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- Always Close to Our Customers
- Forming Synergies

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- Solution Process
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- ID Card with a High-Density Secure QR Code

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Protected Products & Secure Documents





SMART SOLUTIONS

Toppan Gravity is part of the Toppan Group. Toppan Gravity is the international development arm of Toppan in the Identity and Banking industries. Toppan is one of the largest and prestigious company in the industry with decades of experience and multiple references.



TOPPAN GROUP

The Japanese Printing Technology Group

1900



FOUNDED

uss 14bn



NET SALES

52,599



226



COMPANIES



LOCATIONS

EMPLOYEES uss 185_{mn}



R&D SPENDING

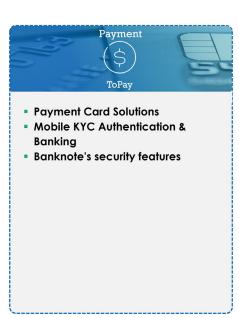




Offering Diversified Solutions

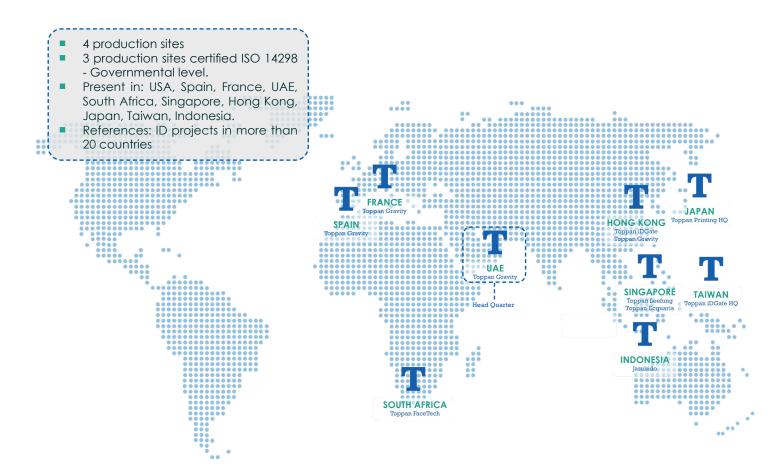
Over the years, we have continuously gained the trust of a growing number of customers in many different industries through dedication and commitment to performance excellence and unrivaled quality. Toppan Gravity promises its valuable clients to safeguard their image while providing them the best product quality and speed of service.







Always Close to Our Customers





FORMING SYNERGIES

Toppan Gravity: An investment Platform

Through strategic acquisitions and partnerships, Toppan Gravity is supporting the Toppan Group to in consolidating it's position as a global key and next generation players in the industry of Security, Identity and Payment.

Company	Logo	Year of Joining Toppan Group		Description
Jasuindo	///JASUINDO	2019	JASUINDO PASSPORT EZ	Manufacturer of ID cards, passports and security printed documents
Ecquaria	TOPPAN TOPPAN ECQUARIA	2019	TOPPAN TOPPAN ECQUARIA	The e-Government Platform specialist
Toppan IDGate	TOPPAN TOPPAN IDGATE	2020	TOPPAN TOPPAN IDGATE	Onboarding and KYC Specialist
Toppan FaceTech	TOPPAN TOPPAN FACETECH	2021	TOPPAN TOPPAN FACETECH	The African System Integrator leader in Driving License and biometric solutions
Toppan FutureCard Toppan Gravity	TOPPAN TOPPAN FUTURECARD TOPPAN TOPPAN TOPPAN GRAVITY	2019 J 2021/2022	TOPPAN TOPPAN GRAVITY	Now renamed Toppan Gravity, former Toppan FutureCard is the group's headquarter and main production site for secure credentials





DIVERSIFIED SOLUTIONS TO KEEP YOU SECURE

We at Toppan Gravity understand that every Identity Project is unique. With over 100 years of experience in identity-related security products and solutions, we will answer to any government identity need.

Our services include state-of-the-art and secure document production, personalization machines, complete identity management solutions, including enrollment and document issuance, brand protection, and border management solutions, including eGates.







