

# The BookMaster® Pro passport personalisation system

The introduction of a new passport can be an exciting, but stressful endeavour. With IAI's innovative and easy-to-operate passport personalisation systems, you'll have one less thing to worry about. A compact system supporting both inkjet and laser engraving technologies, IAI's versatile BookMaster Pro provides secure, reliable, automated passport personalisation.

**Suits your project demands.** With its modular and highly configurable design, BookMaster Pro allows you to choose the functionalities required for your specific passport project. The system's flexibility also ensures that future upgrades can easily be accommodated for.

**High-quality passports.** The BookMaster Pro system provides high-quality passport personalisation. With BookMaster Pro, all functionalities are performed in one go, including the integral verification of all applied data. The finished product is a consistent, high-quality passport. What's more, passports personalised with BookMaster Pro are forensically identical to passports personalised via both IAI's BookMaster One and BookMaster Desk systems.

Proven machine concept. BookMaster Pro has a proven performance in the security documents market. With its robust, industrial design, it is safe and easy to operate and maintain. Built to last and fully compliant with CE and UL safety standards, the system provides high uptime

and high yield. Simplified setup and operation ensure short start-up and switch-over times while the solution's thoughtful design helps to keep operational costs at a minimum.

#### Highlights

- Speed up to 150 pp/h
- Fully automated, one-pass personalisation
- Modular design, fully configurable
- Full-colour inkjet printing and/or high-quality laser engraving
- Support for third-party security features
- Contactless chip personalisation
- Verification of applied data and security features
- Easy to operate and maintain with low operational cost
- Output is forensically identical to that of BookMaster One and BookMaster Desk systems
- Proven performance in the security documents market

# What functionalities do you require?



#### **USER INTERFACE**

For safe and easy operation, the BookMaster Pro system offers a highly intuitive, touch-screen user interface. Clear, easy-to-understand menus in the user's language of choice enable the operator to control all aspects of the system, display general diagnostics and operational procedures, and provide a history log of all actions performed. For additional security, secure logon options such as fingerprint or smart card readers are available.



#### **INPUT**

For operator convenience, the system is equipped with an automated, lockable input stacker. Once opened to the data page, the operator simply places the opened books within the stacker to begin facilitating the personalisation process. The stacker can hold up to 50 books (dependent on thickness).



# **BOOK IDENTIFICATION**

Documents can be identified by reading a preprinted number or barcode directly from the document. Alternatively, e-passports can be identified by reading pre-programmed information from their integrated chips. The system then retrieves the required data from the host computer for the next step in the personalisation process.



#### CHIP ENCODING

The unit can be equipped with one or two encoding units for contactless chip encoding. The BookMaster Pro system uses a defined and documented interface, allowing customers to use the encoding software of their choice. Moreover, the chip can be tested prior to programming to ensure it works properly. Rejected booklets and/or those with malfunctioning chips are sent to the reject bin without further processing.



# LASER ENGRAVING

For passports with a polycarbonate data page, personal data can be laser engraved into the data page (page 2 of the booklet). To ensure proper placement, a camera is used to align data relative to pre-printed marks. Several laser-engraved security features are available, such as Multiple Laser Image (MLI), Stereo Laser Image (SLI) and tactile laser engraving. Additionally, laser engraving can be done on the title page (page 1) for securing the backside of the data page.





# **INKJET PRINTING**

BookMaster Pro provides high-quality, full-colour inkjet printing on both polycarbonate and paper data page surfaces.

For passports with a polycarbonate data page, inkjet printing with CMY inks is combined with a laser engraved greyscale photo resulting in a secure and durable Laser Colour Inkjet (LCI) image on the data page — displaying the holder's photograph in high-quality full colour. Immediately upon printing, the ink is cured by UV light and hardens instantly. For added durability, an optional, translucent varnish ink can be applied on top of the colour image, which is also cured with high-powered UV light.

For passports with a paper data page, the system's full-colour, industrial inkjet engine applies the photograph, personal data and MRZ data.

For both types of passports, the inkjet unit can print both the data page and the adjacent page (page 3) within the same print run. The inkjet printer can contain up to five industrial, piezoelectric Drop on Demand printheads and supports the application of CMYK visible inks and RGB UV fluorescent inks.



# **VERIFICATION**

Cameras cross-check all applied visual data and features, while a chip reader checks the electronic data to ensure that the personal information has been applied correctly. Passports that do not pass verification are automatically sent to the reject bin.



# **OUTPUT**

Finished books are conveyed to the output stacker. The stacker can accommodate approximately 30 passports (dependent on thickness) and is lockable for greater security.



