Automatic personnel protection for conveyors and other hazardous machinery

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HAZARDOUS MACHINERY

The industrial conveyor is a simple and effective way of transporting material. It also represents a hazard for anybody working nearby. For example, in a waste paper processing plant, the conveyors lead directly to the shredder or baling press.

Although sections of the conveyor can be covered, there has to be at least one access point, the place where material (paper and board) is introduced into the system.

Traditional measures are not enough

Traditional safety measures include emergency stop buttons, pull cords and video monitors.

But all of these devices depend on the person in danger being conscious and able to stop the conveyor, or rely on the intervention of other people who see the incident.

Someone who falls onto a conveyor may be injured, ill or unconscious, and concealed by material. If no-one notices the accident, they don't stand a chance unless they're protected by a system like Safetech.

Safetech systems are designed to offer unique protection against accidents involving industrial conveyors and access points leading to hazardous machinery. Unlike some systems, Safetech protects lone workers, even if no-one else on site sees what happens.

Safetech products are suitable for protecting workers in a very wide range of processes, including all recycling applications, paper & board mills, plastic and metal handling, and many other manufacturing and engineering functions.
CASE STUDIES & TESTIMONIALS

SOME ACCIDENTS SAFETECH COULD HAVE PREVENTED

Male aged 55  
Married with 3 children

He climbed onto a moving conveyor to clear a blocked hopper above a horizontal baler. The material gave way and he fell into the baling chamber. The top flap of the baler trapped his leg just below the knee, causing a severe fracture.

Male aged 33  
Married

He was trying to free a large sheet of KLS (cardboard) which was blocking the hopper of a small horizontal baler. The material dropped and he fell with it. The baling ram severed his left leg and then jammed.

Male aged 25  
Married with 2 children

Contrary to his employer’s safety regulations, he used a wooden pole to push material into a working hogger. He lost his footing, overbalanced and fell onto the rotor, with fatal consequences.

Male aged 38  
Single

He slipped on material and fell into the conveyor pit, striking his head and losing consciousness. Nobody saw this happen and he was carried forward into the baling chamber, which caused his death.
SAFETECH BACKGROUND

When we first pioneered the original Safetech device in 1986, we knew we had a winning product. To prevent accidents on conveyors and other hazardous machinery, we found a way to make a reliable system that could distinguish human beings from material. If anyone comes into the danger zone, Safetech switches off the machinery and avoids injury or death.

It's a very simple proposition and easily explains why today Safetech is protecting lives on hundreds of sites in the UK, and all over the world.

We know the installations are rugged and reliable - our earliest systems are still going strong after nearly thirty years of successful industrial operation.

But we can't pretend it's always been easy. We've put Safetech into some very hostile environments, with extremes of temperature and humidity, and often with high levels of background interference. Although you can create a virtual simulation of these conditions in the lab and workshop, what really counts is practical experience gained in the field.

We now know just how demanding some locations can be and we've refined and extended Safetech to become the sophisticated choice of systems currently available. Without those years of experience, we wouldn't be where we are today, from basic knowledge like realising that a pager-style device clipped into a pocket is unlikely to survive in a tough industrial environment, to finding ways of creating effective detection without interfering with wireless networks and communications.

We're sometimes asked why we don't allow customers to install Safetech themselves and why we recommend an annual safety inspection. The answer's quite straightforward - if lives depend on a system, isn't that important enough to require installation by experienced technicians and regular checking by experts? We think so.
Guardian is the latest improved version of the automatic personnel protection system developed and refined by Safetech, meeting and exceeding current safety legislation standards.

It’s designed around state of the art intelligent technology, optimising performance to give powerful detection with more control, and offers unique protection against accidents involving industrial conveyors and access points leading to hazardous machinery. Unlike some inferior systems, detection is not impaired by body mass and material.

Anyone working near the hazardous area wears a Guardian detector belt. These are light, comfortable and easy to wear, constructed to withstand harsh industrial environments and visually distinctive to help safety enforcement. If someone wearing a detector belt enters the hazardous area, a signal is instantly sent to the Guardian Control System.

