ABLOY® PROTEC

CLIQ™

INDUSTRY

DEFENCE

CORPORATE

ASSA ABLOY

Choosing a sophisticated locking system:
Where security is an issue, compromise is simply not an option

In a world increasingly challenged by mounting security threats, the need for comprehensive locking systems has become an essential requirement in virtually every conceivable market sector. From government and law enforcement agencies to public institutions, industrial enterprises, defence and critical national and international infrastructure , there is a growing demand for superior locking solutions that address a wide gamut of complex and sensitive issues.

When it comes to locking systems, flexibility is key; for most organizations with complex infrastructures, security is as much of an issue of who to let in as it is of whom to keep out. To that end, security-minded enterprises require a comprehensive and highly sophisticated solution that enables permission-based access to different locks at designated times throughout their facilities.

According to this model, personnel with varying degrees of security clearance are issued keys that permit them to gain entry into specific areas of a building, campus or office space during clearly defined windows of time. Organizations and institutions that rely upon the preservation of mission-critical data or the protection of other assets and property on their premises can thus be assured that access is both granted and denied according to predefined parameters on a 24/7 basis. This concept can be as complex as providing several foremen working in an industrial facility with keys to the supply warehouse that work only during the hours of their shift – or as straightforward as making sure that personnel can only gain access when management are present on site.

The Challenge:
Locking on to the ultimate high security system

Creating an intricate locking system with permission-based access is a formidable task. The system needs to be as uncomplicated to maintain, as it is difficult to breach. There needs to be a framework in place for granting and denying access, replacing lost keys, preventing their duplication and enabling the updating of the entire locking network according to plan.

Standard cylinders – no matter how robust – are obviously inapplicable for such complex environments, since by nature they cannot be programmed to allow or deny entry based on time-specific considerations. Moreover, once a key is lost the cylinder must be changed or re-keyed. On the other end of the spectrum, electronic locking systems may meet the requirements of the time/permission challenge, but their difficult wiring and installation in standard international profiles can be a nightmare for locksmiths. In addition, they are typically extremely expensive and therefore not always a cost effective option. Finally, should the electronic mechanism be compromised, there is no mechanical mechanism in place to back it up.
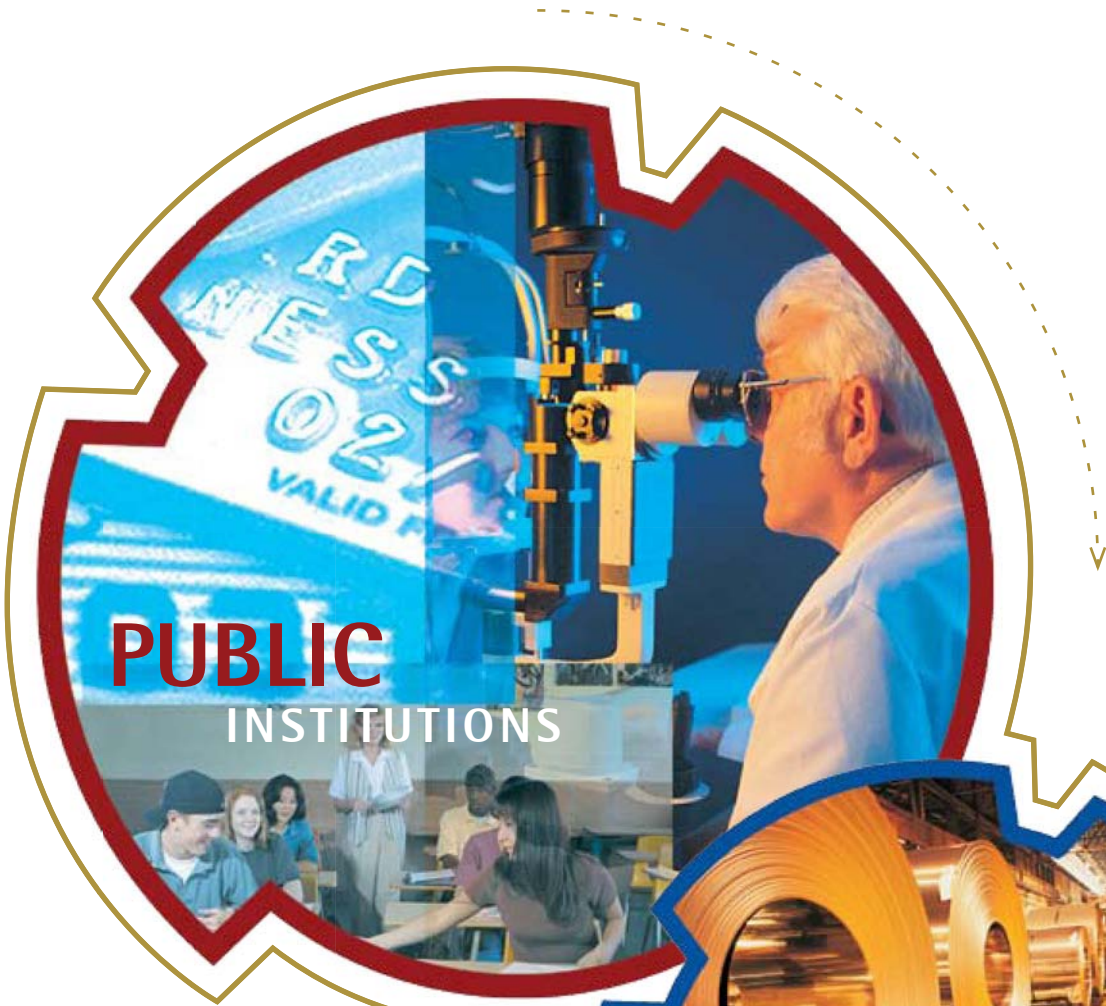
flexibility is key   highly sophisticated solution   ultimate high security solution

