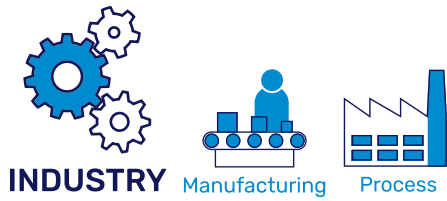


Product Overview



SERV TRAYVOU
INTERVERROUILLAGE



**Safety solutions
for your people
and machines**



Trapped Key Interlocks



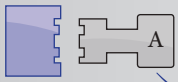
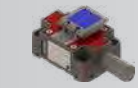
Trapped Key Interlocks

Adapted from our original award-winning trapped key interlock system, a front-line bespoke safety device for protecting both personnel and equipment. Keys are uniquely coded and transferred between locks, applied to two or more movable parts, preventing movement as necessary. This offers a range of key benefits:

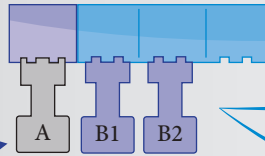
- Avoid human error
- Predetermined sequence of actions to be completed, bespoke to specific needs, before access is granted to a dangerous area or machine
- Adaptable for site retrofits, simple installation and integration into working processes
- Durable, robust and proven performance over many years and a range of applications
- Ensuring unique key coding on-site

Principles of Trapped Key Interlock Systems

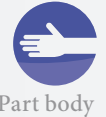
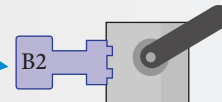
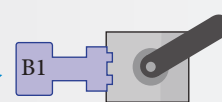
Isolation



Key Exchange



Access Control



Ensures power is off

Trap key A to release others

Allow safe access



INDUSTRY

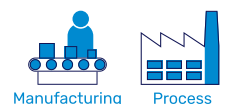
Industry

With a wide range of products and locking systems, we ensure a standard or customised solution adapted to your local needs to ensure the safety of both property and people.

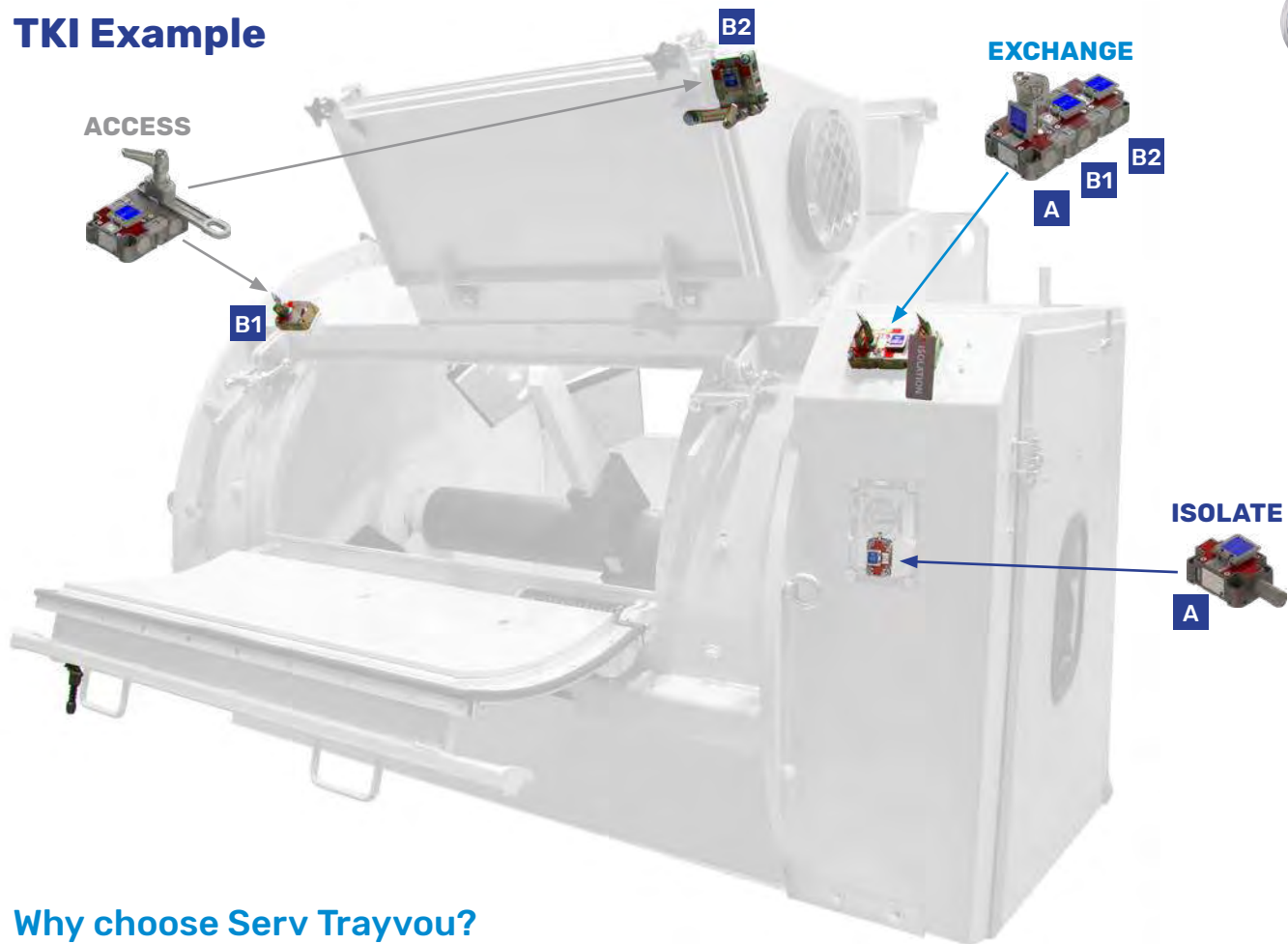
Our experience guarantees an interlocking solution suitable for the extreme conditions that can be present in industrial environments.

