

Once IAI Always IAI

IAI systems have never been replaced by competitor's systems. This is illustrated by several case studies, for instance in The Netherlands:



In 1997, IAI supplied a SheetMaster perforation system to apply the DestriPerf security feature in the Dutch passport. The Dutch passport had a paper laminated data page at the time. The SheetMaster system laser perforated a fine pattern in the paper during the production process, which was then laminated after personalisation. When the laminate was lifted, the fine pattern would tear beyond repair.

In 2000, The Dutch government changed to a new passport concept with a polycarbonate data page. IAI supplied five BookMaster systems to apply an ImagePerf and NumberPerf feature in the polycarbonate data page. IAI also supplied three CardMaster systems to apply the ImagePerf

feature in the Dutch identity card. Personalisation with laser engraving was done on Datacard systems.

In 2001, an extra CardMaster system was supplied to apply the ImagePerf feature in the residence permit card.

In 2006, four CardMaster systems were supplied to apply the ImagePerf feature in the new driver licence card. A new BookMaster system was supplied to apply NumberPerf in the Dutch passport, and the existing passport and card systems were upgraded.

In 2012, IAI supplied a new BookMaster One system for the complete personalisation of the Dutch passport.

In 2013 and 2014, the Dutch government chose a new passport concept. IAI upgraded the BookMaster One and supplied two new BookMaster One systems for the complete personalisation of the Dutch passport. IAI also supplied three CardMaster One systems for the complete personalisation of the Dutch identity card and residence permit. IAI systems have now replaced the Datacard systems.

*“IAI systems
have never
been replaced
by competitor's
systems”*



iai industrial systems

Tilt your expectations

Which IAI personalisation technologies are used in the Dutch passport?

The Dutch passport is completely personalised by IAI's BookMaster One system. This includes the following applications and technologies:



Laser engraving

The photograph and personal data is engraved on the data page. This includes a 3D photo (SLI). The year of birth is engraved in tactile.



NumberPerf

A personal number is perforated through all the visa pages and the back cover.



Stereo Laser Image (SLI)

A second photograph with 3D effect, engraved in a special lens structure.



Verification

The applied data is verified with vision technology. Cameras check whether the information is applied correctly.



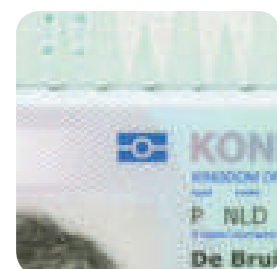
Tilted Laser Number

A number is perforated through the data page. Different numbers are visible under different angles.



Label printing

A barcode and personal data is printed on a label which is applied onto the back cover for easy identification of processed books.



Chip encoding

All personal data is encoded in the contactless chip.

What about the national ID card?

The Dutch national identity card is completely personalised by IAI's CardMaster One system. This includes the following applications and technologies:

Laser engraving

The photograph and personal data is engraved on the front and back of the card. This also includes the Stereo Laser Image (SLI). The year of birth is engraved in tactile.

Stereo Laser Image (SLI)

A second photograph with 3D effect, engraved in a special lens structure.

Chip encoding

All personal data is encoded in the contactless chip.

Tilted Laser Number

A number is perforated through the data page. Different numbers are visible under different angles.

Verification

The applied data is verified with vision technology. Cameras check whether the information is applied correctly.



Project challenges

During our long partnership with the Dutch ID documents solution provider, we have known technological collaboration.



CardMaster and BookMaster personalisation systems



When the Dutch government chose for the ImagePerf/TLI feature, IAI did not have an automated passport system available yet. Also, it was the first time that the ImagePerf feature was to be applied in a polycarbonate data page. We worked closely together with our customer (Joh. Enschede - SDU at the time) to overcome the challenges in material behaviour (warping of the polycarbonate data after laser perforation). IAI engineered its first automated passport system. As personalisation was done on Datacard systems, the IAI systems had to read the information on the data page, retrieve and perforate the corresponding data and verify whether the correct data was applied.

The collaboration in technological developments was so successful, that the customer (by now they were called Sagem Identification) asked IAI to develop a system that could apply their new 3D photograph. This was again a fruitful collaboration between customer and IAI.

The Dutch government chose a new passport concept in 2014 that includes this 3D photograph called SLI (Stereo Laser Image). New systems were needed that could apply the feature, so the customer (by now called Morpho) chose IAI systems to replace the existing Datacard systems. Today, the new passport and ID cards are completely personalised on IAI equipment.



iai industrial systems

IAI industrial systems
De Run 5406
5504 DE Veldhoven
The Netherlands

T +31 40 254 24 45
F +31 40 254 56 35
W www.iai.nl
@ info@iai.nl