

**MACTWIN**  
SECURITY



MactwinBox 5





## MactwinBox<sup>®</sup> 5

The innovation that got us started in Cash Security has proven to stand the test of time. Although technology has advanced in the last 40 years, the concept and primary functionality for the MactwinBox remains the same as it ever was: where there's no reward, there will be no crime. Upon activation in case of a robbery, all banknotes inside the MactwinBox are instantly and irreversibly degraded. The CIT custodian will be unable to influence this process and will therefore not be subject to threats of violence. A screaming siren emitted by an activated MactwinBox will frustrate the criminal and cause him to flee the crime scene, typically leaving the active MactwinBox behind.

In the hypothetical case that a criminal does take the MactwinBox with him, he will quickly find out that there is no valid cash left inside and the physically degraded cash is beyond any form of repair. This leaves him emptyhanded and sends a strong message to other potential offenders: there is nothing to be gained by robbing a CIT custodian. This message has proven to lead to a dramatic decrease of attacks on CIT pavement operations in territories that have implemented MactwinBox into their process.



# Keep your custodians safe and happy

**The threat of a robbery can be successfully counteracted by fighting off criminals with similar means that are adopted by criminals. A gunfight, however, can also lead to life-threatening situations for the parties involved, not to mention the danger it poses to innocent bystanders. Moreover, the use of firearms has the potential risk of creating an arms race between CIT custodians and criminals. At Mactwin, we think CIT custodians shouldn't have to protect the cash themselves in the event of an attack. Instead, the protection can be managed by technology that makes the attack completely fruitless, thus reducing the risk of bodily harm to custodians. Such protection must be triggered intelligently and not directly by the custodian in order to avert possible aggression towards the custodian. Meet the MactwinBox.**

## Easy Key Management

In order to minimize pavement risk in multi-run (a.k.a. multidrop) CIT operations, you had two options: 1) work with customer keys, or 2) first bring the key to the customer location, return to the vehicle and make the same trip with the cashbox. Both options were time consuming and cumbersome. But now, Mactwin brings you KeyTerminal.

Instead of providing the customer with a secure key - that can be lost, misplaced or stolen - a (secure) customer location is equipped with a KeyTerminal unit. The custodian brings the MactwinBox to the customer location and presents his iButton (secure electronic key) to the KeyTerminal. KeyTerminal starts an authentication protocol and provides the iButton with clearance to open the MactwinBox.

Without this clearance, the iButton is useless. The MactwinBox can now be opened with said iButton (just once) and the value can be stored inside. Once the MactwinBox is closed, the procedure can only be repeated after a certain (programmable)time window. The security principle of 'an extra pair of eyes' is still applicable but replaced by technology.

## Theft and vandalism proof

Once in place, KeyTerminal cannot be removed without the system resetting itself. In case of theft or vandalism, KeyTerminal is rendered useless, until it is reactivated by authorized personnel.

## Easy installation and maintenance

Installing KeyTerminal couldn't be easier. Simply stick and/ or screw the KeyTerminal to a suitable surface, activate it by presenting a master key and you are ready to go. KeyTerminal is battery powered, so no wiring is required. Battery lifetime is approximately 2 years and when its power is running low, a warning will be issued to the custodian to replace the battery soon. And that's it! No further maintenance is required.