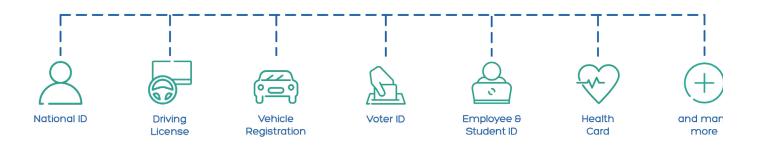
RELIABLE END-TO-END ID SOLUTIONS

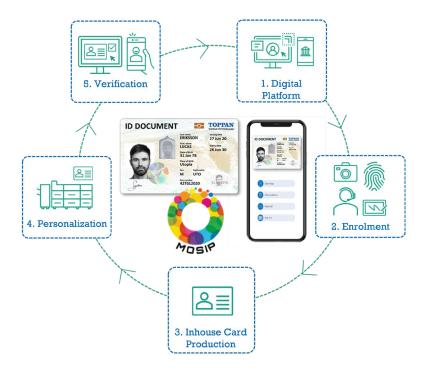
We are mastering full supply chain from consultancy, design, document and chip security to the in-house production of secure documents:

- Highly secure and durable products and solutions
- Proven track record
- Full ISO compliant
- MOSIP-compliant Ecosystem
- Complete Digital Platform



ID Card Offering





1. Digital Platform

Quick-to-deploy solution to a wide range of government functions including:

- Online Document Application
- Online Payment
- 24/7 monitoring Application Status



2. Enrolment

Full digitalization and biometrics management

 Toppan's solution has been rolled out in over 20 countries and over 70 Million persons captured / deduplicated



3. Inhouse Card Production

Large range of Level 1-2-3 security features 10 years lifespan / Pioneer in Polycarbonate Technology

- Antimicrobial
- Moire
- Eco friendly



4. Personalization

Full range of personalization system

- Toppan Personalization machine.
- High resolution Printing
- Modular Color + Laser Engraving
- Advanced security features



5. Verification

Security solutions to identity verification and authentication with the use of biometric and RFID technologies

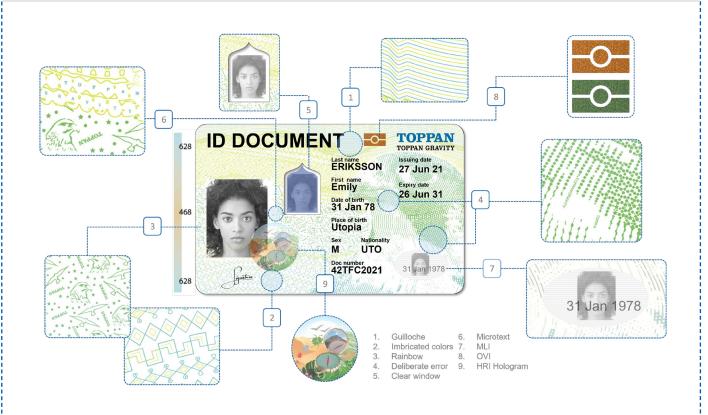


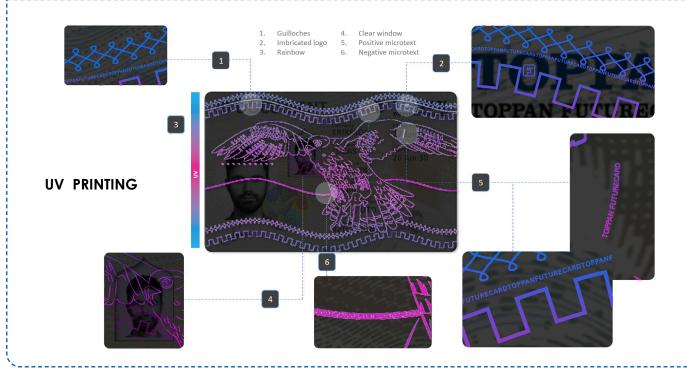


Security Features

- Reliable and forgery proof
- All common security features available
- State-of-the art and unique security features available
- Fully customizable