PUBLIC
INSTITUTIONS

INDUSTRIAL
ENTERPRISES

CRITICAL
INFRASTRUCTURE

compromise is simply not an option

ABLOY® PROTEC CLIQ™

Opening the door on new concepts in locking

ABLOY®PROTEC CLIQ *intelligent cylinder system presents a hybrid electromechanical locking solution, which offers the ultimate synergy between the tried-and-true reliability of superior mechanical keys and cylinders and the programming sophistication and flexibility inherent in electronic locks.*

### PROTEC: Mechanical locking reliability

It begins with the field proven mechanical ABLOY® PROTEC locking system that provides extreme levels of security. The unique construction of the ABLOY®PROTEC rotating disc cylinder makes it virtually pickproof. Keys and disc use a principle where cuts are made in two different radii. In addition, a unique disc blocking system with *two* return bars insures against manipulation. The special construction of the mechanical ABLOY®PROTEC key makes it virtually impossible to duplicate, a dedicated ABLOY® key cutting machine is also required to cut any additional keys.

The ABLOY®PROTEC cylinder not only meets but exceeds international standards for high security, including an un-conditional SCEC endorsement for secure area government applications.

CLIQ: Electronic innovation

In addition to this state-of-the-art, patent-pending mechanical locking system, ABLOY® has integrated ASSA ABLOY's innovative and proprietary CLIQ technology, based on highly miniaturized data encryption electronics that can be embedded directly inside the key and core of a cylinder, which make for an electromechanical system that is intelligent, flexible and highly customizable.

• *The* ABLOY®PROTEC CLIQ key contains a unique electronic I.D. code, designated for one individual only, that cannot be duplicated, altered or corrupted. A replaceable, long-life battery is also inserted into the key and serves as the sole power source for the entire key and cylinder system.

• The *electronic mechanism embedded in the cylinder*, is a self contained unit. This translates into *no wiring whatsoever.* Consequently, the highly intelligent cylinder installs with ease like any normal cylinder, making it a pleasure for locksmiths accustomed to dealing with standard international profiles and customers who want to benefit from sophisticated locking systems – without reconstructing doors and wiring entire buildings.

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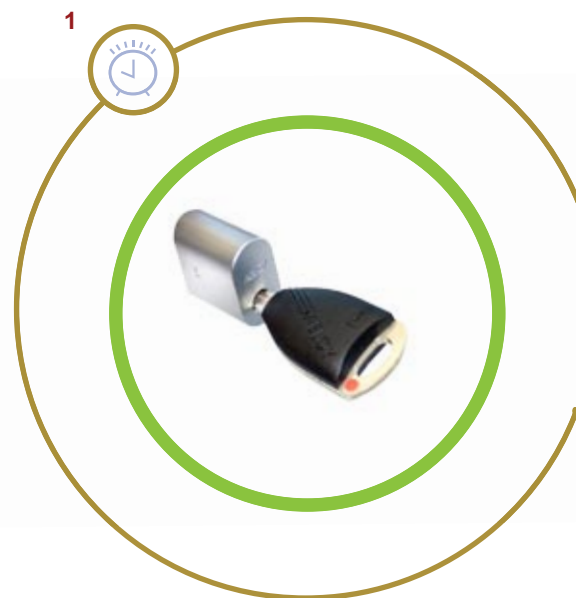
electronic innovation

