



Safe Crossings

Designed for Success

Results

- Higher quality for increased reliability and operation
- Greater credibility with well-recognized GE brand
- Global GE support provides infrastructure for expanding market and sales
- Compact yet powerful controller
- Easy-to-use graphical programming – supports end user customization
- Security to protect critical operational parameters

"The GE controller helps us tremendously, as it makes people aware that we only use quality parts to help ensure the highest possible level of safety. Additionally, GE Fanuc has provided highly responsive local support for the automation throughout the product design cycle, helping us to introduce these important new gates."

John Dinunzi
Manager
Safe Crossings

Safe Crossings and GE Fanuc Improve Train and Vehicle Intersection Safety with Reliable Control Technology

Approximately every three hours, a collision occurs at a railroad crossing between a vehicle and a train. Sadly, this type of serious impact has led to more than 1,400 fatalities and non-fatal injuries each year. Driven by a mission to save lives and reduce injuries at all railroad crossings, Safe Crossings, a manufacturer of state-of-the-art railway crossing gates based in Whitehall, PA, has developed the first gate that automatically extends to block every inch of roadway and shoulder. The new gates help to prevent drivers from going around gates in an attempt to outrun a train. To help ensure higher reliability, Safe Crossings controls the new gates with technology from GE Fanuc Automation, a unit of GE Infrastructure.

Leader of the Track

Traditional railway crossing gates only cover a single lane and are deployed on each side of the railroad tracks, allowing impatient drivers to squeeze through the gap between the two gates and take a gamble that they can beat the train through the crossing. Safe Crossings' extending rail-crossing gate is designed to decrease accidents at rail crossings by providing full-closure protection across



imagination at work

all traffic lanes and shoulders. The company uses a GE Fanuc VersaMax® Micro controller to electronically extend a gate within a gate to a full length of up to 50 feet within 15 seconds from its vertical resting position and to control the simultaneous movement of the gates located on each side of the tracks. With control from the compact VersaMax, which is mounted about 3 feet from the fulcrum of each crossing gate, the system coordinates the gates, so they extend and retract at the same time. Safe Crossings can program the controller to retract the gates simultaneously when a car tries to go through so that it doesn't get stuck on the tracks. The controls are electronically wired directly from the existing crossing gatehouse system and into the gate closure mechanism.

"The GE controller helps us tremendously, as it makes people aware that we only use quality parts to help us ensure the highest possible level of safety in our railway crossing gates," says John Dinunzi, manager for Safe Crossings. "Additionally, GE Fanuc has provided highly responsive local support for the automation throughout the product design cycle, helping us to introduce these important new gates."

As an added safety measure, ground loop wires can run in the exit lanes of the roadway and, when the system detects a car anywhere within the wired area, the controller receives a signal, letting it know whether or not to extend the gate.

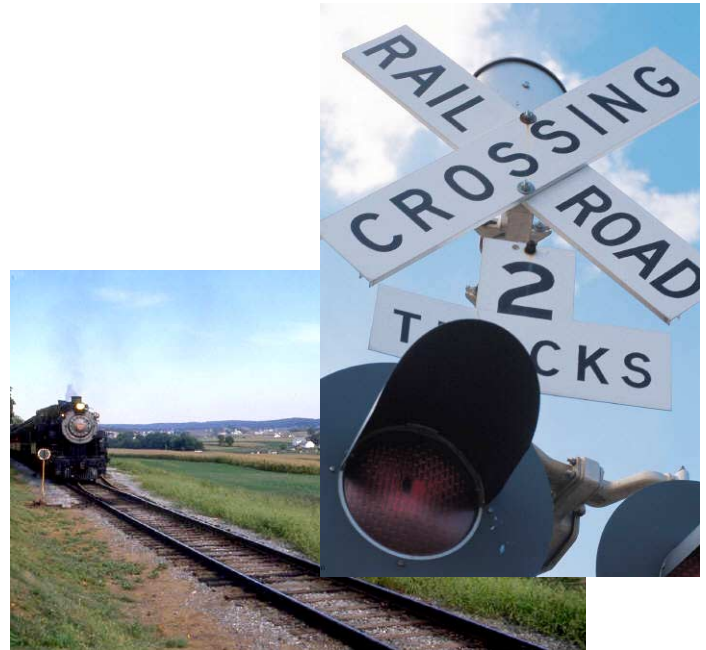
And, should anything be wrong with a crossing gate, the Safe Crossings system is capable of alerting both the engineer and the train master so that immediate action can be taken and the risk of accidents reduced.

All Aboard

As Safe Crossings has introduced its new product to railroad lines, state and federal Departments of Transportation, and the private sector with extensive railroad systems within their operations, company executives have found that one of the most advantageous aspects of using GE controls has been product credibility.

Furthermore, because the company is providing its systems nationally—with the potential for global growth—the easy availability of replacement parts from GE is another key benefit.

Safe Crossings can also easily and quickly design and customize its railway crossings with the help of graphical, Windows®-based controller programming software from GE Fanuc. In fact, the company is currently developing a method of programming the



controllers with a handheld Palm Pilot so that train masters can make field adjustments to the increments at which gates can be extended – which is a great innovation in railway transportation. This feature will allow train masters to dynamically adjust each crossing to changing requirements and conditions, such as road widening or narrowing. Security will be built in, Dinunzi says, so that train masters can only alter this portion of the program and not affect other critical operational components.

About Safe Crossings

The Safe-Crossings (www.safe-crossings.com) mission, like that of Operation Lifesaver, is to prevent injuries and save lives. After four years in development, Safe-Crossing has introduced its extendable rail-crossing gate to the nation. The Safe-Crossings gate can cover traffic lanes and shoulders up to 50' in width. Gates are currently operating at SEPTA and the Lycoming Valley Rail Road, both in Pennsylvania. The Safe-Crossings gate is designed to specifically decrease rail-crossing accidents from occurring by extending across the entire width of a roadway to deter vehicles from driving into the path of an oncoming train.

Information provided by Safe Crossings

GE Fanuc Automation Information Centers

USA and the Americas:
1- 800-GE FANUC
or (434) 978-5100

Europe, Middle East and Africa:
(352) 727979-1

Asia Pacific:
86-21-3222-4555

Additional Resources

For more information, please visit the GE Fanuc web site at:

www.gefanuc.com

