



AVOID COLLISION DAMAGE AND IMPROVE SAFETY

Advanced detection solution improves access safety and reliability and reduces damages to vehicles and barriers.

INTRODUCTION

DIA S.p.a., a food company located in Calcinato (Brescia), manages its site access with automatic barriers. Unfortunately, since the installation of these barriers, the company has to deal with barrier collisions with the vehicles that are driving through resulting in damaged vehicles and barriers.

JOB SITE

The barriers are located at the entrance of the company site as an access barrier for trucks, cars, motorcycles and bicycles. Previously, access control was managed through a sliding gate, which resulted in excessive wear on the gate's motor due to frequent activations. To address this, DIA installed a set of barriers to manage the daily access more efficiently.



PROBLEM

With at least 100 trucks passing through daily, the new barriers faced an issue: vehicles, particularly large trucks, frequently collided with them while they were in motion. The problem stemmed from inadequate protection, as only photobeams between the barrier operators were used for detection. This system did not effectively prevent vehicles from striking the barriers during closure, causing repeated damage, operational disruptions and it was a safety hazard.

SOLUTION

Sicurtec S.r.l. proposed the OPTEX OVS-02GT sensors to installer A&C Automazioni S.r.l., who installed two units at the entrance to enhance vehicle detection. Configured to detect only moving vehicles when barriers were active, the sensors ensured safe reopening to prevent collisions. With an 8-meter range, they provided sufficient clearance for trucks.

These sensors were the preferred solution because:

1

Accurate vehicle presence detection while filtering out pedestrians.

2

Vehicle Detection up to 35 km/h and a range up to 8 meters

3

Above ground solution replacing traditional induction loops and reducing ground work.



RESULTS

Post-installation, the new system significantly reduced damage to the barriers. The barriers now automatically reopen when a vehicle is detected at a safe distance, preventing accidents. The installation was quick and required no soil cuts, ensuring minimal disruption.

CONCLUSION

The solution effectively resolved the issue, enhancing both safety and efficiency at DIA S.p.a.'s entrance. All involved parties—DIA, A&C Automazioni, and Sicurtec—expressed satisfaction with the outcome. The OVS-02GT solution proved to be a reliable, low-maintenance, and cost-effective alternative to traditional detection systems.

