



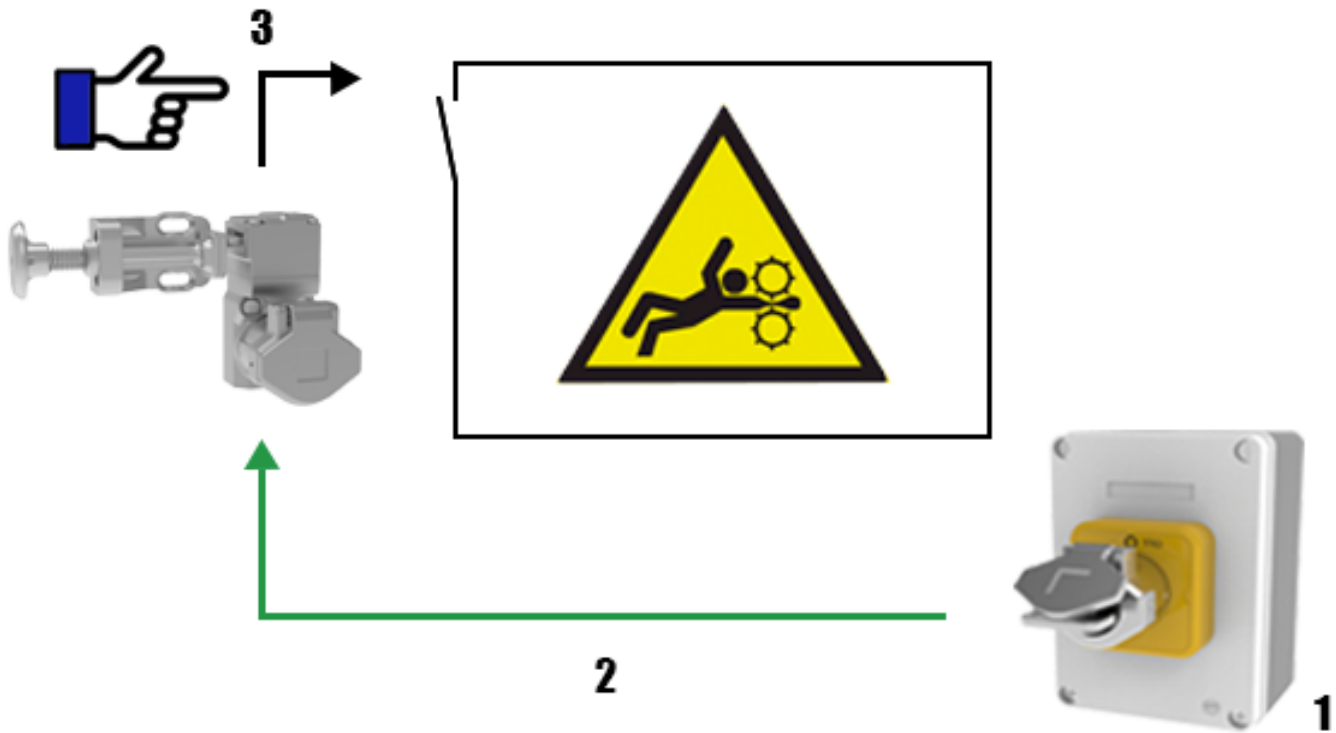
Trapped Key Interlock Systems

How Do They Work?

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Trapped Key Interlock Systems

1-Door Part-Body Access Example



How Does it Keep My Employees Safe?