ID Projects References



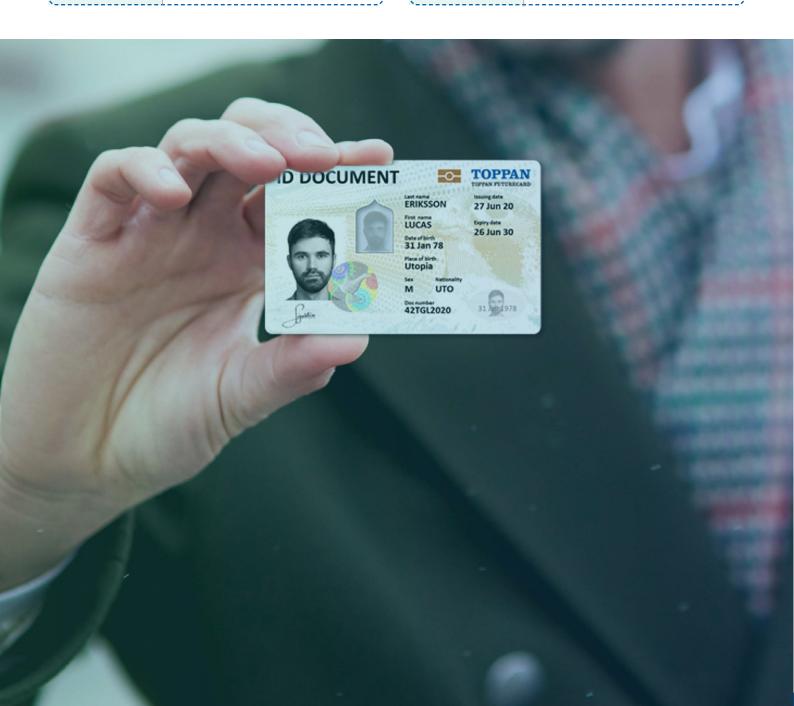
Country	Projects
Indonesia	National ID
Kazakhstan	National ID
Zimbabwe	National ID
Botswana	National ID
Kenya	National ID
Sudan	Military ID
Singapore	Digital ID (mobile app)
Japan	National ID

Country	Projects
Philippines	Government ID
Chad	Voter ID
Somalia	Teacher ID
Morocco	Military ID
Uganda	Police ID
Benin	Military ID, Social Security ID
Cameroon	Consular ID
Nigeria	Tax ID, State ID, Military ID



Country	Projects
Mali	Health ID
Pakistan	Health ID
UAE	Gov ID, State ID, Military ID
Algeria	Military ID
Sierra Leone	National ID

Country	Projects
lraq	Police ID
India	Social Security ID
Cyprus	Other ID
Palestine	Government ID
Jordan	Government ID, Health ID



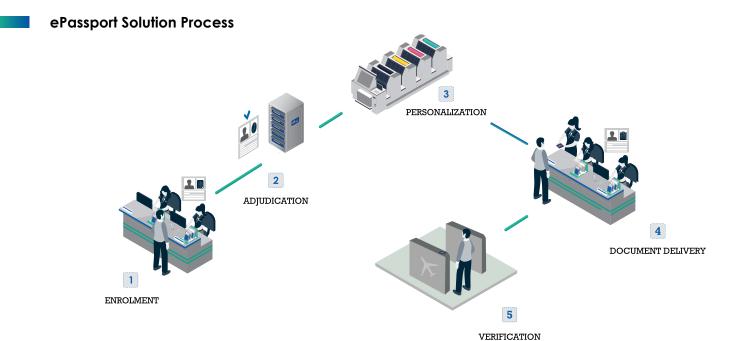


END-TO-END epassport solutions

We are Providing latest generation ePassports:

- Over 150 years of History of secure printing
- Mastering full supply chain from consultancy, design, document and chip security to the in-house production of secure documents
- Highly secure and durable products and solutions
- Proven track record
- Full ICAO compliance





TOPPAN TOPPAN GRAVITY

1. ENROLMENT:



Optimizing the flow and capacity at the enrolment site through a graphical pre-enrollment and enlisting accurate biometrics to confirm the uniqueness of the identity.

2. ADJUDICATION:



Comparing the individual's biographical details (biometric and demographic data) with the data in the system and handling suspected duplicates.

3. PERSONALIZATION:



Transfer of sensitive personal biographical data to an ID document through select technology such as laser or printing.

4. DOCUMENT DELIVERY:



Once personalized, the ID document is either mailed to the permanent address of the applicant or picked up at the municipality.

5. VERIFICATION:



Validation of document authenticity, comparison with Lost and Found or wanted person databases, and verification of document holder identity.





