Towards more sustainable transportation.

In Chile, Vehicle Technical Inspection Facilities use license plate recognition technology to improve service times and help reduce vehicle emissions.

Organization:
Chilena de Revisiones Técnicas SPA

Location:
Chile

Industry segment:
Transportation

Application:
License plate recognition, safety and security

Axis partners:
TechnoSystems Chile Ltda., Milestone

Mission

CHRT (Chilena de Revisiones Técnicas)—a service provider that operates some of Chile's Technical Inspection Facilities—was faced with the challenge of modernizing how it carries out the entire vehicle administrative and control process. It needed to do so as a result of a rule that the Ministry of Transportation imposed on whatever service provider won the concession contract, requiring the winning bidder to incorporate technology for different types of services and offer them in a way that was faster, technology-driven, and more cost-effective.

Solution

In response to this requirement, CHRT chose a system that includes several Axis network cameras, according to the different needs and uses in each area of the company's facilities. After each vehicle arrives at the facility, License Plate Recognition (LPR) analytics technology enables the entire inspection process to be completed much more efficiently.

While some vehicles move forward through the technical part of the review, others can start with the first steps of the administrative procedure, which involves documentation. This ensures optimal response time for the service.

Result

The image quality of the cameras and the analytics used in this project have resulted in a notable improvement in service at the inspection facilities. Shorter processing times are a key aspect of this. Previously, the process was estimated to require an average of 5 hours, while today it takes only about 40 minutes. Logistics for the process were optimized, making it more dynamic and improving the efficiency of operators responsible for evaluations. As a result, a higher percentage of cars are in compliance with this requirement, which has made a positive impact on the environment and avoided sanctions.

AXIS®
COMMUNICATIONS

Achieving efficiency

People hate dealing with bureaucracy and delays when completing any administrative procedure—a notorious problem with Chile's Vehicle Technical Inspection Facilities. For this reason, Axis network cameras were installed in 9 of the 11 facilities awarded to Chilena de Revisiones Técnicas. The Axis system has made it possible to speed up processing times considerably.

Another goal of the modernization requirements set by the Ministry of Transportation was to increase the number of vehicle owners who complied with inspection laws. This would make it possible to guarantee that vehicles on the roads had passed the inspection process, contributing to traffic safety and a reduction in environmental impacts—two fundamental aspects for any city with aspirations toward sustainability.

One of the camera models chosen for the project was AXIS Q6055-E: ideal for the entry and parking sector. This camera's versatility allows it to capture excellent quality images while reducing bandwidth thanks to Axis Zipstream technology.

Safety is also an important aspect in the environment of the inspection facility. AXIS P1365-E MkII is perfect for this need, offering excellent image quality even in low lighting conditions—just like AXIS Q6054-E—thanks to Axis Lightfinder technology. WDR with Forensic Capture (another technology the model boasts), allows it to capture details in high-contrast lighting scenarios, such as when headlights are facing the camera.

Meanwhile, AXIS Q1615-E Mk II Network camera not only offers the above features but also provides superior image quality for moving objects in high-traffic sectors of the facilities. AXIS P5514 cameras round out the system, allowing a comprehensive overview thanks to their 360° horizontal movement with automatic rotation.

"The software used is Milestone XProtect®, and in each instance of the process, the LPR logs the license plate and automatically brings up all the data needed for the inspection. This reduces operations time as the vehicle moves through the process," emphasizes Javier Kupfer, Commercial Manager of TechnoSystems Chile Ltda.

The analytics are used mainly to check the number of vehicles that enter into the premises, as well as to monitor and record any contingencies that may occur, as requested by the Ministry of Transportation.