1. The machine power supply is isolated using the enclosure mounted switch. You can then release the key.

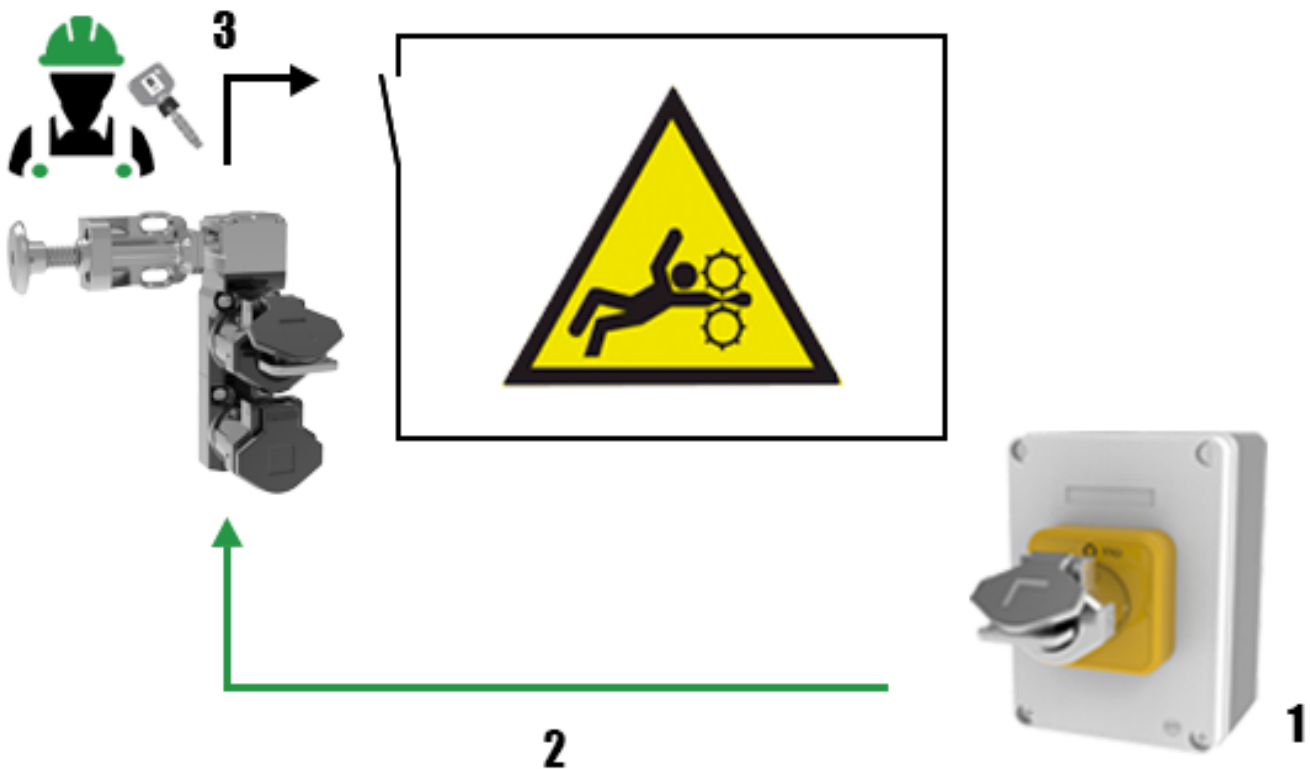
2. Insert the isolator key into the single access lock that is fitted to the guard door.

3. While the guard door is open, the key is trapped in the locking mechanism.

This ensures the safety of the operatives working on your machine because the key cannot be returned to the Isolator and resume power to the machine until the guard door has been safely closed.

Trapped Key Interlock Systems

1-Door Full-Body Access Example



How Does it Keep My Employees Safe?

