The BookMaster® One passport personalisation system

The introduction of a new passport can be an exciting, but stressful project. With IAI's passport personalisation systems, you have one less thing to worry about. IAI's versatile BookMaster® One system personalises passports reliably, automatically and at high speed.

Suits your project demands. The modular design allows you to choose the functionalities and throughput required for your specific passport project. Future upgrades can be accommodated for easily.

Special features. The BookMaster® One can apply IAI's Laser Colour Inkjet (LCI) and patented ImagePerf® and ImagePerf®/REV feature. The ImagePerf® and ImagePerf®/REV are proven high security features applied by special laser technology.

Proven machine concept. The BookMaster® One has been employed in passport projects all over the world. All functionalities are performed in one go, including an integral verification of the applied data. The finished product is a reliable, high quality passport.

Proven machine concept. Operating the BookMaster® One is simple and quick. Start-up and switch-over times are short and all areas of the system are well accessible for maintenance. The system uses few consumables an those consumables it does use are available in large containers. This keeps the price of consumables relatively low and keeps operator handling to a minimum.

Highlights

- Scalable in speed up to approximately 800 pp/h
- Fully automated one-pass personalisation
- Modular design, fully configurable
- Contactless chip personalisation
- Full colour inkjet printing and/or high quality laser engraving
- Personalised high level security features such as ImagePerf®, ImagePerf®/REV, ImagePerf®/TLI, LCI and NumberPerf®
- Verification of applied data and features
- Upgradable and easy to operate and maintain
- Proven performance

What functionalities do you require?

INPUT

The input unit can be equipped with a double input tray. This allows more books to be loaded, and supports working in batch mode with several types of booklets. Optionally, the tray(s) can be lockable.

BOOK IDENTIFICATION

Documents with preprinted information such as a number or barcode can be identified via a hand-held reader connected to the system. Alternatively, the document can be identified by reading preprogrammed information from the chip. A third option is to type in the document number using the touch screen display. The system 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 to five programming sledges, containing four programming heads each. Before programming, the chip can be checked to see if it works. Books with broken chips can be returned to the supplier unprocessed.

INKJET PRINTING

A full colour industrial inkjet engine prints the holder's photograph, also known as LCI in short for Laser Colour Inkjet, on the laser engraved photo in the data page. A camera reads the position of a pre-printed mark to align the data. The resolution of the print is adaptable to obtain more speed. After printing, UV light dries the ink instantly. Optionally ,translucent varnish ink is applied on top of the colour image to increase surface abrasion resistance, which is also completely cured with a high power UV light.

For paper passports, a full colour industrial inkjet engine applies the photograph, personal data and MRZ-data and can print both the data page and the opposite page (page 3) at the same print run. The inkjet printer is equipped with 5 industrial piezo electric printing heads (3 colour CMY and two black K).

LAMINATION

A flat bed laminator applies a laminate foil onto the personalised paper data page. The foil is processed from roll to roll.

"Our customers benefit from our years of laser-based security feature innovation experience and system design expertise."

IMAGEPERF®

The holder's photograph is perforated through the polycarbonate data page with a laser. This security feature called ImagePerf® authenticates the original photograph. ImagePerf®/VLI, ImagePerf®/TLI and ImagePerf®/REV are available as options and offer even more security. A second ImagePerf® unit can be installed for extra speed.

CLEANING

This unit cleans the card from dust and other particles in the photo area to be able to engrave a non-disturbed image.

LASER ENGRAVING

The photo and personal data is laser engraved into the data page. The engraving unit can contain 1 to 5 engraving heads, depending on the required speed and functionality. The data is aligned relative to pre-printed marks using a camera. Several laser engraving options are available, such as tactile laser engraving, Multi Laser Image (MLI) feature and Stereo Laser Image (SLI) feature. Additionally, a laser engraving unit can apply personal information on page 1 of the data page.

NUMBERPERF®

The passport number is perforated through the visa pages and back cover with a laser. This security feature called NumberPerf® prevents page swooping. The number can contain up to nine digits and can be positioned on the top or bottom of the page.

ADDITIONAL INKJET PRINTING

A separate inkjet printing unit is available for full coloured holder's photograph, UV fluorescent print and additional information on the page 3.

VERIFICATION

Cameras cross check all applied visual data and features and a chip reader checks the electronic data to determine whether the information is applied correctly. Reject passports are sent to the reject or rework bin.

LABELLING

A label containing personal text, number and barcode is applied on the back cover of the passport. This simplifies the logistic downstream process.

OUTPUT

The finished books are rotated spine up or down for easy counting and con-eyed to the output tray. The system stacks the books ten by ten. A double output tray is available for extra room or for sorting batches.

BOOKMASTER® ONE // PERSONALISATION SYSTEM

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Empowering Security Documents