Guardian sounds an alarm and immediately activates the emergency stop procedure. It can also send a signal to a remote control room or security post.

Guardian is a versatile product and can be configured in a variety of ways to create a bespoke system to match the customer’s needs. In particular, one single unit can offer protection for several conveyors or other hazardous machinery, which can give dramatic cost savings.

Guardian can cover an access point as wide as up to seven metres.

This makes it suitable for protecting workers in a whole range of processes, including applications in all recycling facilities, paper & board mills and many manufacturing and engineering functions.

The Guardian system includes a unit for checking each individual’s detector belt before starting work and a test module to confirm that the hazardous zone is correctly safeguarded. Our installations are rugged and reliable, and can cope with extremes of temperature and humidity and high levels of background interference.

We firmly believe that no other system available today offers comprehensive automatic protection like Safetech Guardian.
TESTIMONIALS

WHAT SOME OF OUR CUSTOMERS SAY

“We decided that automatic personnel protection was an important factor in safeguarding our workers and commissioned a Safetech Guardian system. The installation was done quickly and efficiently and we are very pleased with the way the equipment operates. We would have no hesitation in recommending Safetech to any organisation concerned with preventing injuries.”

Chris Rynish
Quad/Graphics, United States

“The Guardian installation was completed quickly and without disruption to the operation. Prior planning ensured a smooth delivery of the system with minimal fuss. The Safetech system is simple to operate, and we have had no incidences of false triggers.”

Victor Howe
Branch Manager for Transpacific Recycling, Wellington, New Zealand

“We’ve been using Safetech for many years and have included their systems on numerous installations. We tried an alternative product but we came back to Safetech as we felt they offered the system with the best performance. Their track record and the quality and reliability of their equipment are second to none. They give us an efficient and prompt service and their technicians are professional, skilled and friendly.”

Richard Turner
Middleton Engineering

“Our companies have been working together for over two decades, and it has been a pleasure to see your business grow and our relationship strengthen. Over the years, Safetech has evolved into a high-calibre, customer-focused, professional supplier of personnel protection safety equipment. You have created a very client-friendly environment and support it with outstanding customer service. I appreciate Safetech as a supplier whom we can trust to deliver the service our clients expect.”

Bill Johnson
Engineer in charge at RCP Macpress
THE MAIN BENEFITS OF SAFETECH GUARDIAN

✓ The systems are versatile and adaptable
✓ Operating costs are minimal
✓ Staffing costs can be reduced as there’s no need for a buddy system
✓ There can be savings on insurance premiums
✓ We offer a complete installation and back-up service
✓ Guardian protects workers even if they’re trapped, concealed, unconscious or injured
✓ The flow of material on conveyors is uninhibited
✓ Guardian achieves effective personnel detection in difficult environments
✓ The systems are extremely reliable with comprehensive failsafe devices
✓ The detector belts are visually distinctive with robust fastenings
✓ Guardian’s rugged construction is suitable for harsh industrial conditions
✓ A single Guardian system can protect more than one conveyor, giving dramatic cost savings
✓ Our systems are running successfully on sites around the world
✓ Safetech prevents injury and saves lives

If you want reliable automatic personnel protection, it has to be Guardian.
NEXT STEPS

We hope this profile has demonstrated that automatic protection of people working in hazardous areas is essential and that Safetech's tried and tested systems offers the ideal solution.

For further information on our protection systems, please get in touch with us by telephone, email or fax. The contact details are on the front page of this document. We would be pleased to supply the names of some of our users, with appropriate testimonials, on request.

To establish which configuration of our systems is most appropriate for your operation, we would appreciate seeing a plan of your facility. This is probably sufficient to provide outline costings, although we usually need to undertake a free no-obligation site survey before finalising our recommendations and quoting a firm price.

We look forward to hearing from you.

Robert A. Smith

Robert A. Smith
Managing Director