1. The machine power supply is isolated using the enclosure mounted switch. You can then release the key.

2. The isolator key is used to unlock the guard door and is now trapped.

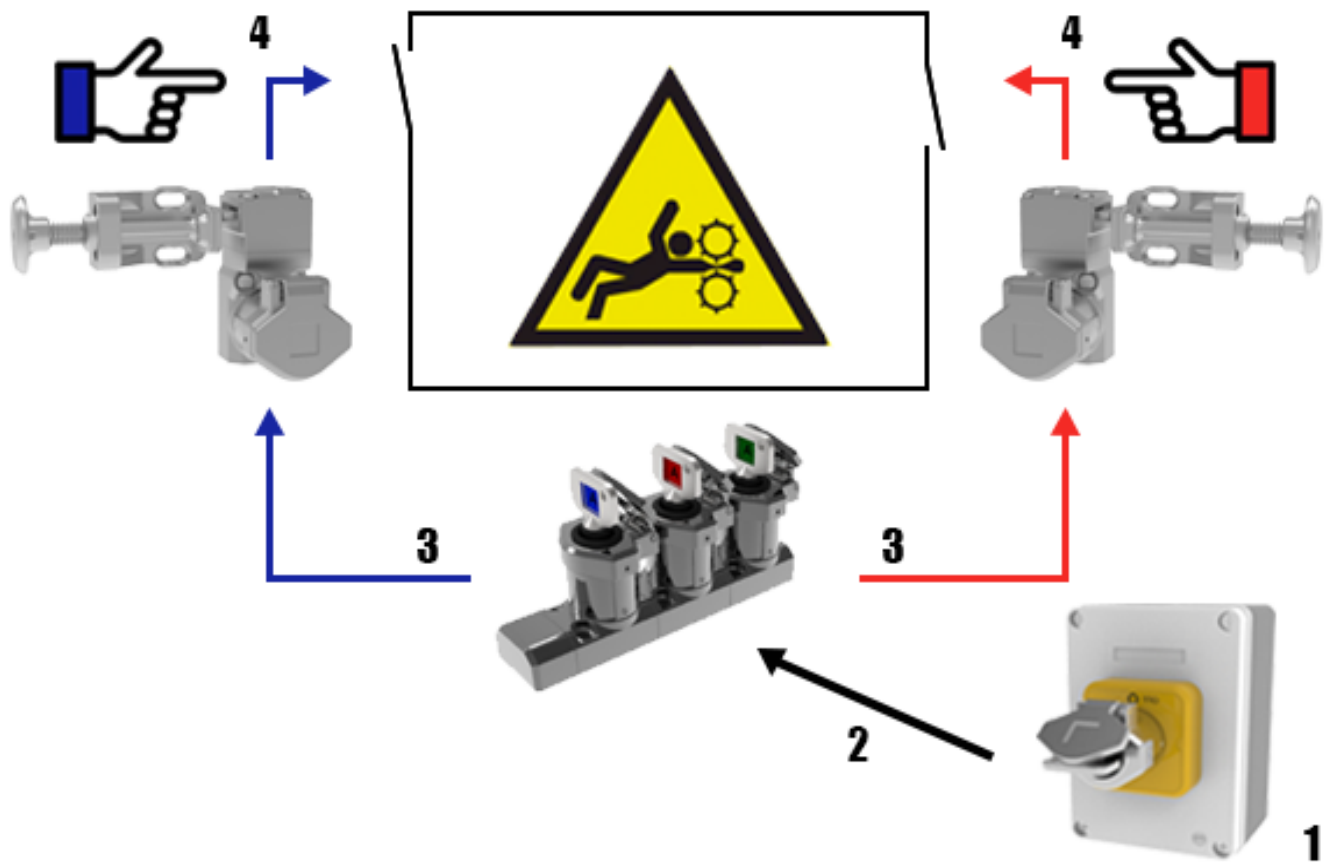
3. Unlocking the guard door releases an additional key, which the operative takes with them into the guarded area.

The isolator key remains trapped in the locking mechanism, making sure the machine can't be restarted until the operative is outside the dangerous area, has replaced the additional key and the guard door has been safely closed.

This is a great way to ensure the guard cannot be closed, or the machine accidentally restarted by someone else while the operative is within the dangerous area.

Trapped Key Interlock Systems

2-Door Part-Body Access Example



How Does it Keep My Employees Safe?

1. The machine power supply is isolated using the enclosure mounted switch. You can then release the key.

2. The isolator key is inserted into the key exchange unit. The isolator key is trapped by the locking mechanism, which releases the two additional keys.

