



Lift height measurement in bridge maintenance work

As well as asphalt work, the supports on bridges also have to be replaced from time to time. These supports bear the full weight of the bridge superstructure and must therefore withstand the highest loads and absorb the vibrations and elongations of the bridge. The properties of the elastomer bridge bearings can change over many years, which is why they sometimes need to be replaced.

For this type of maintenance work, the bridge piers are relieved of any load by using heavy-duty hydraulic jacks.

For this, the bridge is lifted by 10 - 15mm. After the maintenance work has been completed, the superstructure is lowered onto the new supports. A perfectly synchronised lifting process is critical when lifting bridges in order that no torsional stresses can damage the bridge. A heavy-duty jack is used at each corner of the bridge, with each one connected via a control system. Draw-wire sensors are used for each jack, which notify the current lift height to the controller.

A major manufacturer of heavy-duty jacks uses Micro-Epsilon's P60 wireSENSORS for this measurement task, due to its robust design and outstanding price/performance ratio.

Advantages

- Simplified mounting
- Good price/performance ratio
- Very robust sensors
- Enables synchronised lifting