CLIQ technology
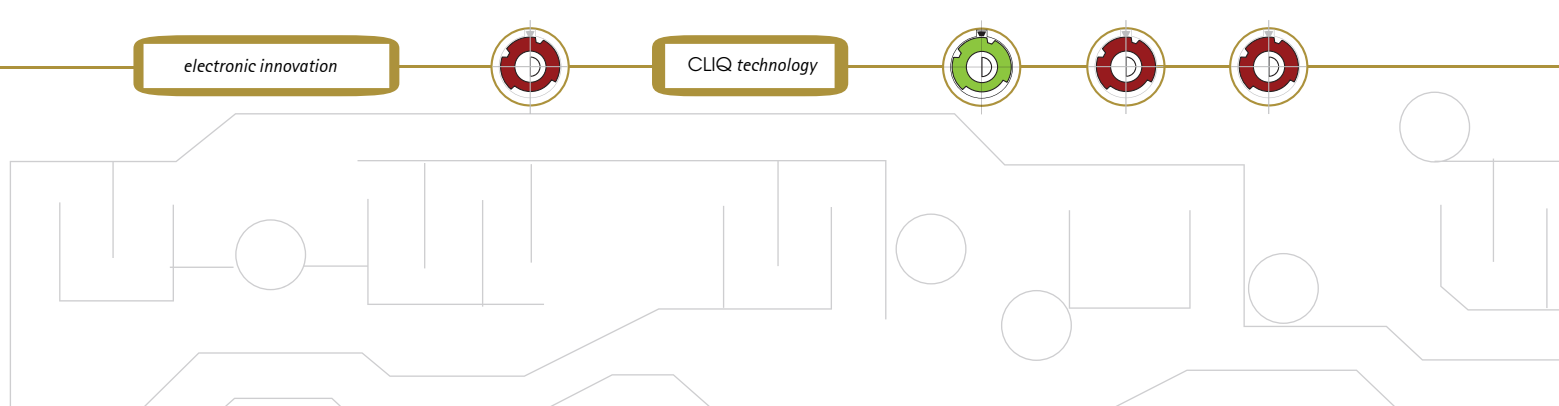
HOW IT WORKS:
Simple operation, sophisticated results.

1. The key is inserted into the cylinder. When the contact pin meets the contact strip an electronic *"wake up" signal* is subsequently generated.

2. The cylinder awakens and generates a random *64-bit* number.

3. The key answers by transmitting an *encrypted* number.

4. The number is *decrypted* and compared to the response calculated by the cylinder's microprocessor.

5. *A log of the interaction* - user, time, result etc. - is automatically stored in the cylinder's memory for retrieval.

6. *If there is a data match*, the identification process continues. Based on parameters such as key identity and the specific time of day that the user is permitted access, the *electro-mechanical element* is cleared for activation and the key can turn the cylinder.

