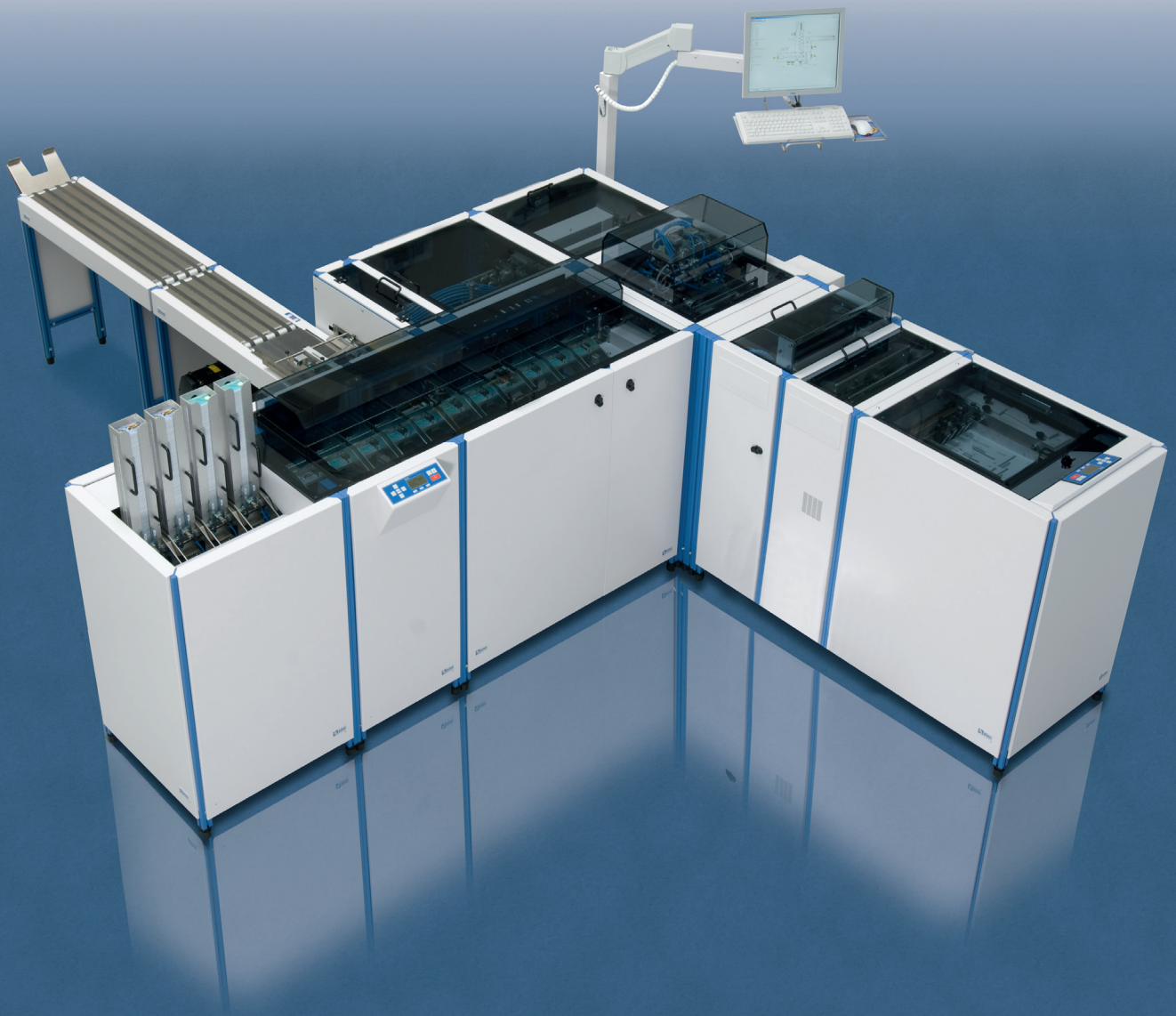


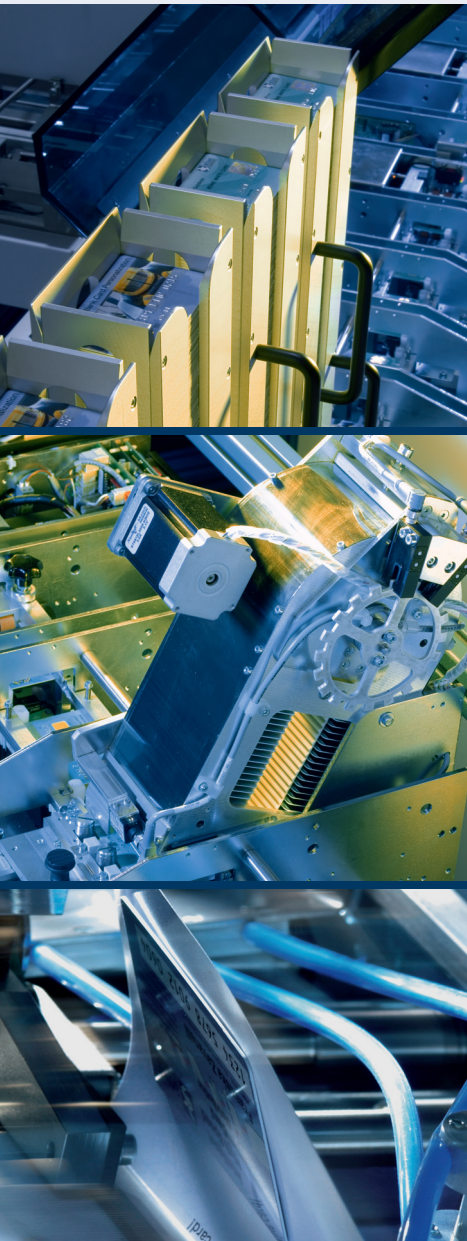
A perfect match ...



PCS

— Card Mailing System

Billions of plastic cards are produced and put into circulation every year. Bank cards, insurance cards, ID-cards, loyalty cards and many more have become an integral part of our everyday life. All these cards must reach the customer in a reliable and cost-efficient way. BÖWE Group's PCS card mailing system offers the solution.



At a glance

“Whether standard system or a tailor-made configuration: with its wide range of flexible modules and intelligent software, BÖWE Group always provides a solution to meet your requirements.”

Meeting a variety of requirements

Card mailing applications range from standardized to highly complex where the focus is on individual appearance, customized composition and personalized content. The wide range of module-based PCS system configurations enables BÖWE Group to provide solutions which meet the diverse customer needs. The PCS offers a maximum level of speed, flexibility, reliability and cost efficiency.

Speed and flexibility

The modular PCS reliably attaches up to six cards per document with a performance of up to 8,000 cards per hour and can be configured to meet individual application requirements. The solutions available range from standard to highly complex, depending on the application and the level of automation and intelligence.

Traceability and integrity

In PCS systems the entire production process is continuously monitored. Reading modules ensure the reliable identification of cards and documents. Sensors track every card and document throughout the entire system and ensure that the right card is matched to the right carrier. Those that do not match are bypassed out of the mail stream automatically. All relevant processing steps are recorded and information on the status of every card is available at all times.

Cost efficiency

Several factors positively influence the cost-per-piece when using a PCS. The combination of a compact footprint, high magazine capacities which guarantee long operation intervals, short job change-over times and an intuitive software interface makes the PCS easy to operate. The automatic bypassing of incorrect cards or documents prevents system stops. As a result, maximum output can be achieved with reduced input of operator time, space and consumables.

Investment protection

The modular machine concept makes it possible to retrofit and modify the PCS easily and quickly any time. Even if requirements change: Investment today is the basis for economic success tomorrow.



Card channel and attaching station: the core of the PCS

The card channel and attaching station always form the central part of a PCS system. The freely configurable card channel comes in two sizes: 10 and 16 stations. It can be equipped with card feeding magazines, different readers, turn-over stations, restacking magazines for incorrect cards, a card buffer and a labeling module. Intelligent options like card verification and selective card feeding maximize integrity and simplify logistics.