These solutions can adapt to the majority of sites and existing machines in a range of applications, such as:

- Machine guarding
- System perimeter guarding
- Wrapping/packaging (*palletisers etc.*)
- Access management
- Valve systems



TKI Example



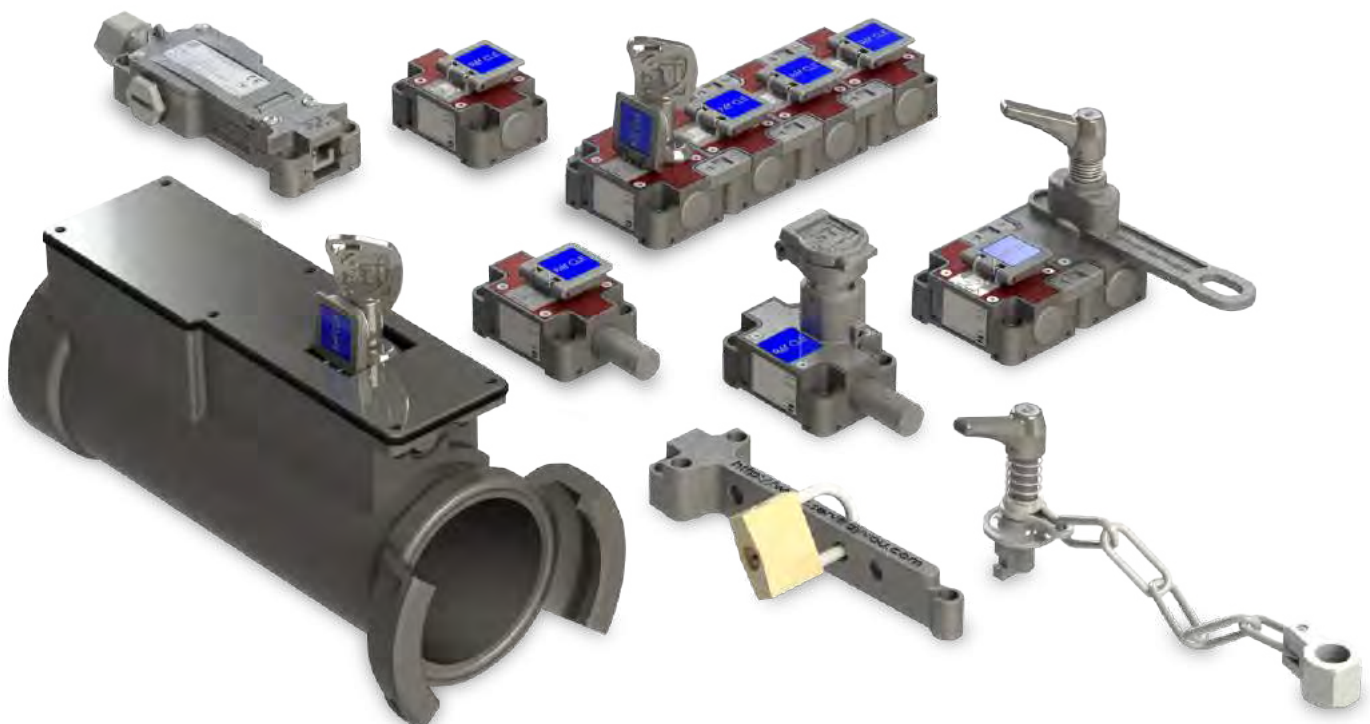
Why choose Serv Trayvou?

