As a longstanding producer of paper tickets and labels, at a very early stage Fleischhauer sought to combine RFID technology with conventional data media, and applied this in many innovative ticketing applications. This has resulted in Fleischhauer being a top performer in this field, with manufacturing capacity that provides high-speed production plus tailor-made delivery of specialist ticketing and label applications.

In cooperation with leading equipment manufacturers, Fleischhauer supplies tickets, cards and other machine-readable media such as labels, coins and tags for all system environments. The know-how behind each application combined with a comprehensive quality system guarantees reliable functionality of each product.



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