



Rail construction and crossings

Compaction control

Airport areas

Control of bearing capacity

Industrial floors

Bearing capacity  $\neq$  compaction!

Freight terminals  
Parking areas

Road construction

# BEARING CAPACITY IS IMPORTANT

Bearing capacity is an important parameter. Just as important as the compaction degree. PRIMA 100 is easy to use and provides first class measurements of the bearing capacity of base layers. An integrated high precision load cell measures the impact load of each individual measurement providing a correct bearing capacity result irrespective of soil type and material. PRIMA 100 measures on anything from clay to base gravel and crushed concrete. PRIMA 100 applies no radioactive sources. No special training is required for normal daily use of PRIMA 100. PRIMA 100 requires no special transport permits

# PRIMA 100 LWD



## PRIMA 100 FOR CONSTRUCTION QA AND MONITORING DURING CONSTRUCTION

### NATURAL SOIL AND EARTHWORK MATERIALS

Irrespective of whether the soil is to carry a large industrial floor, a road, a parking area or other structures, it is crucial to know the surface bearing capacity on top of relevant layers. Only with this knowledge is it possible to ensure a correct and optimum construction.

PRIMA100 utilises an integrated high precision load cell for the measurement of the impact load of each individual measurement providing a correct bearing capacity result irrespective of soil type and earthwork material. PRIMA100 can measure on anything from clay to base gravel and crushed concrete. Knowing the bearing capacity of the soil and foundation materials ensures that the required performance is achieved.

### EXCAVATIONS AND REHABILITATION OF ROAD LANES

**Compaction:** You can control the compaction degree of the excavated and reused often mixed materials. A correct compaction prevents lasting settlements and defects. Sweco has prescribed a measuring procedure for PRIMA 100 for qualitative compaction control of backfill.

**Bearing capacity:** Bearing capacity is as important as compaction. The stiffness of foundation layers is crucial in order to avoid cracking. Thus bearing capacity measurements are performed on old foundation layers immediately after the asphalt layer has been removed. The task is then to obtain the same bearing capacity with the new structure - or as close to as possible. In this way the new and the old asphalt will work uniformly and cracks can be minimised. At the end of the day you save money.

## PRIMA 100 FOR CONTROL DURING CONSTRUCTION

Apply PRIMA 100 for quality control in connection with construction of foundation layers for roads and other areas. Measuring the bearing capacity on top of the individual layer, you will identify insufficiencies in time and these can be remedied.

Or you may discover that the existing materials are better than expected allowing you to potentially reduce the volume of more expensive material.

Time spent measuring surface modulus can very save money and always ensure construction quality.

## PRIMA 100 FOR CONTROL IN CONNECTION WITH RAIL CONSTRUCTION

PRIMA100 is applied for control of natural soil and structure. When constructing foundation layers for track beds, the bearing capacity is essential. PRIMA100 controls the bearing capacity of soil as well as foundation layers under construction. PRIMA100 is applied on a routine basis when replacing crossings.

Compliance with the specific requirements to soil and base gravel are controlled. The work needs to be performed as quickly as possible because all road and rail traffic has been stopped. The in-situ reading of e.g. bearing capacity, impact, deflection, time, GPS coordinates and automatic storage of data ensure this.

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