Application Note

Strip Sensors

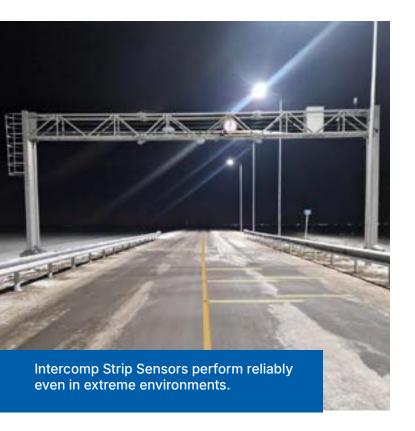
HS-WIM® for Direct Enforcement in Kazakhstan

Kazakhstan has become a global leader in highspeed weigh-in-motion (HS-WIM®) systems, using them to enforce truck weight regulations without disrupting traffic. Central to this success is the use of **strain gauge strip sensors** from



"Kazakhstan selected Intercomp's strain gauge strip sensors for many reasons, including their certified accuracy and longstanding calibration,"

- Tomas Pospisek, International WIM Business Manager, Intercomp





3839 County Road 116 | Medina, MN 55340 USA Worldwide: +1763-476-2531 intercompcompany.com

Intercomp, chosen for their accuracy, durability, and low maintenance needs—critical in Kazakhstan's harsh climate. To ensure fairness and precision, the system was rigorously tested and certified by the Kazakhstan Institute of Standardization and Metrology. The SmartWIM system, developed by Automatic Systems with Intercomp and APM Pro from Poland, integrates sensors, laser scanners, and software to deliver reliable, automated weight enforcement.

Initially, fines were issued manually after an operator reviewed data. In December 2024, Kazakhstan enabled full automation. Now, when an overloaded truck is detected, the system sends a violation notice directly to the driver via SMS and updates the Ministry of Transport's database in real time. Pilot systems in Astana revealed that nearly one-third of dump trucks were overloaded—some by up to double the legal limit. This prompted nationwide expansion. By 2025, over 100 lanes will have HS-WIM® systems.

Kazakhstan's model combines world-class technology, local expertise, and smart enforcement which demonstrates how other countries can protect infrastructure and ensure compliance on their roads.