

ruhlamat – the leading supplier of advanced solutions for passport personalisation

ruhlamat is a leading supplier of advanced solutions for the personalisation and quality control of passports and e-passports.

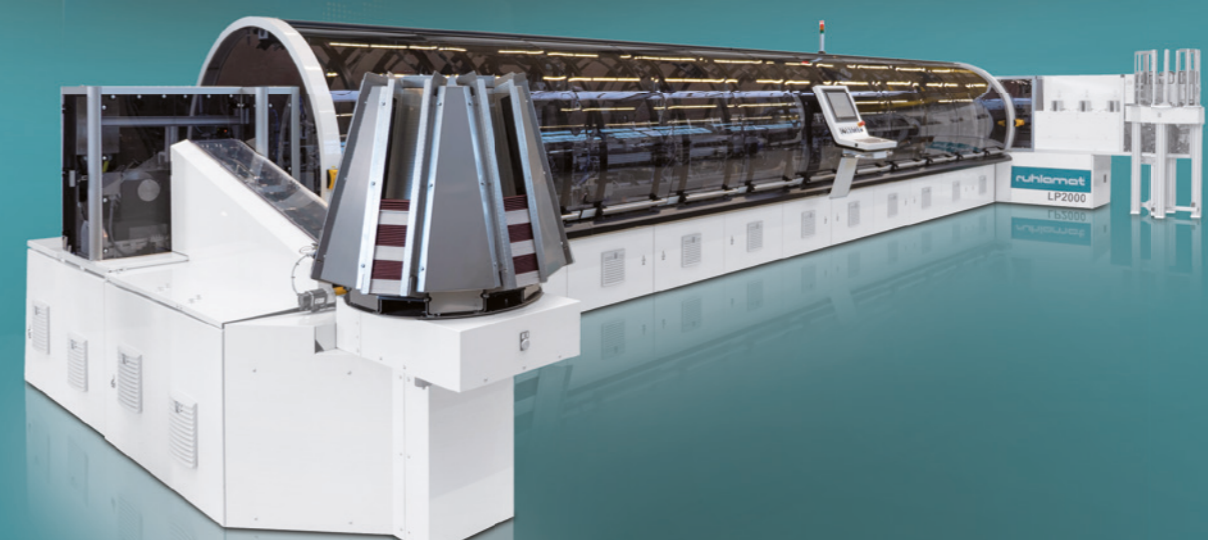
As experienced machine manufacturer, we do our very best to meet every customer requirement, no matter how unique or challenging. We develop and produce functional, affordable and scalable solutions, which ensure full compliance with the ICAO and ISO standards surrounding the issuance and security of MRTDs.

Our reliable state-of-the-art solutions, as well as our unrivalled expertise, has resulted in various successful project installations around the world.

ruhlamat – customised machine solutions for

- > Chip Module Production
- > RFID Inlay Production
- > Card Personalisation
- > Card Quality Control
- > Passport Personalisation
- > Passport Quality Control
- > Special Machinery

ePassport Pre-Personalisation



www.linkedin.com/company/ruhlamat-gmbh



ruhlamat **MACK GROUP**
solutions for your needs.

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PERFLEX® – the premium perforation feature for passports

PERFLEX® allows passport perforation with different character sizes using holes in different geometric shapes like squares and triangles (■▶●◆).

Laser perforation (PERFLEX®) PC holder page



Visa pages with/without back cover



LP2000 Pre-Personalisation



Fully automatic high-speed perforation and pre-personalisation of passports and e-passports.

Different character sizes

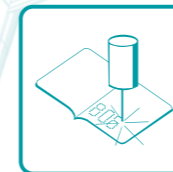
- › Basically unlimited character set (alphabetic letters, digits, symbols, limited by size only)
- › Mixed height and width of characters possible
- › in different positions

Difficult to counterfeit

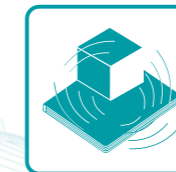
- › Arrangement of shapes/sizes within a character (set) either random or by a customised algorithm, thereby creating a unique, unforgeable feature

Different hole shapes

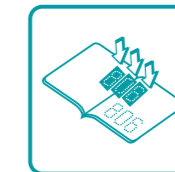
- › Laser perforated characters from any visa page through all remaining pages including or without back cover
- › Extraordinary laser perforation quality in comparison to off-the-shelf solutions due to ruhamat's sophisticated laser software



LASER PERFORATION



RFID CHIP ENCODING



NUMBER PRINTING (MECHANICAL/INKJET)



OPTICAL INSPECTION

Benefits and features:

- › State-of-the-art booklet perforation, numbering and RFID encoding
- › Multiple UID control
- › PERFLEX® as unique, unforgeable perforation feature – a „DNA“ for each passport without additional costs
- › Inline quality control (optical and electronic)
- › Patented laser perforation method allowing creation of different hole shapes and character sizes
- › Universal personalisation software with Data Mastery as open platform
- › Inkjet printing, mechanical numbering and laser engraving as options
- › Can be easily configured according to customer and project demand
- › Patented, space-saving RFID encoding tower for simultaneous chip initialisation and / or encoding of e-passports
- › **For more technical details:**

