

Overweight Identification on Toll Roads - Autostrade per l'Italia

Autostrade per l'Italia is the leading European concessionaire for toll motorway construction and management based in Italy. Tolling concessionaires' largest expense is upkeep of their roads and infrastructure. Over time, overweight vehicles can damage roadways and bridges, so identification of these vehicles can help maintain, or even add to, the lifetime of the infrastructure.

“Strips sensors, paired with ANPR cameras and monitoring software, enable Autostrade to identify, classify, and weigh vehicles to monitor for overweight conditions. Removal of these overweight vehicles helps preserve roadways in prime condition for drivers.”

C. Bower, Director Intercomp Europe

Early in 2018, locations in central and southern Italy were identified for installation of Weigh-In-Motion (WIM) sites to identify overweight vehicles as they were entering toll roads. These WIM sites consisted of two Intercomp strip sensors, an ANPR camera, and networked electronics for remote monitoring of the sites for real-time identification and vehicle reporting. Measuring axle and Gross Vehicle Weights (GVW) at a variety of speeds, the Autostrade WIM sites provided performance of 1.8-3.1% GVW error subsequent to calibration, vastly improving capabilities for overweight detection versus prior classification and counting technologies.

With their networked WIM sites, officials can log into the system and use weight and vehicle information provided to identify overweight vehicles. The tolling concessionaire can contact companies and operators which have common overweight violations to improve safety and preserve infrastructure. Autostrade also uses the databases created for traffic trends including information such as vehicle classifications and observed weights and loading. Further, traffic monitoring assists decisions to bring overweight enforcement into the area, and improves roadway planning during concessionaire negotiation with the government.

Intercomp strip sensors use strain gauge technology, widely recognized as the most accurate means to weigh a vehicle. Installed in 3 in (75 mm) channels cut into the pavement, they are grouted into place and ground flush to become an integral part of the roadway. They are used in low and high speed configurations for data collection, overweight enforcement, tolling, and industrial applications.

For more information about Autostrade per l'Italia, visit <http://www.autostrade.it/it/home>



Strip Sensors are installed in the traffic lanes to weigh vehicles without stopping.



Sensors are ground flush with roadway surface and are combined with ANPR cameras for vehicle identification.



WIM sites identify overweight trucks to minimize impact on roadways and bridges.

Additional Data or Customer Testimonials Available Upon Request