## Happier custodians

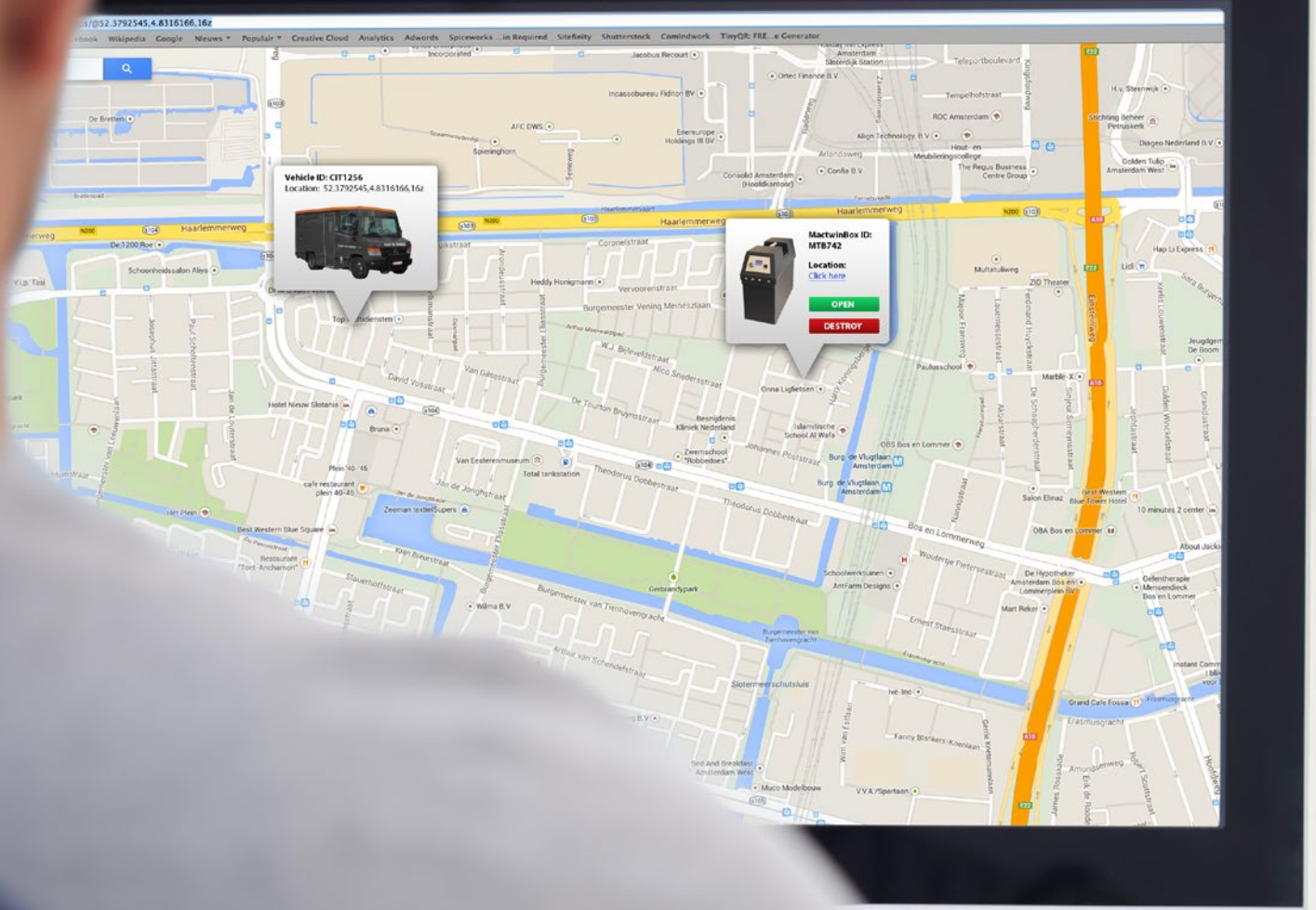
Our constant focus on results and improvement has led to some significant operational benefits. MactwinBox 5 is an astounding 25% lighter than its predecessors. Not only did we refrain from compromises in relation to weight versus durability; MactwinBox 5 is the most durable, sturdy cashbox to date. And that's saying something, coming from the creators of the world's most durable cashbox of the last 40 years.

Even under dire circumstances, products like the MactwinBox have proven to be a reliable companion for CIT officers, time and again. Lifetime expectancy often even exceeds our own predictions. MactwinBoxes with over 10 years on the job are no exception.

Another example is the extremely low False Activation Rate. A false activation is a great disturbance of your operational process and usually costs the organization a lot of time and money. All our solutions have proven to have the lowest number of false activations in the business. This reliability greatly contributes to the user experience, leading to confident and satisfied users.

To further enhance the user experience of the custodians, MactwinBox 5 is equipped with a lightning fast new engine. This will make the use of the MactwinBox faster than ever before. On top of that, a new roaming network SIM will ensure optimal connectivity wherever you go.





## Next level Track & Trace

*As GPS satellite technology evolves, so does the onboard Track & Trace functionality inside the MactwinBox 5. Operating with GPS, Galileo and GLONASS satellites, you will be able to track and trace your MactwinBox 5 with increased accuracy. Now you can monitor and command your fleet of MactwinBoxes with pinpoint precision.*



## Irreversible cash defacement

**The best way to decrease the number of attacks on CIT operations, is by decreasing its attractiveness for the criminal. How? By rendering the potential reward worthless in case of an attack. However, defacing the cash is only useful if the result is irreversible. After all, what good is simply staining the banknotes, when they are quite easily washable or even exchangeable at automated payment centers?**

In order to make a defacement process irreversible, you must alter the physical properties of a banknote. Merely adding color just doesn't cut it. So we need to go beyond the cosmetics and change the size and weight of the banknotes. This is exactly what our High Energy defacement method does. It bypasses the sealbags and, next to visibly marking the banknotes, it alters the size and weight of each banknote, making it impossible to exchange them at a payment terminal. Still, the security properties of the banknote remain intact, allowing for easy identification by your national bank. The owners of the cash can therefore be reimbursed for their losses.

