

# Site Selection & Qualification for Weigh In Motion systems

Type 9968B32...

The Kistler Site Selection & Qualification service is intended for WIM systems with Kistler Data Loggers and Lineas WIM sensors. This service is intended to support customers finding and qualifying the locations that are best suitable to install a Kistler WIM system. The service is available worldwide.

The Kistler Site Selection & Qualification will:

- Define the best suitable location to install a WIM system
- Provide information about the achievable performance at the selected location, before installing the equipment
- Avoid future WIM performance issues due to road properties not meeting the requirements
- Extend the lifetime of the WIM site and reduce maintenance costs

## Description

The Site Selection & Qualification Service is intended for customers who want to benefit from Kistler's experience in the design and installation of WIM systems. The Site Selection & Qualification service consists of on-site measurements and off-site assessments. The results are based on detailed measurements of the properties of the road pavement and the use of modern and well accepted advanced assessment methods.

The optimal WIM site location is determined in a step by step approach.

1. In the first step a road section of up to 1.5 km will be selected based on a desk survey of the requirements for the intended application of the WIM system in combination with the local road and traffic conditions.
2. In the next step a certified Kistler Partner will perform detailed measurements of the pavement roughness (IRI) and rutting using a road surface profilometer. Assessment of this data will result in a further focus of the road section for the potential WIM site to around 150m using a Kistler unique assessment method.
3. The next step includes measurements by a falling weight deflectometer (FWD) to assess the structural characteristics of the pavement and on site according to a detailed measurement procedure. These measurements will also be performed by a certified Kistler Partner and will require a temporary road/lane closure. Based on the assessment of these measurements will result in a final selection of the best potential WIM site of around 1.0 m using a Kistler unique assessment method.



4. As a final step Kistler experts will provide recommendations for the best sensor layout, an appropriate calibration procedure and the achievable performance that may be expected under the local conditions.

The site selection service may also be used for existing WIM systems with disappointing measurement performance to find the source of the problems and make recommendations for improvements.

## Application

This service is highly recommended for high accuracy applications, such as direct enforcement, toll by weight and industrial weighing. For lower accuracy applications such as traffic data collection, the service can be limited to an off-site survey of the road section (step 1).

Note: The final system performance will also depend on the amount of WIM sensors installed and type of WIM electronics used.

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### Service content

Option	Kistler (and partner)	Customer
Organize measurement	X	
Road and Traffic Analysis, selection of 1.5 km road section	X	
Measurement of road surface properties	X	
Assessment of road surface, selection of 150 m road sections	X	
Organize road closure		X
Measurement of road structural properties	X	
Assessment of road structure, selection of WIM site up to 1.0 m	X	
Recommendations on installation spot, sensor layout and calibration	X	

### Reported results

The results will be documented in a road analysis report. The content of the report is as follows:

- Assessment of road conditions
- WIM site classification results
- Recommendation of WIM site installation location
- Achievable performance recommendation
- Layout recommendation
- Calibration process recommendation

### Additional Kistler WIM Services

#### Optional services

- Calibration
  - Calibration of Kistler WIM system
- Installation
  - Installation training for Kistler WIM sensors (this service can be combined with the calibration service)
- Warranty Extension
  - For WIM sensors and electronics
- System Installation & Commissioning
  - For WIM systems

#### Type

9961F19...  
9966W...  
9965F/E/X...  
9962F...

### Ordering key

9968B32-1-A

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