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Large range of Level 1-2-3 security features 10 years lifespan / Pioneer in Polycarbonate Technology

- Antimicrobial
- Moire
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4. Personalization

Full range of personalization system

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- High resolution Printing
- Modular Color + Laser Engraving
- Advanced security features



5. Verification

Security solutions to identity verification and authentication with the use of biometric and RFID technologies





ePASSPORT IN-HOUSE PRODUCTION

We cover the whole production process of passport booklets including electronic or non-electronic PC data pages, electronic covers and other secure consumables





PASSPORT BOOKLETS

- Machine-readable, electronic & biometric passports
- Flexible electronic cover
- Ultra-thin & electronic polycarbonate datapage
- Fully ICAO compliant, surpassing ISO standards
- Tailore made solutions & high secure artwork
- Level 1, 2 and 3 security features for maximum security
- Up to 10-year lifespan

PC DATA PAGE

- Paper / Polycarbonate datapage ePC datapage
- Ultra-thin thickness available for better aesthetics
- Many different Security features available:
 - ✓ Optical Variable Ink (OVI) ✓
 - √ Hologram
 - ✓ MLI / CLI
 - ✓ Personalized window(s)
 - ✓ Mat/Shiny effects
 - √ Latent image

- √ Security printing
- High flexible hinge with tactile effect
- √ Full colour UV image
- √ Embossed security feature
- √ Hinge customization





ePassport Projects References



Country	Projects
USA	ePassport
Spain	ePassport
Korea	Passport
Greece	Passport
Australia	Passport
Congo, DR	Visa
Malawi	Passport

Country	Projects
Indonesia	Passport
Armenia	Passport
Singapore	Passport, Visa
Nepal	Passport
Zimbabwe	Passport (Printer)
Lesotho	Passport (Printer)
Saudi Arabia	Passport (Printer)



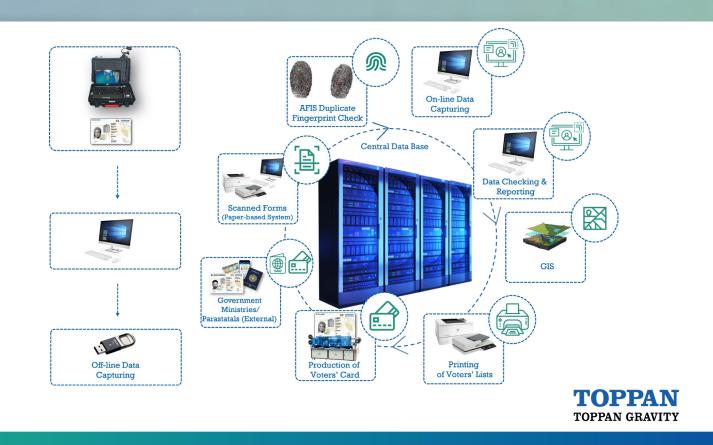


END-TO-END ELECTION SOLUTIONS

We offer complete Election Solutions, including:

- Pre electoral: Signature Verification / Voter & candidates Registration / Poll
- Watcher & polling Statrion Workers Management / Voter info App
- Electoral Day: Biomertric verification/ Electoral Kit / E Voting Machine / Precint Management / Panels
- Post Electoral: Quick Counting / Official Count / Voter Form Digitalization





Elections Projects References



Country	Projects
Namibia	Voters' Registration and AFIS
Lesotho	Electoral Registration System and AFIS
Swaziland	Electoral Management System and AFIS Pensioners Registration
Sierra Leone	Voters' Registration System
Kenya	Voter Verification Devices; Public Workers Registration
Mozambique	System; Voters Registration and AFIS







END-TO-END TRANSPORT INFORMATION SOLUTIONS

We provide full range of Transport Information Solutions from voter registration and verification, through to quick count and canvassing, and electoral materials provision.

- Registration, identification and licensing of drivers
- Seamless and secure driving licence applications
- End-to-end driving licence card production
- Facilitated motor vehicle registration and licensing solutions
- Full cross-border vehicle registration solutions
- Proven track record



Key Functionality



Import / Export



Accident Report



Number Plate



Road Worthiness



Special **Permits**



Suspend / Úplift



Manufacturers Management



Vehicle **Attributes**



Registration / De-registration



Ownership Change

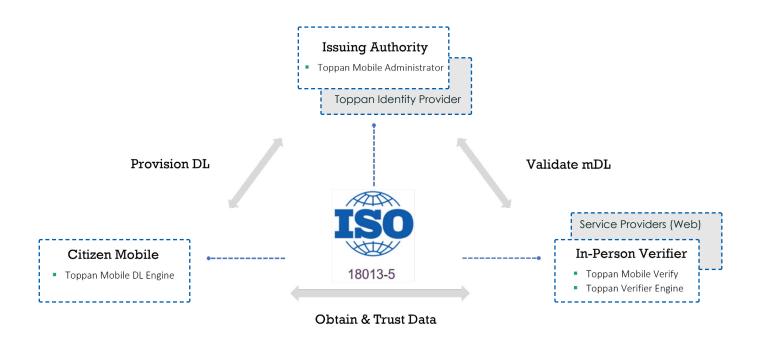
KEY BENEFITS

The information system for the registration and licensing of motor vehicles:

