

## **Measuring the weight of vehicles on roads without deceleration**

The road network is burdened with significant and continuously increasing transport traffic. The carrier's economic interest is to make maximum use of the vehicle's load capacity. In order to protect the condition of public roads and drive safely, the total rolling mass and axle load are maximized. Adherence to these limit values is checked with different measuring devices: statically with a bridge scale, or at occasional measuring points with wheel load meters, with axle load meters at low speeds of 5 km/h. The goal of the development was to create a measuring arrangement that can be installed economically and provides data that can be processed in several ways compared to the previous ones, regarding the total weight, axle load, wheel load of the vehicle passing through it, if possible, additionally the distribution of the load, or even the quality of the wheels. In the framework of the "High-speed vehicle axle load measurement" project (NKFIA VÁLLALATI\_16) an axle load measuring system that can be integrated into the road network is embedded in the road surface and is functional even at high speeds will be developed. The weight of the vehicles can thus be checked in continuous operation without traffic diversion. The system, which consists of a network of strain gauge-stamp measuring elements and signal processing electronics developed for this purpose, is more accurate than previously known solutions