Kern 90
Card mailing system

kern**Card**

The groundbreaking card processing solution for high-range volumes.

The Kern 90 Card System is yet another innovation from the Kern Group, whose more than 70 years' experience with inserting systems has enabled the company to develop a new and exciting card system.

The Kern 90 is notable for its extremely versatile and modular design. The system's pick and place robot allows up to 8 cards to be placed anywhere on the document, while its linear structure allows up to max 7,000 cards placements per hour - a significant gain in productivity.

The System's user friendly software allows for a database controlled procedure where all cards are compared with carrier and inserts, then validated and inserted. Each processing step is monitored, and an ergonomic user interface makes system operations extremely simple and intuitive.

And what's more, all product information is available for ad hoc evaluation purposes. The use of a pick and place robot allows cards of varying thicknesses, sizes and forms to be processed.

This means that your marketing team can give its imagination free rein in designing of different cards.

All product information is available for ad hoc evaluation purposes. The use of a pick & place robot allows cards of varying thicknesses, sizes and forms to be processed. Your marketing team can give its imagination free rein in card affixing.

Kern 90 is a genuinely groundbreaking solution that is ideally suited to high standards and complex technical requirements of today's plastic card industry.

A specific version, K90 SPECIAL, has been conceived to process special card sizes ranging from mm 54 x 42.5 mm to 108×86 mm, with cycle speed up to max. 6,000 card placements per hour by a SCARA Robot.

Features

- Card size ISO 7810: 54×86 mm Minicards 54×42.5 mm on request
- Card thickness:
  min. 0.4 mm / max. 0.8 mm

- Carrier Size:
  min. 100×100 mm / max. 254×350 mm
  (A3 format to be folded)
- Carrier density:
  min. 80 gr/m^2 / max. 180 gr/m^2
  (up to 250 gr/m^2 only pre creased)
- Carrier identification:
  Bar Code (1D/2D, major types) OCR
- Card placement speed:
  up to max. 7,000 pieces/hour with DELTA Robot)
  up to max. 6,000 pieces/hour on Kern 90 SPECIAL with SCARA Robot
- Attachment: Bi-adhesive label or Hot melt glue
- No. Card Attachment max up to 8 single on each page - variable on each mail piece of same job
- Position of cards:
  variable within each mail piece of same job. Landscape, portrait or selected degree of inclination
- Folding type C, Z, G, S, Half-Fold – "Irregular"
- Enclosure format:
  min. 93×100 mm / max. 150×220 mm
- Envelope format C5, C6/5
- Envelope thickness: up to 6 mm (over 6 mm on request)