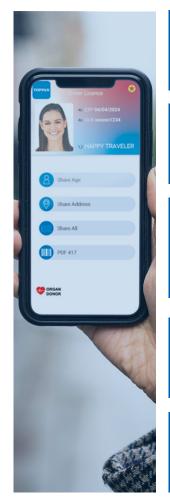
- Ensures proper records of driver license are maintained
- Offers better licensing services delivery
- Provides a processing platform all actors necessary (importers, manufacturers, banks, insurance companies)



Full Ecosystem Solution Provider



Mobile Driving License





- Works across the widest array of consumer devices and transportsConsumers use any existing mobile phone
- Consorriors osciarry existing
- NFC on iOS and Android
- Verifiers can read any mDL



- Does not rely on visual display of the DLs and holds data in secure areas
- Cannot be spoofed or impersonated or tampered
- Cryptographic proof of ID



- Full ISO 18013-5 compliant; follows all National and International Standards
- Consumers can use their mobile DL everywhere
- International interoperability
- Solution rolled out in the US and tested in Europe



- In-Person or Accurate Remote Provisioning
- An Official copy of your DL without a trip to the issuer's Office



- Engineered for privacy and security of citizen data
- Complete control over your ld document and attributes



Transport Information Project References



Country	Projects
Malawi	Driver Licenses, Motor Vehicle Registration System
Mozambique	Driver Licenses, Motor Vehicle Registration System
Mongolia	Driver Licenses
Senegal	Transport Information System
Sri Lanka	Driver Licenses (ISO9001:2008 Certified). "Toppan MVR" a Toppan Motor Vehicle Registration
Greece	Driver Licenses
Uganda	Driver Licenses and AFIS, and AFIS, MOPS, PSV, ALS, MOW Archiving

Country	Projects
Zambia	Driver Licenses, Motor Vehicle Registration System
Kazakhstan	Driver Licenses & Vehicle Registration
Kyrgyzstan	Driver Licenses
Niger	Vehicle Registration ID
South Africa	Driver Licenses







CUTTING-EDGE DIGITAL GOVERNMENT SYSTEMS

Toppan Gravity's Government Platform is a purpose-built platform for governments to design, build and manage citizen-centric digital services to co-create with citizens.

- Digital platform that incorporates Government Best Practices with Ready Building Blocks to deliver better world
- Government to Business (G2B) and Government to Citizen (G2C)
 Digital Services
- Public services available online, 24/7, to all citizens





Unlocking API Economy



Independent Scaling & Updating of Services



Ensuring System Resiliency



Facilitating Frictionless Release



Hosting Environment Agnostic



Monitoring & Managing Individual Services





DIGITAL COVID CERTIFICATE (DCC) SOLUTION

The current health crisis has shown that outdated, unsecure vaccine management systems and affiliated documents such as the "Yellow Card" needs to be improved and modernized. Across the globe, severa health passport & certificate initiatives from isolated Governments private sectors or organizations have been proposed.

Toppan Gravity's Digital COVID Certificate (DCC) Solution aims at restoring freedom of travel since it allows the lifting of restrictions as entry bans, quarantine obligations, and PCR / RDT testing. People al around the world can easily enter and travel within Europe by simply getting a QR code scanned.



KEY BENEFITS

- Solution already implemented and running in the EU
- ✓ Toppan Gravity will support any government to comply with the EU standards, so that your country becomes an official 'third party' member. This means that the Covid Certificate issued by your country will be treated as equivalent the EU DCC
- Modular approach, re-use and optimization of existing infrastructure (if possible).
- End-to-end solution, including the trust framework, QR code preparation and issuance, upgrade of existing certificate solution to the EU Standards
- Mobile and physical credential support

