

PRIMA 100 LWD - TOOL FOR UNBOUND LAYERS

PRIMA100 - The tool for unbound layers - The PRIMA100 LWD is the road builders' tool. It is the perfect method for bearing capacity control of subsoil and foundation layers – sub-base and base course. Proper control of these layers prior to final paving is essential in order to ensure the high and expected quality of your new road. If the bearing capacity of the subsoil or foundation layers fails, the performance of the road fails. You will soon experience rutting and cracking. The road becomes uncomfortable and will need repair much earlier than expected. Other typical applications for the PRIMA100 include measurements on e.g. foundations layers for truck terminals, industrial flooring and parking lots. One special application is control of load transfer on industrial flooring using three geophones

PRIMA 100 LWD







PRIMA 100 reads out your results at once. Results are stored automatically together with the GPS position. PRIMA100 applies wireless technology for data collection and is one-man operated

UNIQUE PRIMA 100 FEATURES

Having the results from the PRIMA 100 allows you to simply move on to the next step. Alternatively you have the chance of correcting failures at an early stage. And it is much cheaper to correct at an early stage than to repair at a late stage.

MEASURING APPLIED STRESS IS IMPORTANT

The PRIMA 100 is the only LWD utilising the technique from the big traditional FWDs with an integrated load cell. Consequently the PRIMA 100 registers the variation of the applied stress transferred to different (sub)soils using the same weight drop height. A variation that may be substantial and therefore has to be taken into consideration to achieve reliable E0 results and hence to make the correct conclusions!

TO UNDERSTAND THIS IMAGINE:

Place a thick wooden plate on your floor and alongside that place your mattress. Hit the wooden plate and the mattress with your hand! Besides the fact that you hurt your hand when you hit the wooden plate, you will also intuitively understand the difference in energy transfer and hence the difference in applied stress. Now, if you imagine that the wooden plate is a stiff soil and the mattress is a weak soil, you realise that you always need to measure the applied stress.

This is the reason why this LWD generates reliable results.

DATA PRESENTATION/DOCUMENTATION

After a measuring campaign or any time during a campaign, data can be seen on the display. Either each individual drop or the entire series of measuring points. Data can be transferred to Excel or Word. This allows printing of data for further interpretation or direct presentation in a report as documentation towards e.g. a client.

THE EQUIPMENT

is delivered with a 100 mm and 300 mm diameter loading plate, a 10 kg weight, integrated load cell and electronic box and a centre-mounted geophone, a CAT SmartPhone with a data collection program installed is required.

The PRIMA 100 method is quicker than the isotope measuring method and requires no reference measurements

The equipment has no radioactive sources requiring safety courses

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Extension to three geophones is possible.

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