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# Case study
# *Monitoring solution for car parks*
## *(New construction)*

August 2014

## New car park project

**Client:**
Municipal Building Authority

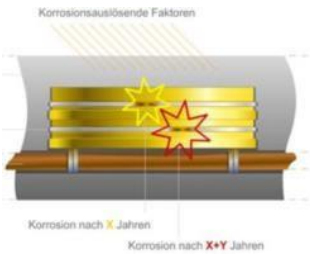
**Initial situation:**

As a result of high repair costs for existing car parks, the city administration decided to install sensors for moisture and corrosion in the new building. The reason for this is the early detection of damage and the monitoring of the building up to the VOB acceptance and beyond.
Due to the special construction method (built-over roof of the underground car park), particular importance was attached to moisture monitoring, as the sealing of the roof surface is not accessible. Therefore, moisture sensors were to be installed in the low drainage point of the car park ceiling and in the drainage joints of the entrance ramps.

**Solution:**

Installation of corrosion sensors (standard version) in the
Supports of the parking decks as well as at the most frequented parking spaces.

corroDec 2G




Installation of humidity sensors (special design) in the drainage area of the four ceiling tiles
(40m x 20m x 0.5m) - reading from the bottom of the concrete slabs.

corroDec 2G

The data was read out manually using a handheld reader.
Alternatively, a fully automatic remote readout is also available.

**Added value:**

- ✓ Uncomplicated visualisation of the building condition
- ✓ Significant cost reduction in subsequent concrete repair due to early detection of damage
- ✓ Sustainable safeguarding of investments
- ✓ Proof of construction quality
- ✓ Differentiated repair in case of OS system failure
- ✓ Targeted control of the inspection intervals by querying the humidity values
- ✓ Reduced blocking times for subsequent repairs