1. More than 120 years of experience, providing safe environments through smarter protection that adapts to existing facilities
2. The leading provider of trapped key interlocking, in collaboration with [Castell Safety](#) and [Kirk Key](#)
3. A global team dedicated to providing bespoke solutions and technical support in selecting the correct solutions
4. Tracking encoding for each user (Ensure the same code is never delivered twice)

Our Work

The expertise and experience of [Serv Trayvou](#) guarantees a locking safety system that is most suitable to your application. Examples of our typical work include:

- Machine guarding
- Industrial maintenance
- Low, medium and high voltage switchgear
- Hazardous industrial environments
- Loading and unloading of silos
- Loading dock safety



Overview

The isolation of hazardous energies is critical when performing maintenance on equipment and ensuring good conditions without risk. Isolate machinery can be done mechanically, through control switching or through power cut.

Bolt interlocks, solenoid switches and fluid isolation mounted directly on equipment ensure the state of energies and guarantee that it can't be mistakenly changed, avoiding human mistakes.

Power Isolation

Disconnecter

Isolation of the power circuits of hazardous machines.



IVC

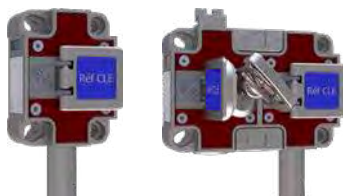
With mechanical or electromechanical lock

- Up to 3 key entries (mechanical lock NX or electromechanical SENOP)
- 25 to 630 Amps
- 3, 4 or 6 poles
- 5,5 kW to 100 kW

Mechanical Isolation

Bolt Lock

Mechanical locking of switches, circuit breakers...



NX

Heavy Industry
Stainless steel



MS

Heavy ++ / Dirty environment
Copper brushed aluminium

- 1 to 5 key entries
- Switch option
- Flip cap option
- Consignment key
- Multi-clasp for padlocks (NX)

Cam Lock

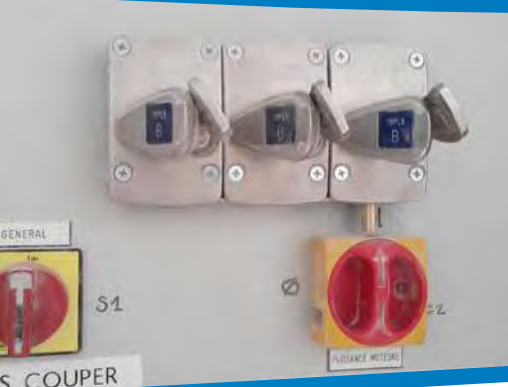
Mechanical locking of switches, inverters, disconnecting switches, transformers...



RTK

Nickelled brass

- Flip cap option



Control Switching

Switch off the machine command



- Nickelled brass lock
- 1 to 5 key entries
- Switch 20-2C, 30-1C or 30-3C
- Flip cap option
- Plate mounting, stainless steel or polycarbonate cabinet

Solenoid Control Switching

Disconnecter

With a signal to release a key, e.g. a robot has to finish a cycle prior to isolation



- Nickelled brass lock
- 1 to 5 key entries
- Switch 20-2C, 30-1C or 30-3C
- 24, 48, 110 or 230 V - AC or DC
- Flip cap option
- Plate mounting, stainless steel or polycarbonate cabinet

Disconnecter

Locking of machines command with a complementary condition



- Copper aluminium
- 24, 48, 110 or 230 V - AC or DC
- Flip cap option
- Switch option