7. If the key is *not authorized* the electro-mechanical blocking element in the locking system will simply *remain locked*.
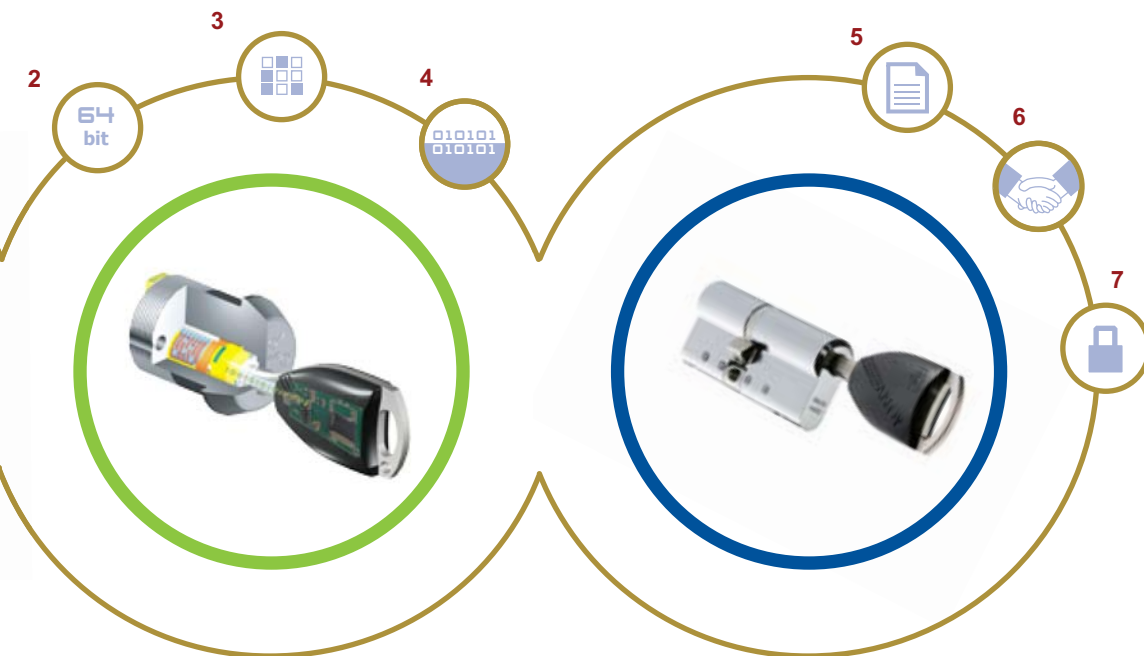
flexible

intelligent electromechanical system

ABLOY® PROTEC

^{CLIQ™}

Smart system, intuitive management

The ABLOY®PROTEC CLIQ *locking system is supported by several user-friendly components that turn the complex functions of running a secure locking system into simple maintenance tasks.*

- *Intuitive software programs*, loaded on standard PCs, enable organizations to manage their dynamic security needs through easily accessible interfaces. You can grant or cancel user access, eliminate keys from the network, and designate times of access for every member of your enterprise quickly and efficiently

- A separate exterior *Programming Device (PD)*, serves as a link between the information stored in the PC and all of the keys and cylinders in the system. Since the PD doesn't store the data it receives, there is no chance of compromising the system.

- A *Programming Key*, which facilitates simple and intuitive maintenance throughout the entire locking system, is inserted into the PD and recognized for authenticity. It then uploads all of the latest data generated in the various software programs concerning each individual cylinder and key in the network.

- *Security Personnel* can now insert the Programming Key in every lock in the network and download the data into the cylinder's memory.

- The Programming Key also *retrieves Audit Trails* from the cylinders, so that precise data concerning every interaction between a lock and key is readily accessible at all times.
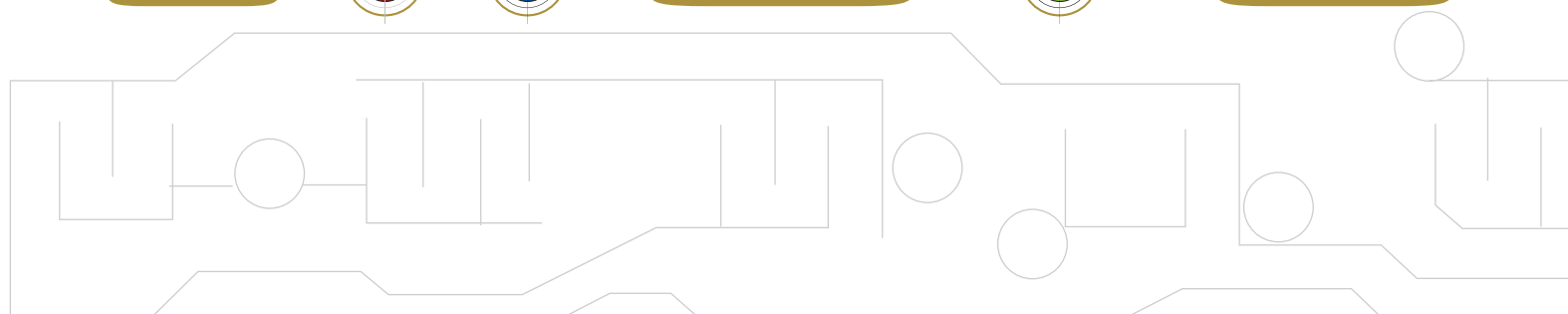
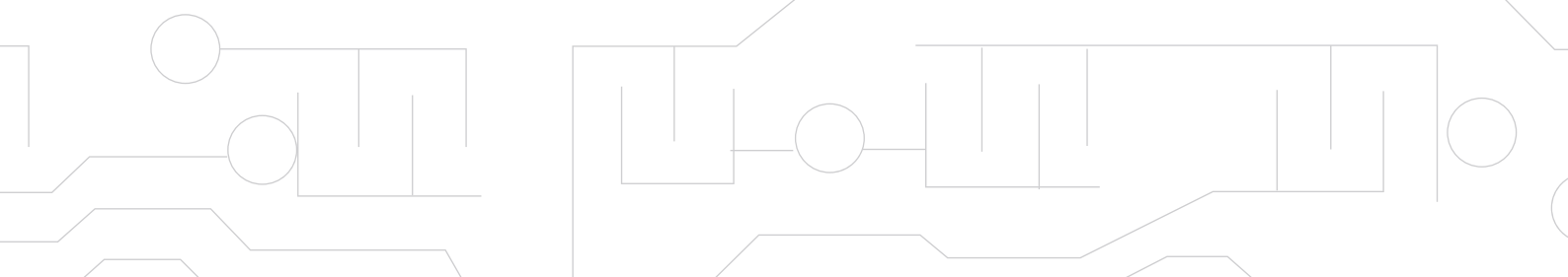programming key | intuitive software programs | programming device

