

VI. Applications and Solutions

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What are some of the applications in which positive-break and tamper-resistant safety interlocks are used?

Positive-break and tamper-resistant safety interlocks are inherently safer alternatives to conventional industrial components such as:

- (Non-safety) electromechanical limit switches
- Inductive proximity switches
- Snap-acting position switches (without positive-break)
- Uncoded reed switches
- Hall-effect sensors
- Magnetic position switches
- Photoelectric sensors

Such conventional industrial sensors/switches are not recommended for safety applications.

For increased safety and reduced liability, only components which have been tested and certified by an independent, recognized safety commission/agency are recommended.

Typical applications for these safety interlocks include:

- Metal cutting machine tools
- Metal forming machine tools
- Grinding machines
- Woodworking machinery
- Packaging equipment
- Printing presses
- Stamping/punch presses
- Textile machinery
- Material handling/conveyor lines
- Forging equipment
- Crushing machines
- Sawing systems
- Robot work-cell enclosures
- Emergency trip-wire systems
- Assembly equipment

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What type safety interlock switches are available that are positive-break, tamper resistant, and certified for safety applications?

The examples on the following pages are representative of the growing family of safety switches from

SCHMERSAL which satisfy these requirements.