Naturally, the High Energy defacement process is executed in a contained, internal environment: the MactwinBox. This means that in case of an activation, High Energy defacement is harmless to your custodial staff and their surroundings.

When developing a product, we always have the best interest of our environment at heart. All our solutions' components are produced with durability in mind, resulting in low TCO's and longer lifetimes for the product, the people and the planet.



Another prerequisite for effective cash defacement, is that the process must be unstoppable, once activated. We need to make sure the custodians are unable to influence the cash defacement process, so they will not be exposed to violence that is intended to force them into stopping the defacement. After all, it is out of their control.

The High Energy defacement method has been thoroughly tested on all kinds of banknotes, including the new polymer reinforced generation.

In case of an activation, a siren will be audible. Optionally, the High Energy defacement module can be fitted with a crime scene marker. Together with the siren, this will frustrate the criminal by attracting unwanted attention to the crime scene. Frustration is the main reason why a MactwinBox is practically always left behind at the crime scene.

The crime scene marker will also add an orange coloring to the cash, which is still mandatory in some countries.

Don't adjust your process to your hardware.

## **Adjust your hardware to your process!**

**We are looking for a timer-based solution**

Corporate branding is very important to us. We need the cashbox in our brand color.

We need the cashbox to function as a crime scene marker that attracts attention to the robbery.

**My cashbox needs to be opened and activated remotely from inside the armoured vehicle.**

**I want the cashbox to be left behind at the crime scene.**

Our operation with non-armoured vehicles needs increased performance at lower cost, without sacrificing security.

We want one system that can be used for cash delivery, cash pickups, multiple collections and ATM servicing.

It's very important we can monitor the status and location of each cashbox.

**I'm looking for a solution for my one-man CIT crew.**





# YES WE CAN

We need to be able  
to vary the carrier  
size and type.

We want to be able to  
remotely open the cashbox,  
regardless of the  
circumstances.

Can we manage  
customer keys  
easily?

Can we activate a  
MactwinBox from our  
remote control room?

## Improve your operation

MactwinBox 5 now has one multifunctional cover, that fits five different types of carrier. This will enhance your operational flexibility, because you can use the same cover - in combination with one of the carriers - for deliveries, pick-ups, multi-run, and cassette swap (MEI and ATM cassettes) operations. You won't need to have boxes from different vendors in your vehicle, because MactwinBox can do it all. Save money and reduce user errors that occur from working with different systems at once.

MEI and ATM cash cassettes work seamlessly together with MactwinBox. In case of an activation, the cover sends an immediate and uninterruptable signal to any compatible cash degradation system inside the cassette.





## Powered by Mactwin

**The MactwinBox was designed by Mactwin Security. Mactwin designs and delivers security solutions for banks and cash in transit companies. More than anyone else, Mactwin is familiar with the branches' criminal risks and international criminal scenarios, as well as with their specific business processes and relevant external factors. Thanks to this knowledge and their experience, Mactwin's R&D Department develops effective products that are adapted to and anticipate today's and tomorrow's criminal modi operandi.**

Our products make it less attractive and more difficult for criminals to commit crimes, and in the event a crime occurs, the expected pay-off for the criminal will be diminished to a minimum.

Depending on your specific situation and security needs, we offer bespoke solutions that can be perfectly integrated with your current security systems and operational infrastructure. We can implement this integration for you and pride ourselves on going to great lengths to ensure outstanding performance of our products once they are in operation.

Apart from offering cutting edge security solutions, our solutions are characterised by the fact that they all have been built to last. By focusing on durability, we distinguish ourselves from the competition by keeping service and maintenance costs low and operational downtime to a minimum. Add to this the extra long lifetime expectancy and an extremely low number of malfunctions and you'll know you are getting the best deal possible.

Due to our in-depth knowledge of the CIT process and use of the most durable materials and time-tested technology, we are able to offer solutions with a maximum of lifetime and a minimum of system malfunctions. What all of this means to our customers? Prevention of a lot of hassle and a low total cost of ownership. That's a promise.

Mactwin Security was established in 1973 and has continuously developed itself to meet the demand of clients and the market. Over the years, we have gathered a great deal of knowledge of business processes, modus operandi and available solutions. Valuable knowledge that we utilise every day to successfully realize many projects across the world.



MactwinBox: minimizing pavement risk, since 1978



# The Cash Security Innovators

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