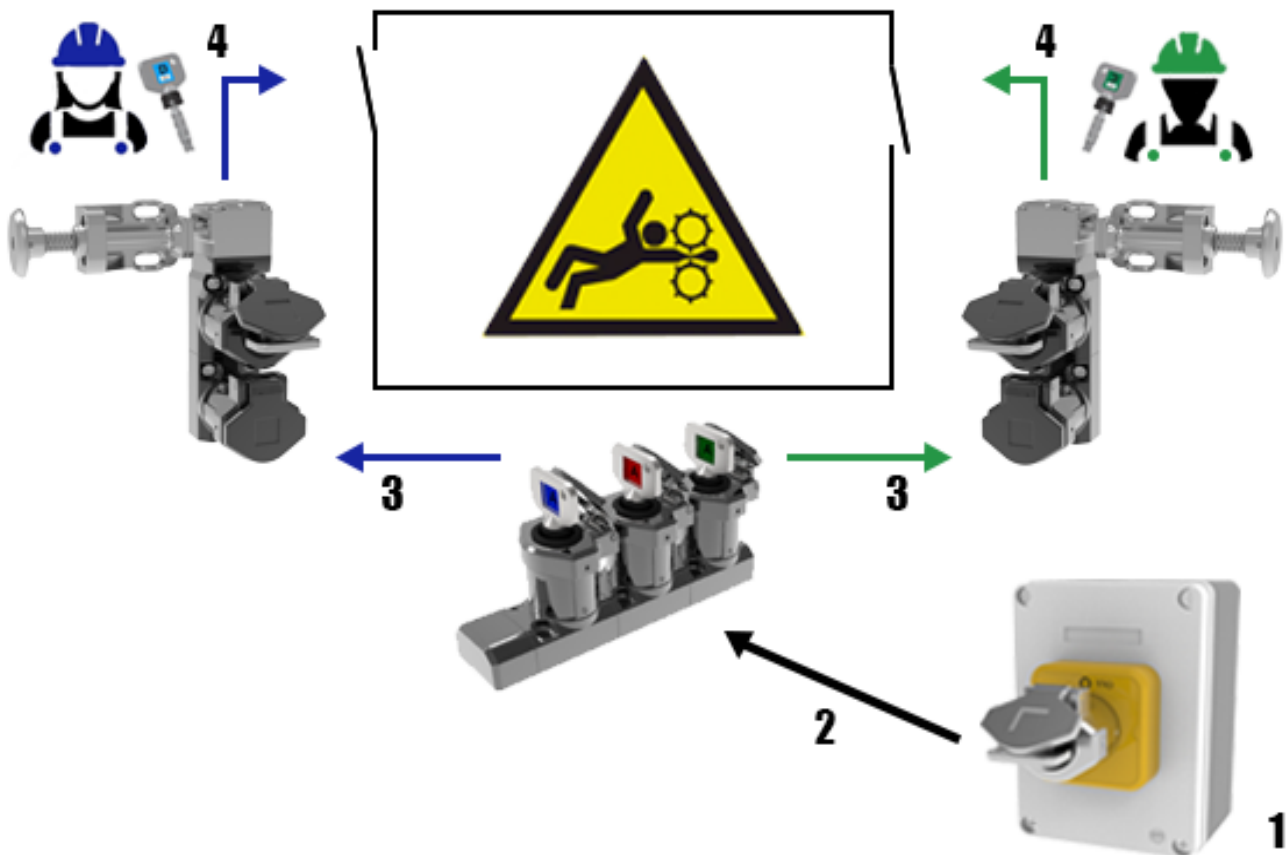
3. The additional keys are used to unlock the guard doors.

4. While the guard doors are open, the additional keys are trapped in the locks and can't be returned to the key exchange unit.

When both guards are safely closed, the keys can be returned to key exchange unit, releasing the isolator key. Power can now be returned to the machine, safe in the knowledge that both guard doors are closed, and all operatives are safe.

Trapped Key Interlock Systems

2-Door Full-Body Access Example



How Does it Keep My Employees Safe?

1. The machine power supply is isolated using the enclosure mounted switch. You can then release the key.

2. The isolator key is inserted into the key exchange unit. The isolator key is trapped by the locking mechanism, which releases the two additional keys.