The attaching station reliably matches and physically joins cards and documents at up to 8,000 cards per hour. The card positions can change from document to document and, if required, the cards can be rotated.

Card channel

Feeder magazine

- For all common card types and materials
- Serial, parallel or selective draw-off
- High loading capacity
- Easy refill during operation

Card reading

- Magstripe
- Chip (contact and contactless)
- Barcode
- 2D-Code
- OCR/OCV

Card turn-over

Compensates different feed and read orientation

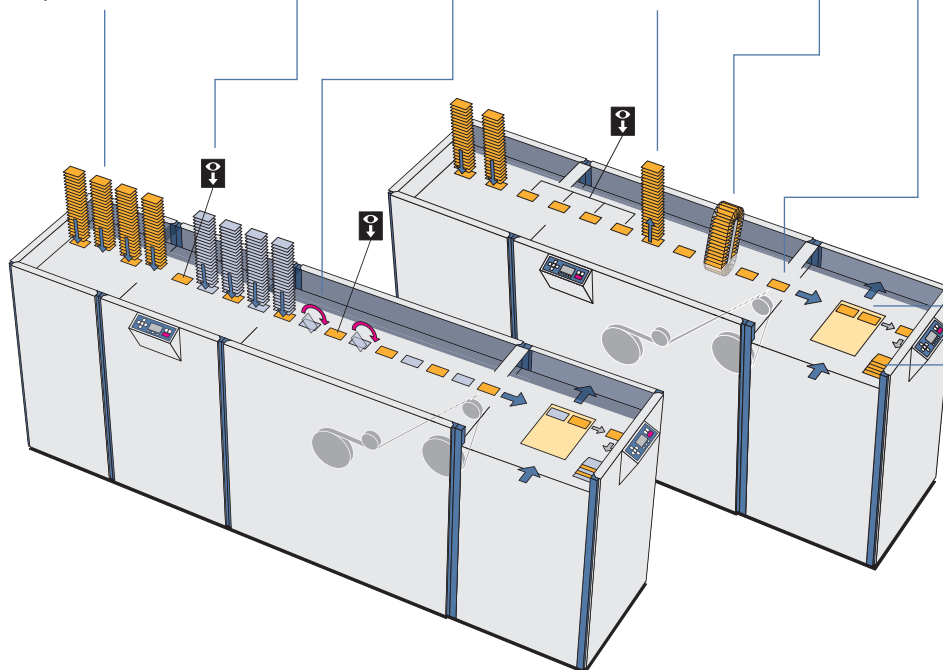
Card buffer

Synchronizes card channel to document channel in on-line systems (carrier print-on-demand)

Labeling

Double-sided self-adhesive label is applied to the back of the card

Divert magazine
For incorrect cards



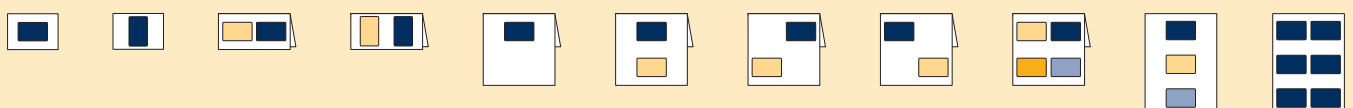
Attaching station

Attaching station

- Matches cards with documents
- Attaches up to 6 cards per carrier
- Selective and fully automated card positioning in X and Y direction
- Options:
Card rotation
Attaching with hot glue

Divert tray for cards

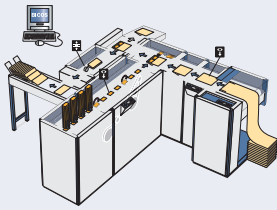
For cards without matching carrier



System configurations

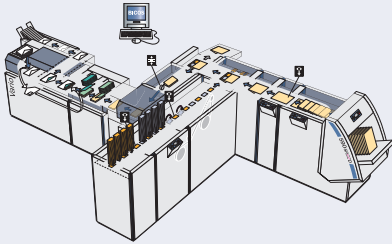
Off-line processing

Both personalized cards and personalized documents are fed in a pre-determined sequence.



