

MAILok Card Inspection & Sorting System - CISS

Cards and jobs - automatic control, sorting, protocol and counting

With its manifold functions the **Card Inspection & Sorting System (CISS)** optimizes time consuming and safety relevant production steps. Processes, which needed to be handled manually in the past and consequently interrupted the work flow, will now be automated.

For intelligent job pre- preparation, the **CISS** system is an effective tool to prepare the right sequence of different virginal cards ("rainbow decks") to be able to collate many small batches to high volume jobs. This big personalization job will optimize the following personalization process and will reduce downtimes of all common personalization equipment significant! Additionally all virginal cards can be tested according quality during the pre- preparation process by optical or electrical devices.

Part of the basic functions is the inspection (e.g. test the actual card state or the chip), the counting (check if complete) and the sorting mode (e.g. split a batch according to the different card types).

Also the other way around! In case jobs have to be separated into smaller batches, because of personalization process, the **CISS** system automatically proves, re- organizes and collates these batches again to bigger jobs after production (e.g. branch sorting).

Therefore, errors occurring by human intervention can be avoided during the entire production cycle!

In combination with the DIALok Logistic Center (DLC), the retrieved production data can be verified to 100%, adjusted and written into a specific protocol.

Because of the high modularity, cards can be separated resp. collated to criteria, which are freely definable via chip-magnetic-stripe, OCR- and/or barcode (1D, 2D, DataMatrix) reading. For best integration in existing production environment, the CISS is compatible with card magazines of all common personalization systems by adaptor kit. Also collating of cards in boxes, jewel card cases or blister tapes is possible by post processing modules.

The **CISS** has modular design, which allows the system to be upgraded in range and functionality.

Additional features such as the automated destructions of defect basic card material round up the overall performance of the **CISS**.



Performance characteristics:

- Up to 6000 cards per hour
- Reading and counting cards
- Sorting card types
- Checking card quality of card body, chip, magnetic stripe or optical data
- 1-n input magazines
- 1-n output magazines
- Magazine identification by RFID-tag
- Compatibility of card magazines with all common personalization systems
- Upgradeable modular design

Performance characteristics with DLC-connection:

- Communication with the DLC and external databank
- 100% data protocol (in- and output)
- Network connection via DLC
- Databank controlled functions
- Card sorting, separation, collating
- Card controlling, reading, matching
- Process criteria freely definable

Card verification:

- Video reading OCR as well as character / symbol recognition
- OCR, barcode, clear text recognition
- Chip reading (bottom, top, contactless)
- Magnetic stripe reading

Additional features:

- Personalization of magnetic stripe, chip contact or contact-less (e.g. Mifare)
- Stand-alone or network integration
- 100% quality control before and after personalization
- Different packaging systems can be added



Otto Künnecke

MAILok CISS - Scratch-Off System

Scratch cards automatically printed, labelled and verified

With its manifold functions, the **Card Inspection & Sorting System (CISS)** can be also designed as a dedicated production machine for scratch cards. The necessary modules can be integrated in an existing CISS – System but can also be designed as a **stand-alone-scratch-off-system**. The modular design of the CISS allows to integrate different modules. Standard for scratch cards is the input module, the ink-jet printing and the labeling- or hot stamp unit. The machine can be equipped with various other modules like magstripe encoding, verification units as well as different sorting and packaging modules.

The **CISS scratch-off system** can grow along with the customer's needs.

Like all other CISS-systems, the machine is very easy to operate using our DIALok Data Center with a graphical user interface which can be equipped with local language. The machine is a heavy-duty, reliant machine for working in multiple-shifts.

Due to this reliability, the machine needs less service and works in every production environment.

The withdrawal of the cards from the magazines and the transport system ensure that no scratches will appear on

the surface of the card during production.

The **CISS scratch-off-system** is an efficient, cost-effective solution for print runs ranging from just one single card up to several millions of cards.

The **CISS scratch-off system** can use all kinds of plastic- and paper cards from 0.35 – 1 mm thickness.

The **CISS** has a modular design, which allows the system to be upgraded in range and functionality.

Additional features, such as the automated destructions of defect basic card material round up the overall performance of the **CISS**.



Performance characteristics:

- Up to 8.000 cards per hour
- Printing, labeling and verifying of cards
- Labeling- or hot stamp unit available
- More than 1 printing head can be integrated
- Modules for different kind of card personalization available
- Handling of cards with 0.35 – 1 mm card thickness
- 1-n input magazines
- 1-n output magazines
- efficient, cost effective solution
- Upgradeable modular design

Performance characteristics with DDC-connection:

- Network connection via DDC
- Databank controlled functions
- Card printing, labeling and verifying
- Process criteria freely definable

Card verification:

- Video reading OCR as well as character / symbol recognition
- OCR, barcode, clear text recognition
- Chip reading (bottom, top, contact-less)
- Magnetic stripe reading

Additional features:

- Personalization of magnetic stripe, chip contact or contact-less (e.g. Mi-fare)
- Stand-alone or network integration
- 100% quality control of print- and/or label result
- Different packaging systems can be added like box packaging, banding and blister.



Otto Künnecke

MAILok Card Inspection & Sorting System - CISS

Automatic verifying, grouping and packaging of cards

While the production for the direct dispatch of cards to the end customer has been automatized almost completely, the packaging of cards to the indirect dispatch to a branch or local authority is still done manually.

Therefore, **Otto Künnecke** has developed new modules for the Card Inspection Sorting System **CISS** for optimization of packaging of cards for the indirect dispatch, besides the systems for direct dispatch which are already part of the product range.

During the manual production, the cards are mostly controlled by hand and grouped by means of a pre-printed delivery note. The end packaging is most of the time a foil envelope with an address label.

The **CISS** puts an end to this complex and insecure manual work process.

The **CISS** verifies all optical and electronic data on the card and verifies it with the original data. Afterwards, the cards are grouped by branches, banded and a label with content is printed

and applied to the stack.

Upon requirement, the delivery note is printed, folded and combined with the card stacks.

Should the mailing then be inserted into a foil envelope and a label with the address of the branch be printed, this will lead to a full optimization of the process. This enables the customer not to only save costs but also reach a 100% verification of the end product.



Special features:

- Up to 6000 cards per hour
- Verification, counting, grouping and sorting of cards to different criteria
- Verification of all optical and electronic data on one card; verification of the correct card body.
- 1-n Input Magazine
- 1-n Output Magazine
- RFID-recognition of magazines
- Compatibility with all moving card magazines of all traditional personalization systems
- Expandable, modular design

Special features with DLC-connection:

- 100% data protocol (In- and Output)
- Network connection via DLC
- Database driven functions
- Sorting, separation and grouping of cards
- Card verification, reading and matching
- Process criteria freely configurable
- Printing of labels and delivery notes
- Communication with the DLC and an external database

Card verification:

- Video reading for verifying of numbers and texts, barcode embossed characters as well as logos
- Verification of card body (Layout recognition)
- Chip reading (bottom, top, contactless)
- Magstripe reading

Additional options:

- Personalization of magstripe, chip contact- or contactless (e.g. Mifare), Laser- and thermo print
- Stand-alone or network integration
- 100% quality control before and after personalization



Otto Künnecke