



CHROMA

**TOPPAN**  
TOPPAN Security

# THE TECHNOLOGY OF THE DECADE

Near-Photographic Colour  
Personalisation Without  
Security Compromise



# THE HISTORIC CHALLENGE: SECURITY VS. QUALITY

For decades, governments have faced an impossible choice when personalising identity documents:

**Black-and-white laser** personalisation ensured robust security but produced greyscale images, which limited visual recognition of subtle facial features. It offered high security and quality-just not in colour.

**Colour laser personalisation** technologies currently available on the market provide colour portraits but fail to deliver both high security and premium quality. With colour, there is always a compromise.

Governments were forced to choose between security and quality.

**Until now.**

# INTRODUCING CHROMA: THE BREAKTHROUGH

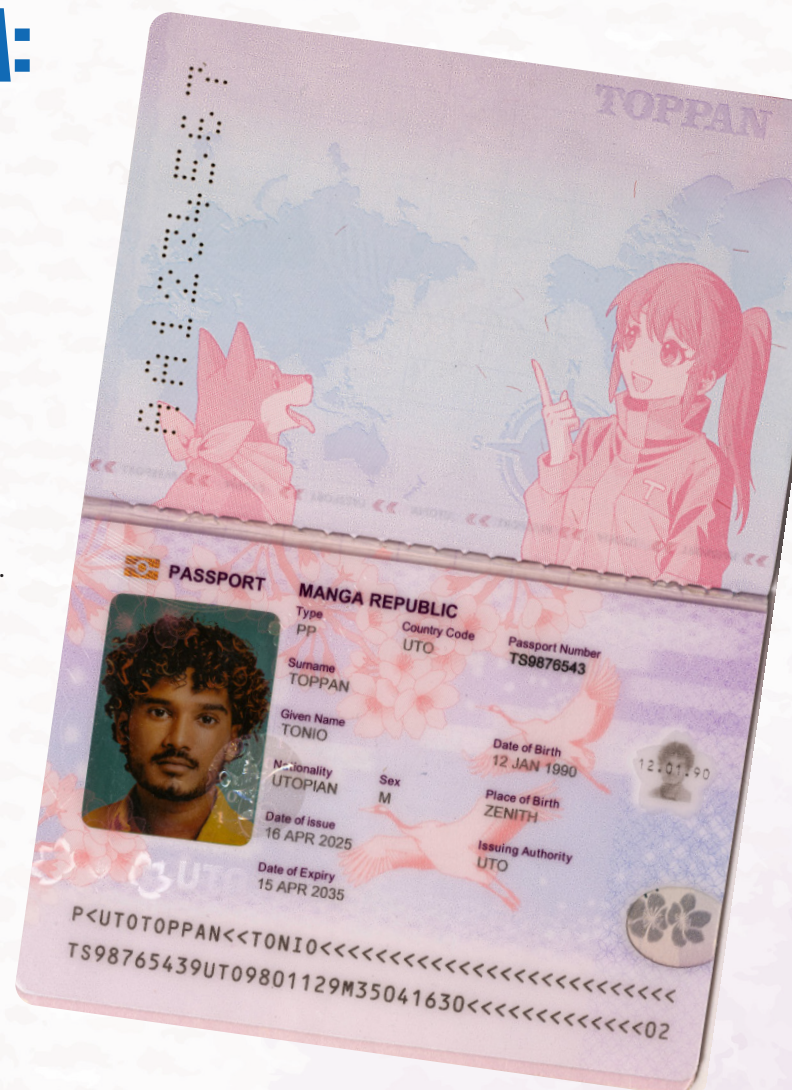
CHROMA is the **first and only** laser colour personalisation technology that delivers near-photographic image quality while maintaining the highest security standards required for polycarbonate identity documents.

**The innovation:** Cyan, magenta, and yellow photosensitive dyes combined with a single laser beam, achieving a polychromatic portrait.

**The result:** Passport and national ID polycarbonate card colour personalisation that no longer compromises.

## CHROMA TECH: Enabling Seamless Personalisation

CHROMA TECH is a qualified machine range compatible with CHROMA technology, including upgradeable existing equipment.



# WHY COLOR MATTERS: THREE DIMENSIONS OF IDENTITY

Modern identity verification relies on three interconnected methods- all inherently designed for colour:

**1. VISUAL** → Border officers view both the traveller and document in colour

**2. PERSONALISED PORTRAIT** → The photograph in the document booklet

**3. DIGITAL** → The photograph stored on the chip

Border Control officers must mentally translate between colour reality and limited personalised representation, slowing verification and increasing error potential.

**CHROMA aligns all three**

## THE SECURITY ADVANTAGE

**Near-photographic quality** previously impossible with secure laser technology

**Full security integrity** on polycarbonate substrates

**Compatible** with passports, national ID cards, and any polycarbonate identity document

**Future-proof** your identity program with cutting-edge innovation



**EXPERIENCE THE  
CHROMA DIFFERENCE**





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