INTUITIVE

SOFTWARE PROGRAMS

DEFENCE DEPARTMENTS

SECURITY–MINDED ORGANISATIONS
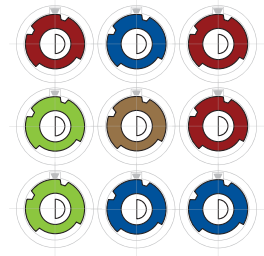
Unprecedented Benefits

The **ABLOY**®PROTEC CLIQ *locking system provides security-minded organizations, government and defence departments with a wealth of superior functionality and benefits that are not available in other locking solutions:*

The best of both worlds – the dual, patent pending technologies employed in **ABLOY**®PROTEC CLIQ represent a truly successful marriage of electrical and mechanical locking systems, offering a double layer of impenetrable security.

Data Tracking – Audit Trail Control is an absolute necessity if you hope to keep tabs on the efficacy of your locking network. **ABLOY**®PROTEC CLIQ's Programming Key enables you to easily access precise data from every cylinder in your facility and upload it swiftly into your PC for review.

Individual Keys – Encrypted with tamper-proof codes, each key is designated for use by one individual only. If the key is lost, it is simply rendered obsolete for use by the network controller. This enables total control of every key distributed to personnel. A new key, with a new code, can then be generated and will be recognized by the cylinders for which it is granted access.

