

***“Trapped-Key interlocking provides the necessary machine guarding tools and solutions to ensure safety is maximised in today’s automated industry.”***

Castell’s trapped key interlocks force workers to adhere to a step-by-step process every time internal access or maintenance to a machine is needed. Each step releases a key which in turn permits activation of the next stage in the process. This system ensures that human error is eliminated and access to potentially dangerous environments is impossible when the machine is running.

Our isolation interlocks can be specified to accommodate your exact voltage and switch contact specifications. They are available in either a panel mount option or with an IP65 polycarbonate enclosure.

In order to minimize maintenance and installation cost, all Castell access interlocks are mechanical implicating that no electrical wiring needs to be installed in the area, a distinct advantage in wash down environments as well as applications where power access is limited.

Our access interlocks have an open cavity design and are manufactured in a durable stainless steel making them ideally suited to use in harsh or corrosive environments where the lock is subject to heavy use. Typical industries using the AI are food, chemical, quarrying and aggregates, steel and pharmaceutical. In addition, each lock portion can be fitted with one of our stainless spring loaded cap that will automatically cover the lock portion when not in use to prevent any dirt or debris from entering the lock.

Whilst the machine is running, the key will be trapped in the isolation interlock. Once the operator turns the key counter clockwise the machine becomes isolated. The switch contacts on the isolation interlock will change preventing any re-energization, whilst the key is removed. The key can only be released once the machine is isolated.

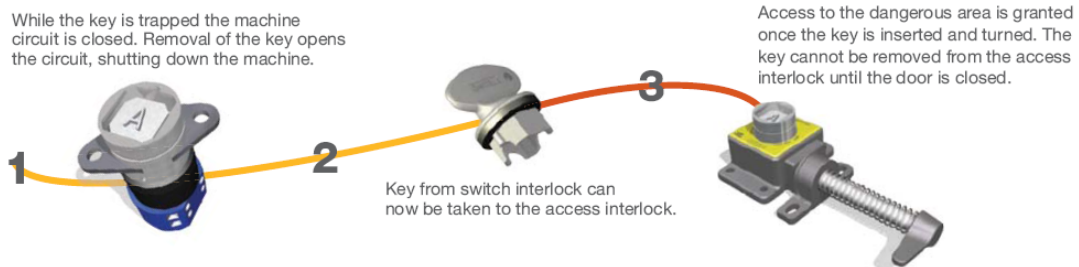
Benefiting from the knowledge the machine cannot be turned on whilst he or she has the key in hand, the operator is permitted to take the key and gain right of entry through our access interlock. Once the key is inserted into the access interlock the door can be opened. Once access or maintenance to the area is completed, the key can then be used to re-energize the machine. The key will remain trapped inside the interlock until the door is closed and the lock bolt has been re-inserted back into the lock.

Each Castell Trapped-Key Interlocking system is custom made to suit your application. Unsurpassed quality and robust construction ensure that our customers experience firm dependability with reliable customer service.

## Machine Guarding Applications

Castell provides heavy duty, robust safety systems for a variety of industries involving machine guarding. Our safety products are designed for all types of environments with additional product options for outdoor, marine and explosion risk areas.

### Isolation/Disconnect to Access





## **ISOLATION OPTIONS:**

### ***KS Powersafe Control Switch:***

Suitable for instant isolation. Available in 20, 32, 63, and 125 amp ratings. Suitable for mounting into an existing panel or for surface mouting in a supplied IP65 racted ploycarbonate enclosure. Switch contacts can be arranged to suit each particular application. Upon removal of the key, the KS switch contacts change to prevent re-energization while the key is free.

### ***KSE Powersafe Control Switch:***

Suitable for instant isolation. Our KSE is used in the event an application requires more than one access point and provides additional lock portions. Available in both *Exchange Condition* and *Dual Key Codition*. *Double key requires both keys to be inserted and trapped to operate the switch. Exchange condition requires one key to be inserted to allow the secondary key to be released.* Rated for 20, 32, 63, and 125 amps. Suitable for mounting into an existing panel or for surface mouting in a supplied IP65 racted ploycarbonate enclosure. Switch contacts can be arranged to suit each particular application. Upon removal of the key, the KSE switch contacts change to prevent re-energization while the key is free.

### ***KSS Solenoid Controlled Switch:***

Suitable where a robot has to *finish a cycle prior to isolation*. Once a signal from the PLC is received, an LED illuminates and the operator may then press a push button to energize the solenoid which enables the key release. Available in 20, 32, 63, and 125 amp ratings. Suitable when a machine/robot has to *finish a cycle prior to isolation*. Once the signal is received BY the PLC, the solenoid can be energized which enables the key release. Upon removal of the key, the KSS switch contacts change to prevent re-energization while the key is free.

## **EXCHANGE OPTIONS:**

### ***X Exchange Box:***

In the event an application requires more than one access point. The X type key exchange unit is designed to form part of an integrated safety system linking machine control and access interlocks. The key exchange is configured to trap and release keys in a pre-determined sequence, depending on the operating requirements of the safety interlocking system.

## **EXCHANGE OPTIONS:**

### ***AI Access Interlock:***

The AI is single key bolt access interlock suitable for use on hinged and sliding doors.

### ***AIE Access Interlock:***

The AIE is a dual key version of the AI bolt interlock. Available in both *Exchange Condition* and *Dual Key Codition*.

### ***SALUS Access Interlock:***

The AI is single key bolt access interlock suitable for use on hinged and sliding doors. Further benefits of the Salus include an integrated lock cover, an ergonomic housing to reduce dirt traps and, through the lock mechanism, the ability to close gates or doors despite them being misaligned.

## **KEYS & CAPS:**

### ***FS Heavy Duty Keys:***

Our large and robust handled key is capable of transmitting much more torque to the lock than a standard pin tumbler key for ease of operation. In addition, the larger size helps to minimize loss and prevents from falling through grating. Each key comes complete with a dust boot designed to prevent dirt and dust to enter the lock when the key is in use.

### ***FLIP-S Lock Cap:***

Spring loaded cap that automatically covers the lock portion when the key is not in use.