Your technology partner | **kern**
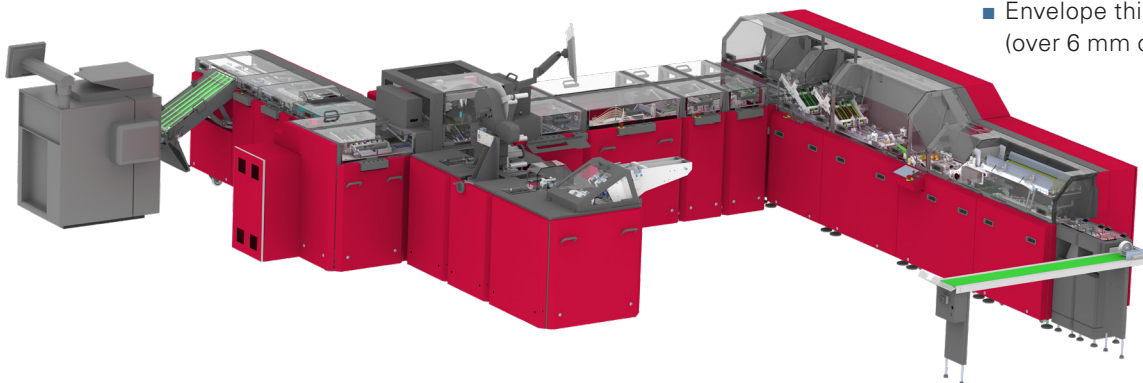
Additional to the System **Kern 90**
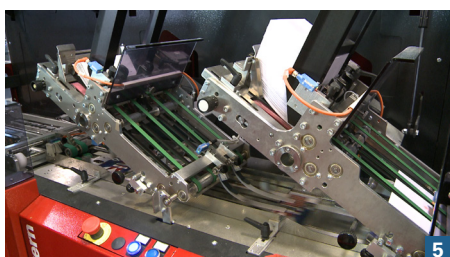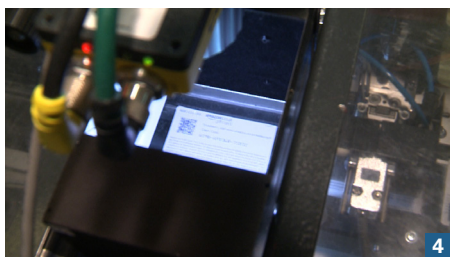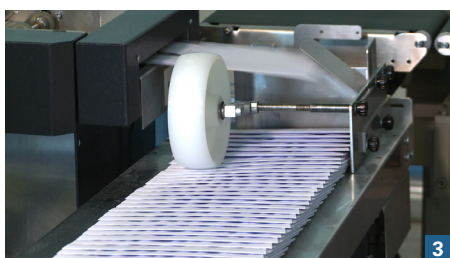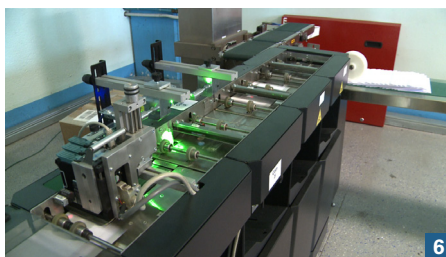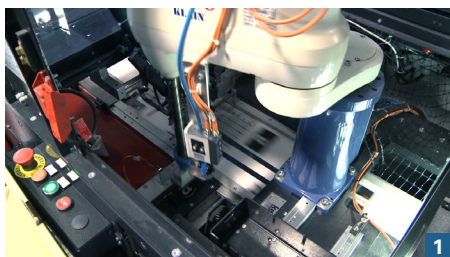
1 RoboCard Application Module
- Cards can be positioned on the carrier at a speed of up to max. 7,000 placements/hour.
- Available Pick & Place Robot for cards out of ordinary ISO standards at with speed up to max. 6,000 placements cards/hour.
- High level of versatility in card attachment.
- Card positioning with an accuracy of ± 0.5 mm and at any angle from 0° to 360°.
- The integrated vision system facilitates programming and set up of the module.
- Cards can be attached to the carrier with glue or double-side adhesive.
- Low level of maintenance.
- Automatic adjustments for job changeover (Option 2).

2 Automatic Suction Card Feeders
- Enables continuous loading A to Z or Z to A
- High hopper capacity
- Additional autoloader to increase Loading capacity (option).
- Stack-level monitoring.
- Double-feed detection with any kind of plastic card.
- Handling of various card types: flat, transparent and embossed
- Installation of up to eight Card Feeders. (additional upon request)

3 Versatility of Card Formats and Performance
- Card formats can be processed, out of standard ISO 7810. (Option)
- Handling of irregular shaped cards
- Thicknesses range 0.40 to 0.80 mm.

4 Card Readers
- The system provides various readers: Magnetic stripe, Microchip (contact and contact-less) Barcode, Data-matrix, OCR.
- High quality and reliable reading.
- Functionality "AND" – "OR".
- Several readers can be employed simultaneously.

5 Versatility of Paper Formats
- Various carrier inputs: Cut sheet, Fanfold or Roll.
- Various paper formats: A3, A4, A5, and A6.
- All input modules are manufactured by Kern Group («One Stop Shop»).

6 Additional Modules and Processing Options
- Easy to use software for Job creation
- To enable the inclusion of cards in multiple page mail pieces, the system can encompass a variety of document and enclosure feeders, grouping and folding modules.
- The Kern 90 is designed to interface with Kern Inserting Systems. (additional modules required)
- Available module for no enveloping jobs
- Database-driven inserting and integrity control available as security-enhancing options.
- Mail pieces can be sorted, based on variable criteria.