Time-based permission – **ABLOY**®PROTEC CLIQ enables you to designate specific windows of time (as often as necessary) wherein access to a given cylinder by a given user is permitted – an essential component of ensuring the ultimate in high security and seamless, trouble-free maintenance for the entire system.
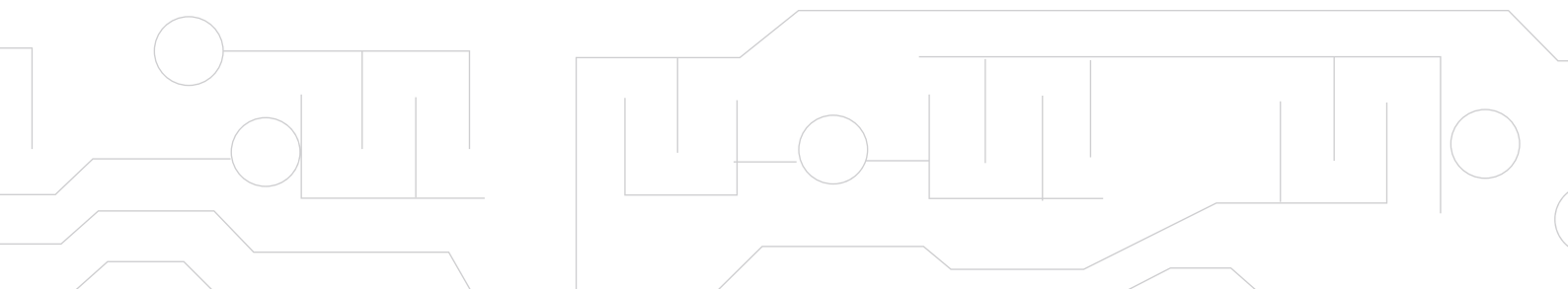
Convenient and cost-effective – our dual-locking systems are *wire free*, simple to install, and easy to plan and use on a daily basis. You get all of the comparable benefits of an electronic control system at a fraction of the cost – and the added value of a robust mechanical mechanism.
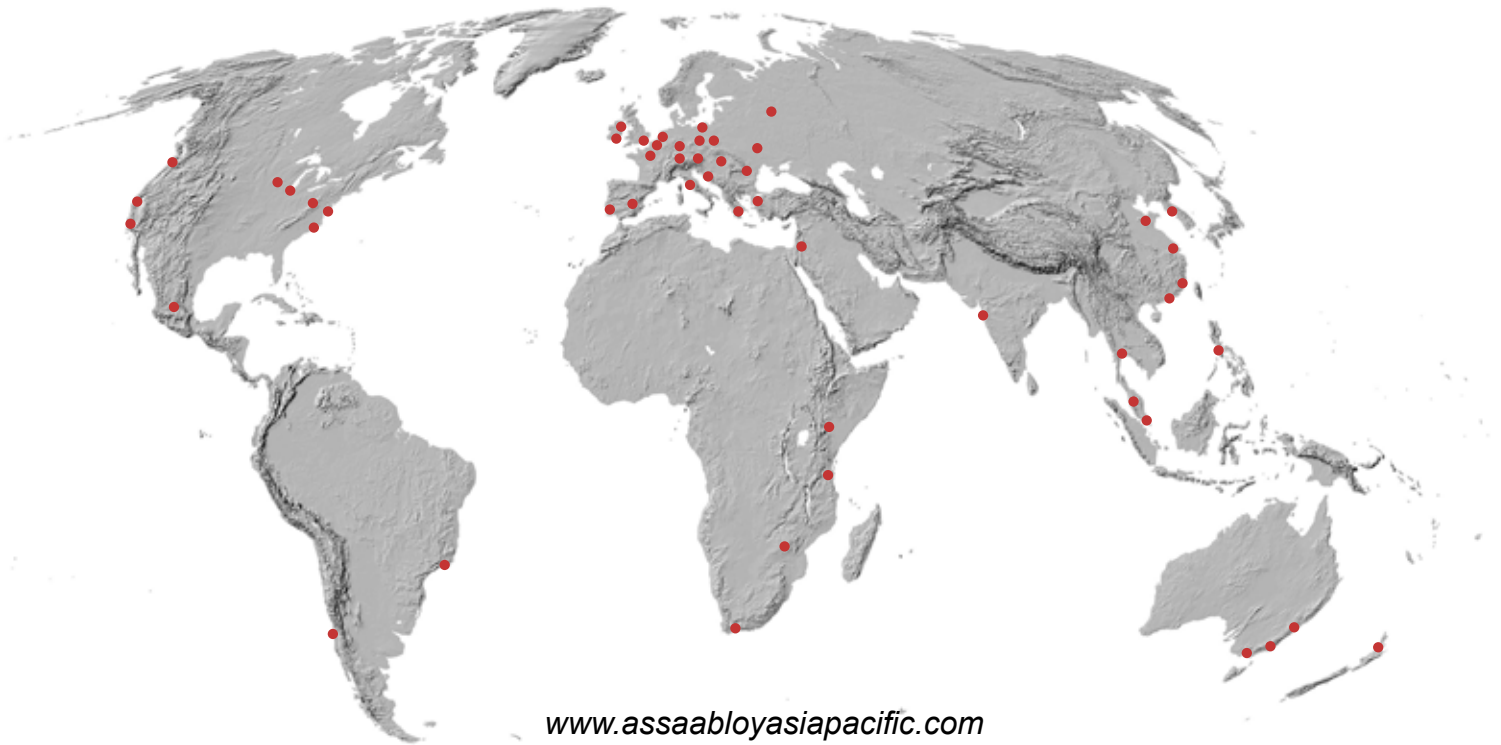
time-based permission

convenient and cost-effective

ASSA ABLOY is the world's leading manufacturer and supplier of locking solutions, meeting tough end-user demands for safety, security and user friendliness. The Group has some 30,000 employees and annual sales of about EURO 3 billion.

www.assaabloyasiapacific.com

"Our vision is to be the most successful and innovative company in our market by placing locks at the heart of security and providing safe and secure solutions that give true added value to our customers."

An ASSA ABLOY Group Company

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