

Metro Fence removes the need to saw into pavement for a non-contact solution on a barrier arm

BEA Division - Vehicle Sensing Solutions

Industry Market - Barrier Arm Safety

BEA Customer - Metro Fence Company, Inc.

BEA Product(s) - SUPERSCAN-T INDUSTRIAL - active infrared presence sensor

INTRODUCTION

Metro Fence installs fences throughout the Pittsburgh area ranging from standard chain link fences to access control gates and barriers. Approximately six years ago, their expertise in barrier arm safety was called upon by Western PA School for the Deaf (WPSD) to address a need for additional safety on barrier arms located throughout campus.



THE CHALLENGE

Access control at WPSD includes entry and exit slide gates as well as barrier arms that separate multiple parking areas throughout campus. Unfortunately, the primary entrapment protection devices began to fail on the barrier arms, meaning vehicles were no longer protected from potential arm/boom collisions.

THE SOLUTION

Instead of traditional photo beams, Metro Fence created barrier arm safety and free exit capability by daisy-chaining two SUPERSCAN-T INDUSTRIAL sensors side-by-side. The inbound sensor contains two master modules wired in a series, which both must be tripped for activation of the barrier arm; while the outbound sensors serve as a safety reset. For even more protection, the SUPERSCAN-T INDUSTRIAL sensors offer infinite detection within their range of eight to 10 feet, meaning that if an object is detected, they will never time out.



Unlike the typical transmitter and reflective receiver configuration, SUPERSCAN-T INDUSTRIAL sensors utilize triangulation; permitting the sensor to detect objects without relying on the background. A benefit of this is that it is not necessary to cut into the pavement for photo beam wiring, saving time and money.

THE RESULTS

The final install uses a combination of master sensor modules for activation and safety, while providing directionality for free exit capabilities. Without any major maintenance issues, besides regularly cleaning the sensor lenses, all of the barrier arms have been functioning without interruptions for the past six years.