Fluid Isolation

Isolate hydraulic or pneumatic e.g: purging air on compressor



- Nickelled brass and stainless steel
- 1/4 turn valve, 2 ways or 2 ways + purging
- RTP: 1/4' (DN7), 3/8'' (DN10)
- RTV: 1/2' (DN15), 1/4' (DN7)
- Flip cap option



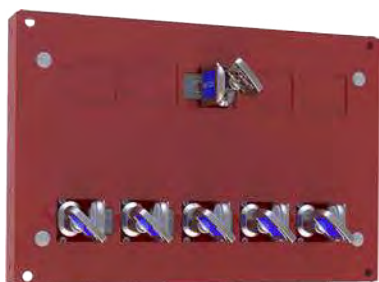
Overview

Maintenance procedures may require access into multiple areas once hazardous energy has been isolated. Key exchange units are ideal for these applications, ensuring all access points are safely entered after Isolation.

Transfer exchange units feature two parts and are designed to trap keys coming from Isolation before releasing access keys. Only when all access keys have been returned to the exchange unit will the trapped keys be released to restore energies.

Key Exchange Box

Applications with multiple access points



TMEC

- Up to 40 key entries



PCRTK



NX

- Up to 5 key entries

Key Selector

Releases keys in a pre-determined sequence in differing combinations



CRTL



Overview

Accessing hazardous areas can easily put employees at risk. Understanding access points and the type of access needed, partial-body or full-body, is critical to ensure you have the appropriate safety solution.

Access interlocks have two parts. A main body, mounted to the stationary portion of the equipment, and a latching block or chain latch, mounted to the door or gate.

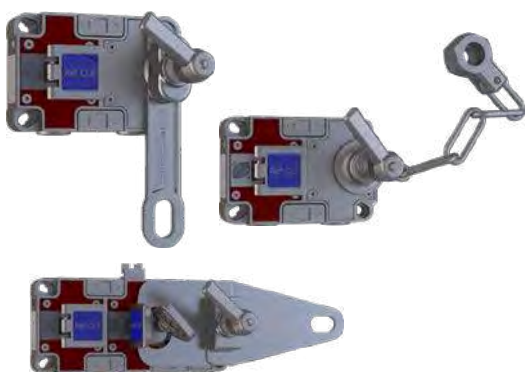
The key is always trapped in the main body of the interlock when the two parts are separated. Only when the latch block or chain latch re-engages in the main body will the key be released.

All solution allows a personal key to be kept on the person performing the maintenance (pocket key).

Access Lock

Access Interlock

The machine cannot be restarted unless the door is closed and key released



NX

Heavy Industry
Stainless steel



MS

Heavy ++ / Dirty environment
Copper brushed aluminium



XSOL

Heavy ++
Stainless steel

- 1 to 5 key entries
- Switch option
- Flip cap option
- Consignment key
- Latch option and support
- Emergency release DEU
- Multi-clasp for padlocks (NX)