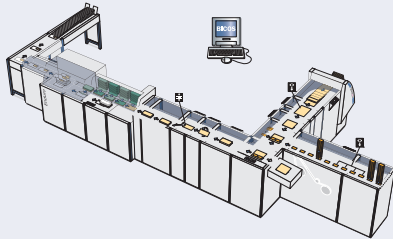
A good foundation ...

for attaching plastic cards to documents is a **PCS without an inserter**. Documents and cards are fed, read and matched, then the cards are attached to the documents. The folded documents are stacked on a shingle conveyor. Further processing, for instance inserting, can be realized in a separate step.



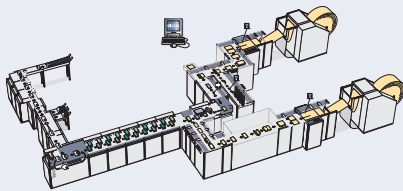
A flexible solution ...

for the production of complete card mailings is a combination of the **PCS and an inserting system**. A variable amount of enclosure feeders, suited for promotional inserts of every kind, provides flexibility for the individual composition of mail pieces. A comprehensive range of post-processing components completes this solution.

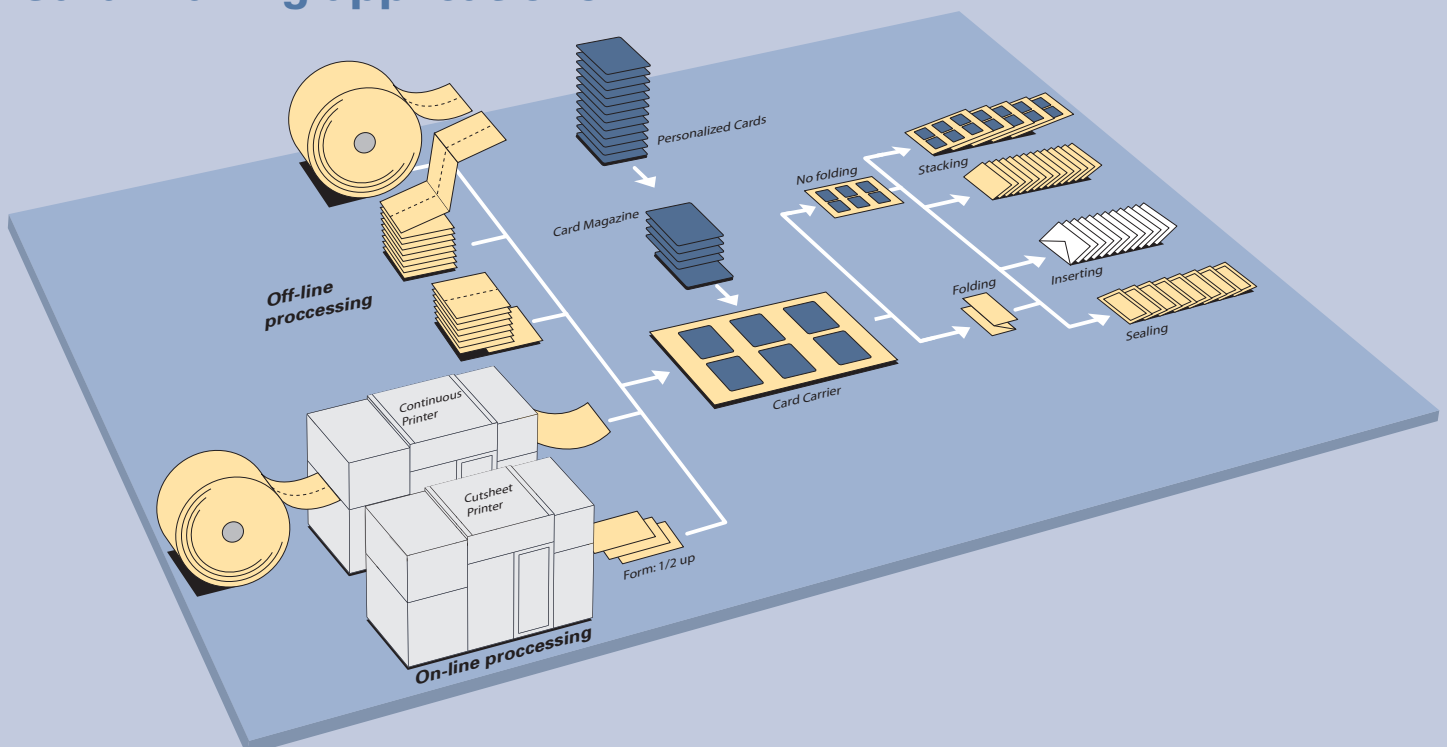


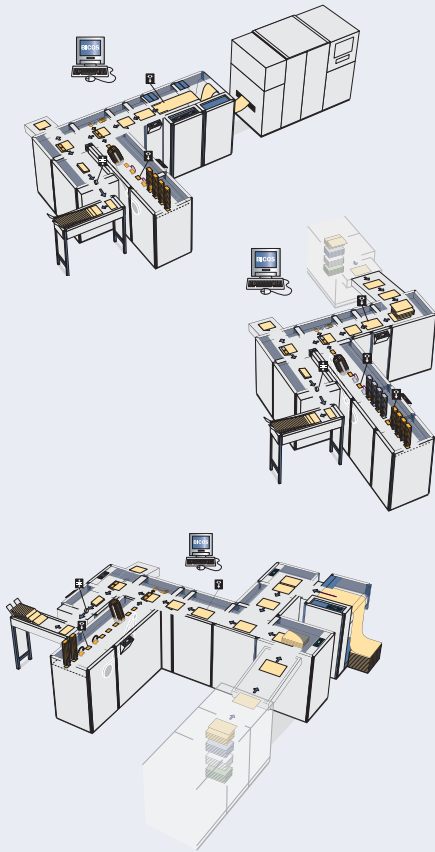
Complex requirements ...

call for tailor-made configurations. **Multi-channel systems**, for example, allow for adding extensive recipient-specific information to the card carrier. The result is a customized mail piece with a strong impact on the recipient.



Card mailing applications





On-line processing

The PCS is linked to a digital high performance printer. Personalized cards are fed and the corresponding documents are printed on demand.

Easy logistics ...

are the main advantage of on-line configurations. The cards can be fed at random, as document prints are initiated only after the cards have been read. Document reprints can be generated directly at the system if needed. On-line systems can be configured with **continuous-form** or **cut-sheet** printers from numerous manufacturers. Cut-sheet printers with several paper trays allow for selective draw-off of different forms. Therefore, different applications can be bundled in one job.

The best of two worlds ...