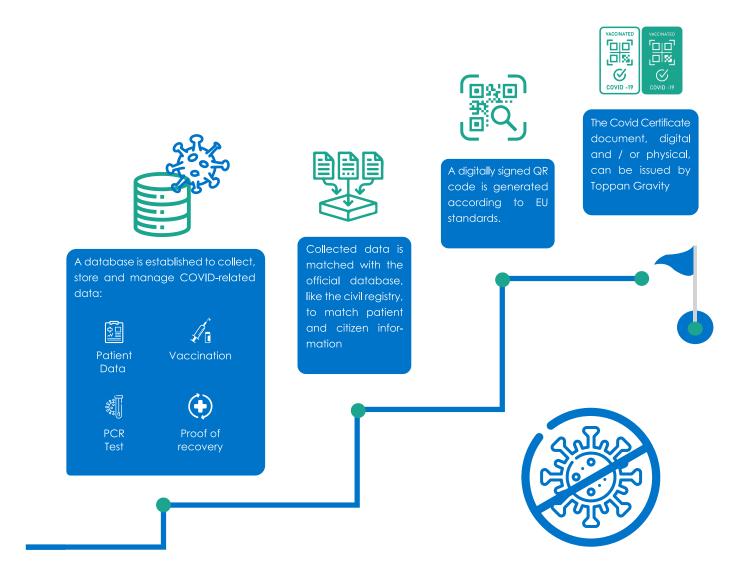


The information contained in the QR code of the EU interoperable COVID-19 health certificates is digitally signed, proving its authenticity, and can be verified via the EU Gateway. Its underlying trust framework is an ICAO compliant Public Key Infrastructure (PKI), the core element to digital signature today. Such Infrastructure is already current, like the one applied to travel documents (eIDs and ePassports).

- √ The set-up of your Trust Framework, according to EU regulations, best practices and security requirements
- √ The Third Country EU Digital COVID certificate Equivalence Decision procedure and the connection to a global or local public key directory (EU-gateway)
- ✓ Installation and management of a Document Signer to sign the COVID certificate
- ✓ QR code preparation and COVID Certificate issuance via API
- ✓ Certificate revocation services



Solution Process



BIOMETRIC CARD WITHOUT A CHIP

Shortages in sourcing semiconductor products is affecting the secure credentials sector as well. Many new projects are delayed or cancelled as raw materials, especially the secure IC cannot be sourced, or at a much higher price.

Use Cases:

- Access Control
- Identify Driver
- Certificate Authentication
- Exam Access
- Property deeds
- Secure IBAN



ID CARD WITH A HIGH-DENSITY SECURE QR CODE

Toppan Biometric ID card carries a high-density secure barcode that entails the biometric data of the document holder (portrait and / or Fingerprints).

Our solution supports the most widespread high density QR code formats: Datamatrix, 2D Doc, following ISO / IEC standards for a complete transparency of the solution.

KEY BENEFITS

- ✓ Cost efficient solution
- √ Fast implementation
- ✓ Free of charge verification App
- √ iOS and Android
- √ Security by design







PROTECTED PRODUCTS & SECURE DOCUMENTS

With the ever-growing frauds, it is a prerogative of any government agencies to secure the revenues derived from customs and excise duties as well as preventing breeder documents from counterfeiting



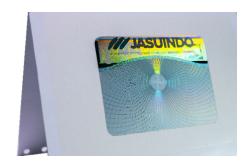


TAX STAMPS

- To fight against illicit trade, we are committed to provide tax stamp management solutions to shield and support tax revenues
- Secure (banknote security level) and cost-effective solution for product tracing and authentication
- Liquor or cigarette stamps using security paper and release paper with digital numbering or QR code
- Available security features:
- √ Hidden image
- ✓ Dye cutting
- ✓ Invisible Bi-Fluorescent ink
- ✓ Infra-red taggant ink
- ✓ Serial number
- ✓ Microtext
- √ Hologram







LABELS

- Fully customized design
- Finished product in the form of tamper evident sticker, scratch off label and adhesive label used in asset management, inventory control, track and trace solutions and for brand protection
- Variety of materials from paper to synthetics, to match the required resistance and durability needs

HOLOGRAMS

- The standard for brand protection and product authentication
- Delivered in the form of foils or stickers
- Security features, such as:
 - ✓ Laser image
 ✓ Nano text
 ✓ 3D picture
 ✓ Switch image
 ✓ Microtext
 ✓ Lens effect
 ✓ 3D depth
 ✓ Laser numb
 - ✓ Switch image✓ Laser numbering✓ Zero transparency✓ Emboss effect





CERTIFICATES & DIPLOMA Up and Design of African Minister

- We offer high security printing to secure all breeder documents:
 - Civil: Birth, death, marriage, or registered partnership certificate
 - ✓ Business: legal status of a company
 - √ Education: Degree, certificate
 - √ Other areas: real estate, residence, and absence of criminal record
- Security features:
 - √ Laser image
 - ✓ Nano text
 - √ 3D picture
 - √ Watermark
 - ✓ Switch image
 - ✓ Zero transparency