DEU

- Flip cap option
- Latch option and support



Access Lock

Door Interlock

Typically used for electrical control cubicles and distribution panels



RTG

Brass / Stainless steel

- Switch option
- Flip cap option

Solenoid Access Lock

Allows door operating under specific conditions



SENLT

Copper aluminium

- Switch option
- Latch option and support
- Emergency release DEU

Gate Switches

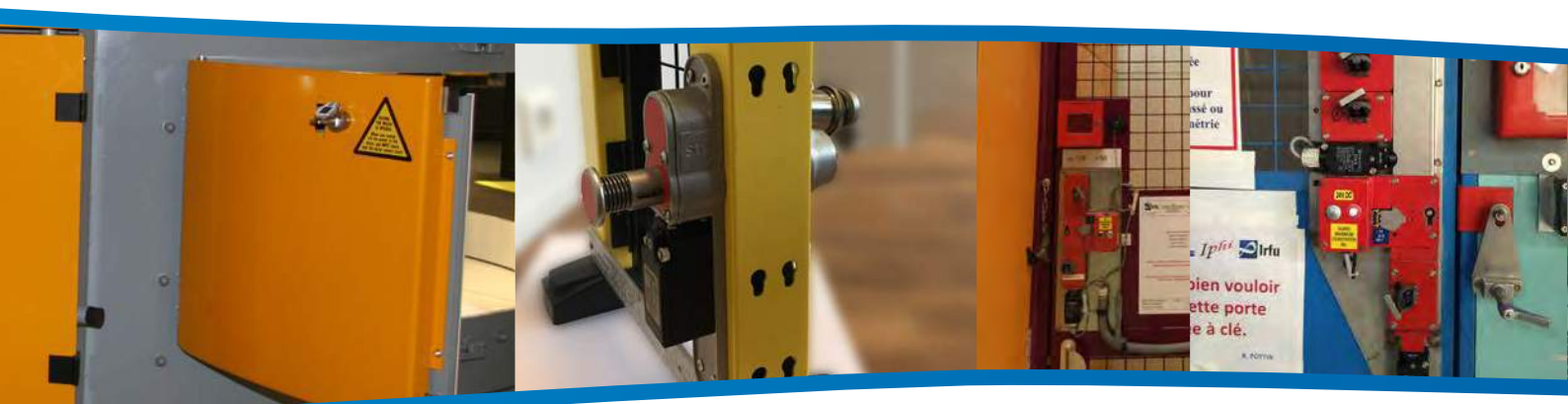
Safety switch

When the guard is opened, machine is stopped



NXL

- Stainless steel
- 1 or 2 Contact option
- Multi-clasp for padlocks



Safety switch

When the guard is opened, machine is stopped



AutoStop amGardpro

Zinc alloy / Stainless steel

- Configurable
- Actuators option (Tongue, Handle, Slidebar,...)
- Key adaptors option
- Electrical Switching option
- Pods option (push button, LED, ...)

Solenoid control Safety switch

Need authorisation and machine stop to open the guard/door



AutoLock amGardpro

Zinc alloy / Stainless steel

- Configurable
- 24, 48, 100, 110 or 230 V - AC or DC
- Actuators option (Tongue, Handle, Slidebar,...)
- Key adaptors option
- Electrical Switching option
- Pods option (push button, LED, ...)



Lockable Hose Coupling

Overview

During the loading process, the risks of mixing errors are recurrent. To connect the silo, the operator must retrieve the corresponding coded key from the loading operations manager (mechanical RGV) or obtain the authorisation from the control room; this is a fully automated process (Electromechanical RGV).



RGV

Stainless steel

- DN80 or DN100
- Cylindrical BSP, NPT thread or Welding coupling
- Mechanical or Electromechanical
- Switch option

Smart Key Manager

Overview

Keys are difficult to track. In some cases, you may not know who holds the key and whether the person is authorized or who is responsible for it. These are issues that should not be neglected, leading to an unnecessary waste of time and safety. This is why it is important to rely on a solution that combines both access organization and traceability.



SKM

Stainless steel / Zamack 5

- Up to 8 key modules (128 keys)
- Badge, iTag option

- Allow user
- Track & record key movement
- Centralise management
- Real time control



Energy

For maintenance, measurement or intervention operations in switchgear or sub stations (LV to HV), isolating the power and earthing the elements is the mandatory step before accessing potentially dangerous equipment (circuit-breakers, transformers, inverters, etc.). Trapped key interlocking systems ensure the operators to safely manipulate equipment by following the correct procedures. This also provides safety for the equipment and a reduced risk of arcing and fire.



ABA



HVE



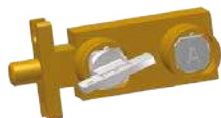
HSP



ELP1

Castell

Serv Trayvou, the leading provider of trapped key interlocking, in collaboration with **Castell Safety**.



KLF



BEMF



BD



AI



AIS

Logistics

Patented Salvo system, in partnership with **Castell Safety**, prevents drive-aways at loading bays and reduces the dependency on written procedures. The drivers can retain their keys and above all, the loaders are in control of the situation at all times. The Salvo forces the operator / driver to carry out tasks prior to the loading process beginning. The Salvo eliminates the human error element. Many existing safety products used in the loading bay industry are procedure controlled, i.e. they should be used but nothing forces them to be implemented.





SERV TRAYVOU
INTERVERROUILLAGE



Serv Trayvou

1ter Rue du Marais – Bât. B
93106 Montreuil Cedex
France

T: +33 (0)148 181515

E: sales@servtrayvou.com