The field-proven software packages Job creator, Data Mastery (DMS), Software Development Kits (SDK) and Hardware Security Module (HSM) integration with open interfaces to customer’s application complement the ruhlamat machine solutions to the perfect, flexible solution for high quality and secure smart card personalisation.

ruhlamat software packages

Smart card personalisation
ruhlamat MWS pro-ID1
A powerful Midrange Working Station – unique in the market

MWS pro-ID1 – the state-of-the-art midrange concept for high quality laser personalisation of smart cards. Contact, contactless or dual interface chip backing, laser engraving up to 24 heads, MLI, CLI or both and up to integrated customer options are the main features. Up to 50 cards can be loaded in the input stacker for continuous personalisation. An integration of a reject station is possible. The advanced double-junction diode pumped Nd:YVO₄ laser allows a resolution up to 2000 dpi. That guarantees precise high speed laser engraving up to 150 cards per hour. Short laser pulse with perfect bell shaped characteristics blue the threshold energy that allows high quality, laser engraving of different valuable surfaces without thermal stress and formation of blow holes. ruhlamat – unbeaten laser engraving quality for pictures, text, logo, signature, fingerprint, data, text, etc. etc.

Resolution up to 2000 dpi.

Identical laser as on Pearl – a perfect backup solution.

Up to 150 cards per hour.

Optional reject box.

Integrated optical inspection.

Available features

High quality laser.

ruhlamat Pearl ID
Benchmark for centralised personalisation

Pearl ID – the ruhlamat solution for all kind of personalisation tasks in the smart card sector combines innovation design with proven technology modules. That allows a flexible configuration whatever the detailed needs for the respective ID card are.

Contact, contactless or combined dual interface chip loading in the same encoding tower®, Drop on Demand high speed colour printing, laser engraving or a combination of both technologies, MLI, CLI and a variety of inline optical inspection systems are the major building blocks for a customised and efficient configuration of your Pearl ID.

Automatic card handling

Up to 6 laser stations.

Colour printing.

Optical personalisation

Optical inspection – Inline quality control

Electrical personalisation & test

Universal chip encoding tower.

Pearl Bank

A powerful Midrange Working Station – unique in the market

ME350-2 GSM

• special design for SIM, UMTS and Pay TV cards
• throughput up to 6.000 cph
• automatic magazine changer for card in-/output
• space saving, patented ruhlamat chip encoding tower®
• eTower for up to 80 cards – long personalisation times no problem!
• rework station for simultaneous personalisation of replacement cards
• complete personalisation in correct sequence
• laser marking
• optical verification
• universal chip encoding tower®

Pearl GSM

• special design for completely printed bank cards / flat cards
• High Definition drop-on-demand (HD DOD) industrial colour printing
• special design of the card feeding / feeding roll
• magnetic stripe encoder
• universal contact, contactless or dual interface chip encoding tower®
• fully modular, complete range of PEARL technology modules available

MS350-2 GSM

• special design for SIM, UMTS and Pay TV cards
• throughput up to 6.000 cph
• automatic magazine changer for card in-/output
• space saving, patented ruhlamat chip encoding tower®
• eTower for up to 80 cards – long personalisation times no problem!
• rework station for simultaneous personalisation of replacement cards
• complete personalisation in correct sequence
• laser marking
• optional rework

BT110-4 | TT100-3 – Card Testing

• air drop / droplet knocking test
• friction

Electrical personalisation & test

Universal chip encoding tower.

Optical personalisation

Optical inspection – Inline quality control

Electrical personalisation & test

Universal chip encoding tower.

High Definition drop-on-demand (HD DOD) industrial colour printing

Optical inspection – Inline quality control

Electrical personalisation & test

Universal chip encoding tower.

MT150-2 GSM

• special design for SIM, UMTS and Pay TV cards
• throughput up to 6.000 cph
• automatic magazine changer for card in-/output
• space saving, patented ruhlamat chip encoding tower®
• eTower for up to 80 cards – long personalisation times no problem!
• rework station for simultaneous personalisation of replacement cards
• complete personalisation in correct sequence
• laser marking
• optional rework

BT110-4 | TT100-3 – Card Testing

• air drop / droplet knocking test
• friction

Electrical personalisation & test

Universal chip encoding tower.

Optical personalisation

Optical inspection – Inline quality control

Electrical personalisation & test

Universal chip encoding tower.