3. The additional keys are used to unlock the guard doors.

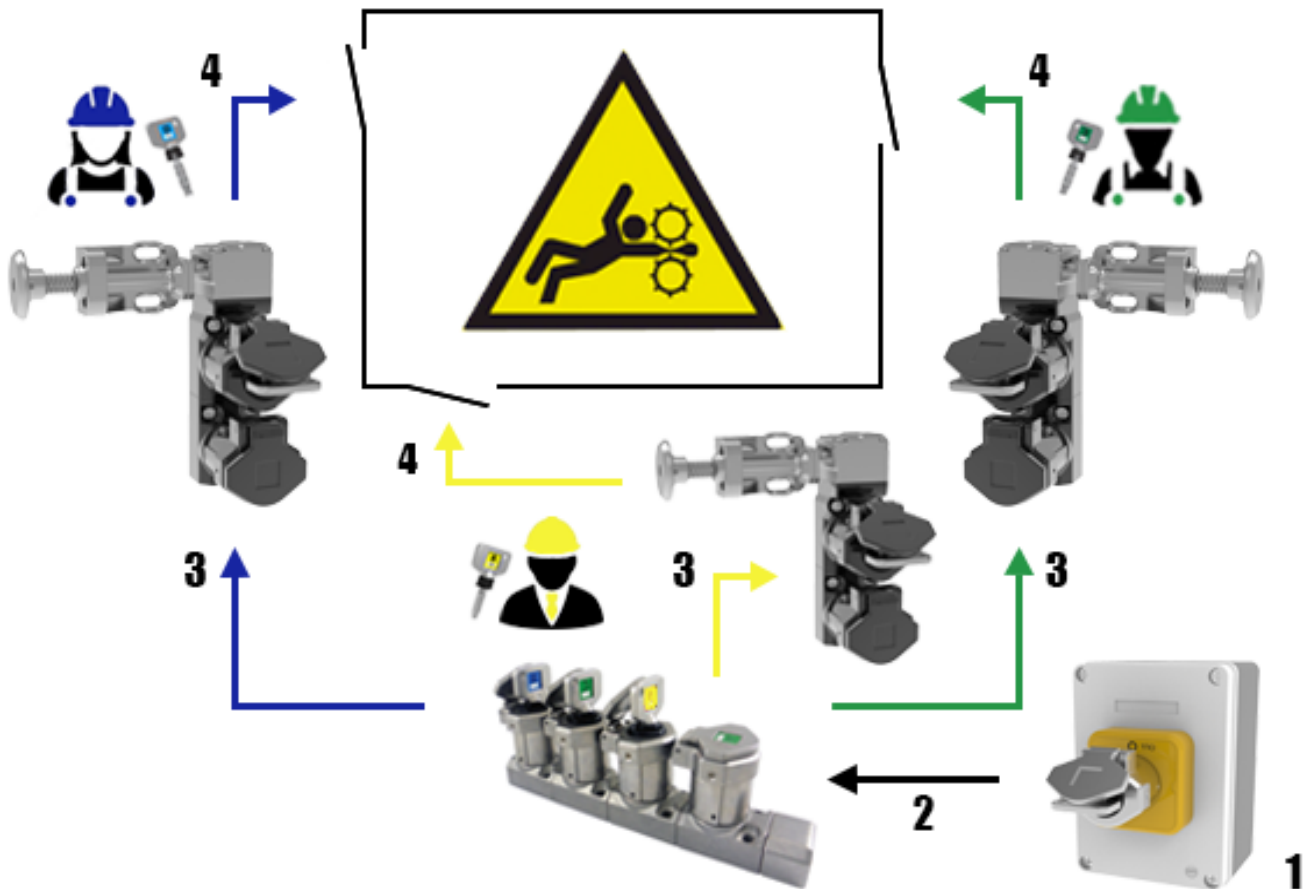
4. Unlocking the guard doors releases two final keys. Each operative takes one of these keys with them into the guarded area.

The isolator key remains trapped in the key exchange unit to make sure the machine cannot be restarted until both operatives are outside the dangerous area, have replaced the final keys and both guard doors have been safely closed.

This is a great way to ensure the guards cannot be closed, or the machine accidentally restarted by someone else while either of the operatives is within the dangerous area.

Trapped Key Interlock Systems

3-Door Full-Body Access Example



How Does it Keep My Employees Safe?

1. The machine power supply is isolated using the enclosure mounted switch. You can then release the key.

2. The isolator key is inserted into the key exchange unit. The isolator key is trapped by the locking mechanism, which releases the three additional keys.

3. The additional keys are used to unlock the guard doors.

4. Unlocking the guard doors releases three final keys. Each operative takes one of these keys with them into the guarded area.

The isolator key remains trapped in the key exchange unit to ensure the machine cannot be restarted until all three operatives are outside the dangerous area, have replaced the final keys and the guard doors have been safely closed.

In the same way, larger key exchange units can be used to accommodate more doors, and/or operatives. It's important that each operative takes a key into the dangerous area, to ensure the guards cannot be closed, or the machine accidentally restarted by someone else while an operative is still within the dangerous area.



Trapped Key Interlocks - Maximising Safety In Manufacturing

Trapped Key Interlocks are a great solution to help ensure a safe working environment in your manufacturing application or process. With their ability to significantly reduce the risk of workplace accidents, they should be a top consideration for anyone who is responsible for workplace Health and Safety.

If you want to improve the safety in your manufacturing application, take a look at Trapped Key Interlocks. Even if you have never used, or specified, a Trapped Key System before, it's really straightforward (especially with the help of our Field Sales Engineers).

Contact us today to discuss your application and to find out how we can help.

www.lcautomation.com

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