

EXCISE TAX RECOVERY DIGITAL TOBACCO TAX STAMP SOLUTION



Someone out there is stealing your tax revenues—together we can stop them.



Billions in Tax Revenues Are Lost Each Year to Tobacco Tax Evasion

Tobacco tax evasion is a problem that costs federal and state governments billions of dollars per year. For example, the state of Washington loses an estimated \$200 million per year due to tobacco tax fraud¹. Governments lose money in two ways, the first occurs when cigarettes are smuggled from lower tax to higher tax states. The second is from cigarettes stamped with counterfeit tax stamps.

When tax revenues are stolen, they don't go to their intended sources of funding tax relief programs, healthcare and infrastructure. In some cases, these stolen revenues have been shown to fund criminal and terrorist activities. As a result, governments lose millions of dollars in tax revenue and the security of their citizens is threatened.

The Current Approach

Like currency, traditional tax stamps carry inherent value and need to be treated as such. This creates challenges in securing the manufacturing, distribution, and application of the stamps. Tracking of cigarette packs throughout their distribution would enable tax authorities to ensure proper tax collection, but currently taxes on cigarettes are collected via a stamp system that has very limited track and trace capabilities.

In order to manage tobacco tax revenue collection efficiently and securely, it is necessary to significantly improve tax stamp security features and transition stamp distribution from a centralized print and distribute model to a secure print-on-demand model.

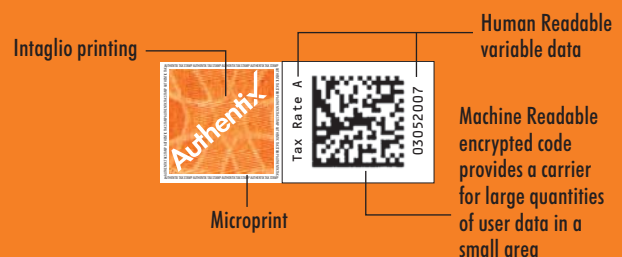
The Digital Solution

Authentix has partnered with RED Stamp, Inc. and Assure Digitax to offer the next generation solution for tobacco tax revenue management and recovery. This unique system enables tax collection authorities to collect tax revenues effectively and track the status of legally issued stamps electronically.

This solution brings tax stamps into the digital era by eliminating the need for expensive and vulnerable inventories of printed stamps while providing real-time auditing and immediate cash retrieval. The Authentix Digital Tax Stamp Solution significantly improves security and operational efficiency of tax stamp production, distribution and monitoring.

With the Authentix solution, cigarette distributors and licensees can print, authenticate, and report tax stamp consumption electronically. Additionally, law enforcement authorities can authenticate the digital stamps and verify the embedded information on the stamps in the field via simple-to-use and secure handheld instruments.

This high-tech system combines the latest in nano-scale security technologies, sophisticated encryption technologies and secure e-commerce services. This solution provides the ability to track each cigarette pack throughout the distribution chain from point-of-origin to the point-of-sale.



