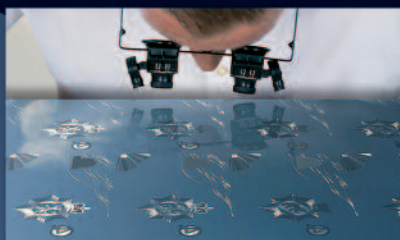


4 IDOPTIC[®]

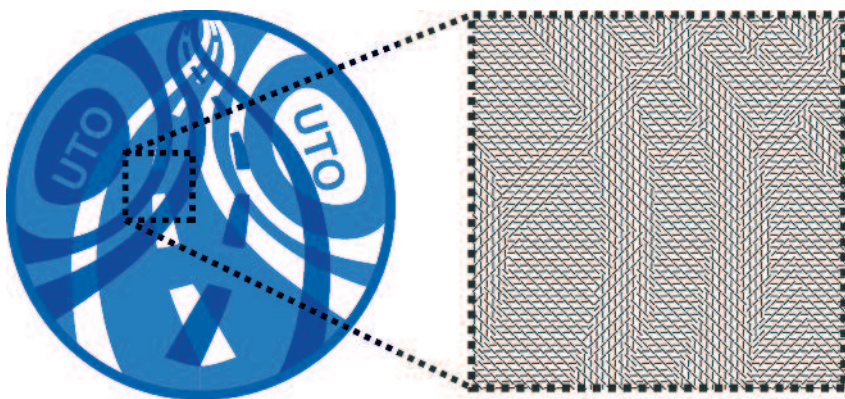
THE NEW GENERATION
OF **ACHROMATIC AND
OPTICALLY VARIABLE**
SECURITY ELEMENTS



| D | E | S | C | R | I | P | T | I | O | N |

IDOPTIC® IS AN INNOVATIVE OPTICAL ELEMENT COMBINING STATE-OF-THE-ART MICRO FABRICATION TECHNIQUES WITH 4PLATE'S UNIQUE KNOW-HOW IN PLATE ENGRAVING.

IDOPTIC® features consist of an array of micromirrors which cooperate to form the desired custom optically variable feature. These arrays, formed directly on each lamination plate, are perfectly transferred during the lamination process on plastic substrates (PC, PVC, PETF).



THOUSANDS OF MICROMIRRORS COOPERATE TO FORM AN IMAGE

The effect is permanent and designed for long-lifetime applications such as ID cards, Passport data pages, Driving Licences and other high security documents.

- **IDOPTIC®** can be of any shape.
- **IDOPTIC®** can be combined with other security feature like MLI-CLI, Micro text, Guilloches, Braille, Positive and/or Negative elements.
- Printed images under **IDOPTIC®** remain visible and can be combined in register.
- In-line with ICAO recommendations **IDOPTIC®** is a robust anti-forgery solution.
- **IDOPTIC®** is secure and straightforward to implement not needing specific foil application and therefore highly cost effective.
- **IDOPTIC®** is laser engravable and protects data from fraudulent alteration.
- **IDOPTIC®** can be engraved on our 4STEEL, EXTREMESTEEL and 4BRASS lamination plates.

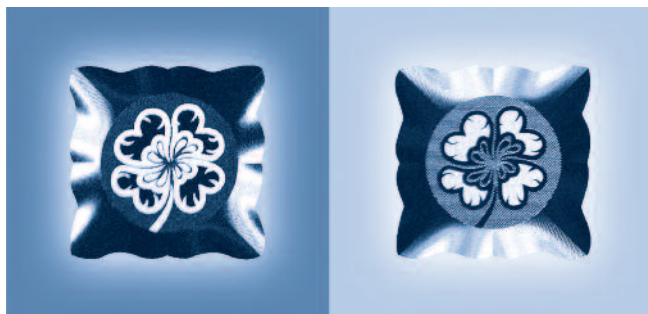
O R I G I N A T I O N

LIKE A HOLOGRAM IDOPTIC® IS MASTERED BY 4PLATE USING A PROPRIETARY AND HIGHLY SECURE ORIGATION TECHNIQUE.

THE FOLLOWING FEATURES ARE AVAILABLE AND CAN BE COMBINED AT WILL :

CONTRAST SWITCH :

Switch in reflected light contrast between image foreground and background upon tilt.



DYNAMIC :

Animated motifs which come to life upon tilt of the image.



FAUX-RELIEF :

Optical illusion of 3D height regardless of viewing angle.



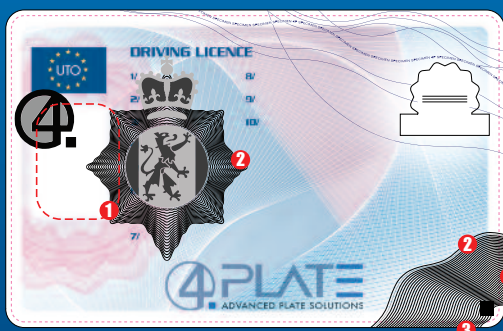
TWO-WAY IMAGE :

Clear switch from a first to a second image upon tilt.





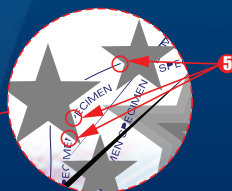
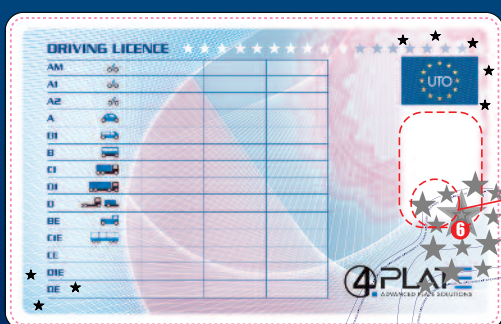
1 **IDOPTIC®** feature superposed on personalised data such as photo.



2 Seamless integration onto Card surface.

3 Feature extension to substrate edge prevents silicone casting of relief (with or without clear borders).

4 **IDOPTIC®** is an integral part of the overlay, removal and re-use is effectively impossible.



5 Tight registration of **IDOPTIC®** with other features (Guilloche, microtext, CLI) forces counterfeiter to simulate several engraving methods and depths in register.

6 **IDOPTIC®** certifies uniformity across clear windows and enhances their security.



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