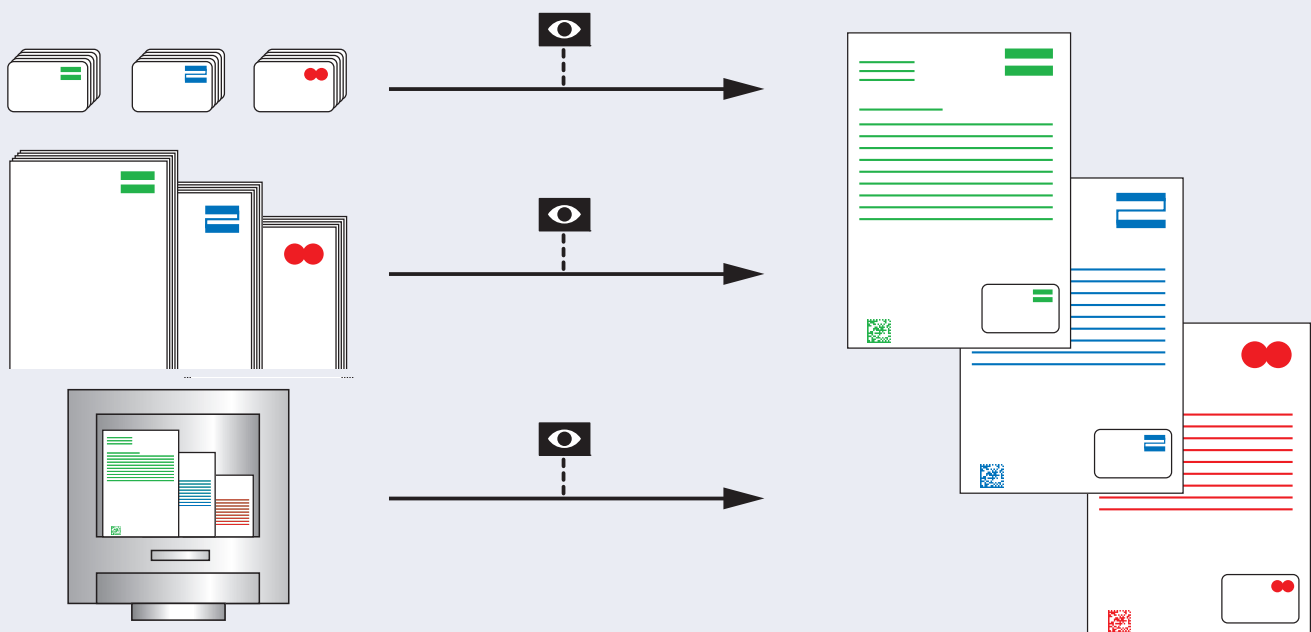
is combined in the **hybrid PCS system** which comes with an on-line and an off-line paper channel. Generally, the off-line paper channel is used for high-volume standard jobs whereas the on-line channel produces re-prints and documents for small jobs.

Form verification: getting it right straight away

When using a variety of standard forms, it is important to ensure that the correct one is selected in the carrier printing process:

First of all the card is fed and read. The matching form is then drawn from one of the printer's paper trays. The form is identified by a pre-printed element. Comparing it to the coded information printed together with the text allows for form verification. If everything is correct, the card is attached to the document.

Form verification ensures that each recipient receives the right card(s) on the right form containing the right text.



Objective: card, form and text – a perfect match

Technical Data

Document feeding

- 1-up / 2-up
- Continuous / cut-sheet
- Portrait / landscape

Document printing

- Off-line
- On-line, with the printer linked to the system

Document reading

- Barcode: 2 of 5 Interleaved / Code 39 / Code 128 / Codabar
- 2D-Code: Data Matrix (ECC 200)
- OCR
- Image recognition
- Other readings upon request

Document formats

- Height: 4" – 14"
- Width: 120 mm – 305 mm
- Other formats upon request

Document labeling

Scratch-off / peel-off labels to cover confidential information (e.g. PIN / PUK)

Document folding

- Z-fold
- Wrap-fold
- Half-fold
- Double-parallel fold
- Cross-fold
- No fold

Card feeding

- Serial, parallel or selective operation mode

Card reading

- Magstripe: ISO / JIS
- Chip: contact / contactless
- Barcode: 2 of 5 Interleaved / Code 39 / Code 128 / Codabar
- 2D-Code: Data Matrix (ECC 200)
- OCR / OCV
- Other readings upon request

Card turning module

- Processing of cards independent of feeding direction (personalization A → Z / Z → A)
- Reading on card front and flip side

Card buffer

Max. 100 cards:
for on-line document printing (print-on-demand)

Card attaching

- Automatic matching of card with card carrier
- Double-sided adhesive label and/or hot glue
- Free positioning of the cards on the carrier
- Selective attaching of up to 6 cards per carrier
- Up to 8,000 cards per hour
- Card rotation:
Card angle on the carrier from – 90° to + 90°

Inserting

- Compatible to BÖWE SYSTEC inserters
- Up to 18 selective enclosure stations (more upon request)
- Reading of personalized enclosures in the enclosure station
- Variable number of documents per envelope
- Envelope format C6 / C5 / C4

Post processing

Sorting / postage metering / sealing / film wrapping

BICOS software

- Easy system operation
- Operating data logging

ANV (Account Number Verification)

Tracking and recording of all relevant production steps

BÖWE One enabled

Modular software solution for transparency, processing security and integrity in the total production environment