Example Stamp shown above

¹ Source: Yakima Herald Republic, February 27, 2007

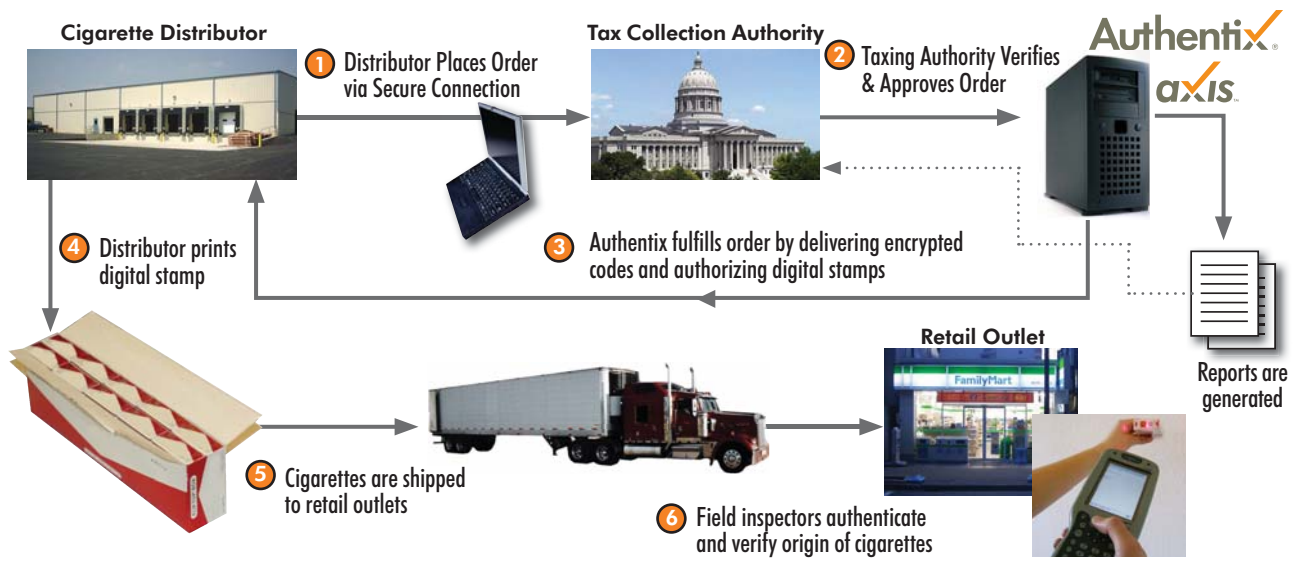
Authentix Digital Tax Stamp Solution

With the Authentix Digital Tax Stamp Solution, cigarette distributors and licensees will order tax stamps through a secure online connection 24 hours a day, 7 days a week. The tax revenue collection authority will verify the source, electronically verify requirements to support the request, and approve the purchase by authorizing Authentix to issue and deliver the requested number of digital stamps in the appropriate tax rate and denomination.

The encrypted codes are delivered to the stamping agent in a secure electronic “envelope”, the contents of which can only be retrieved with a private decryption key, sent in a separate electronic message. The digital IDs are transferred to secure servers integrated with stamp

application equipment and are printed on-site on label substrates with their own security and tamper evident features. The blank labels are provided by Authentix and cannot be counterfeited without detection. Each digital stamp is authenticated and its digital signature is verified after it has been applied to the product.

The equipment that prints, applies and verifies the stamps operates at speeds exceeding 100 cartons or 1000 packs per minute. The entire process of ordering, receiving and applying digital stamps can be completed within hours. Distribution of digital stamps is controlled and verifiable by authorized personnel—the completed stamps are not at material risk of theft prior to being applied to the product.



Key Advantages

Benefits of the Authentix Digital Tax Stamp Solution include:

- **Multiple Layers of Security.** Each stamp includes multiple layers of overt, covert and forensic security features.
- **Individual Portable Databases.** Each stamp has a unique code that carries a significant amount of data.
- **Digital Stamps do not fully “exist” until applied.** Until the encrypted code is applied via digital printer by the stamp applicator at the wholesaler’s site, the stamps are not valid or usable.
- **Digital Validation.** Each stamp is validated in-line post application.
- **Remote Monitoring.** The equipment applying the stamp can be monitored remotely by the authorities.
- **Field Verification.** The stamps are field-verifiable without the need for connectivity to a central database. Tracking and sourcing information is available on each stamp.
- **Increased Throughput.** New stamp applicators enable stamping of 100 cartons of cigarettes per minute, as opposed to traditional systems which run 70 cartons per minute. The result is a 40% improvement in operational efficiency.
- **Near Real Time Reports.** This solution offers the ability to generate up-to-date reports, rather than waiting for monthly reports to be filed.
- **Improved Audits.** Due to 24/7 availability and access to data, auditing capabilities and accuracy are improved.

Industry Leaders

The Authentix Digital Tax Stamp Solution for Tobacco Tax Revenue Recovery is based on a partnership between leading industry solution providers Authentix, RED Stamp, Inc., and Assure DigiTax



Assure DigiTax®

Authentix is the global leader in authentication and tracking solutions for excise tax recovery and brand protection. As the inventor and developer of many of the leading nano-scale authentication solutions in use today, we have a world-class technology portfolio. Moreover, our skills in applying those technologies to solve counterfeit, adulteration and smuggling issues for clients, ensures that we are a trusted partner of many of the world's leading brand owners and governments. In the last four years we have recovered over \$4 billion in lost revenues in the petroleum, pharmaceutical and consumer goods industries alone. In addition, our expertise in the fields of valued documents, currency and homeland security applications helps protect the very fabric of our society.

RED Stamp, Inc. was formed in 1998 and since inception has rapidly gained market share in the tax stamping equipment business in the U.S. The RED Stamp Digital tax applicator machine can encode, apply, print and scan digital tax stamps at 100 cartons per minute. The equipment is computer controlled state-of-the-art technology, and far superior to existing equipment in the market. The customer benefits include less down time, faster stamping ability and less damaged product.

Assure DigiTax, Inc. is a leader in the development and application of encrypted indicia technology. The Assure DigiTax® tobacco tax stamp indicia, called S/Mark® codes, is a patented serialization system that carries encrypted information about the product. Applied in 2D barcode format to a cigarette pack, an S/Mark® code gives the pack a unique identity and serves as a secure portable "database" of information.

Contact Authentix

If you would like further information on Authentix or wish to discuss a commercial application in confidence, please call us toll free at +1 (866) 434 1402 or contact us via our website at www.authentix.com

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