PRODUCTION
Semlex offers complete solutions for governments to identify populations. We produce all types of identity and travel documents that can be requested by our clients. Our documents are in accordance with ICAO recommendations.

Our documents are produced in our printing factory specialized in the manufacture of secure documents. We offer quality products thanks to the latest fiduciary printing techniques.
PASSPORT

Semlex passport meets the recommendations of the document N°9303 from the ICAO (International Civil Aviation Organization).

BIOMETRIC E-PASSPORT

The biometric data is stored on an integrated contactless chip.

B.A.C ( « Basic Access Control »)

This mechanism ensures that the electronic content of the passport can only be read by authorized parties using a contactless chip. A PIN key is used to encrypt communications between the passport chip and the reader.

E.A.C ( « Extended Access Control »)

This mechanism ensures that the electronic content of the passport can only be read by authorized parties using a contactless chip. A PKI key is used to encrypt communications between the passport chip and the reader.

S.A.C ( « Supplemental Access Control »)

This mechanism ensures that the electronic content of the passport can only be read by authorized parties using a contactless chip. A PKI key is used to encrypt communications between the passport chip and the reader.

HOT FOIL STAMPING

This coloring process used in offset printing is used to protect security documents against color separation or copying, by subtly merging colors into each other resulting in a gradual color change.

PAPER CHARACTERISTICS

Booklet paper will offer appropriate ruggedness and absorption characteristics. Fibres with fluorescent properties (visible under UV light) are mixed into the paper pulp during the paper manufacturing process to serve as a security feature. They may be visible (colored fibres) or invisible under normal light. Presence of chemical markers reacting to solvents.

FLUORESCENT THREAD

Pages can be held together with a thread (can also consist of several individual, interlaced, threads), which fluoresces in one or several colors seen when exposed to UV light.

WATERMARK

The watermark is a picture, text or character motif, which is incorporated into the paper during manufacture by displacement of the paper fibers, leading to a varying thickness of the paper.

OPTICALLY VARIABLE INK (OVI)

Printing ink containing optically variable pigments which will show large color shifts (strong variations in color) depending on the angle of observation or lighting.

UV FLUORESCENT INK

Ink containing fluorescent substances (pigments) which is used to print text or motifs. This type of ink fluoresces under UV light.

IRIDESCENT INK

This film deposited on tiny mica flakes causes interferences with the incident light. It creates shiny, pear-like shimmering effects.

PHOTOCHROMIC INK

Photochromic inks change their color when exposed to sunlight and remain for a certain time before the color reverts to its original state.

INFRARED INK

Ink visible only under infrared light.

INTAGLIO PRINTING AND LATENT IMAGE

Printing technique whereby the image to be printed is etched or engraved in the surface of a printing plate. This technique is suitable for the effect of a latent image, which appears depending on the angle of the oblique light.

GUILLOCHE

Fine (intricate) designs consisting of interlaced continuous lines arranged in geometric patterns with the aim of raising the barrier for re-origination and reproduction.

RAINBOW COLORING

This coloring process used in offset printing is used to protect security documents against color separation or copying, by subtly merging colors into each other resulting in a gradual color change.

ANTISCAN/COPY PATTERNS

Printed security features integrated in the background printing to protect against simulation through copy techniques. The printed images and patterns contain embedded (hidden) information that is invisible to the naked eye under normal inspection conditions but becomes visible or legible, or causes flaws (mistakes) to appear after copying or reproduction with a scanner.

MICROPRINT

Lines or motifs made up of very small letters or numbers that are barely perceptible to the eye that basic methods of reproduction cannot reproduce.

SERIAL NUMBER

A unique sequential number that is printed and perforated in the passport, which allows the document to be traced if it is lost or stolen.

Holographic laminate

Holographic film that is affixed to the personal data page by means of pressure (cold-applied laminate) and/or heat (heat-applied laminate) to protect data entries against falsification. Laminates can incorporate specific security features which are not usually available on the market. They are laminated at 165°C on the page for total adhesion.

Techniques for customizing the data page:

- Color laser printing on the data page and hot laying of holographic laminate.
- Laser engraving information on the data page (polycarbonate). This latter technology allows greater accuracy but does not allow the color printing of the photo (a gray scale is used).