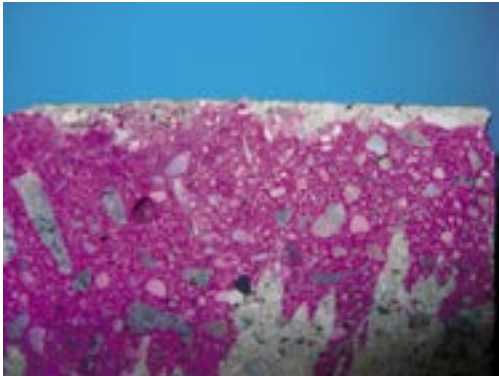


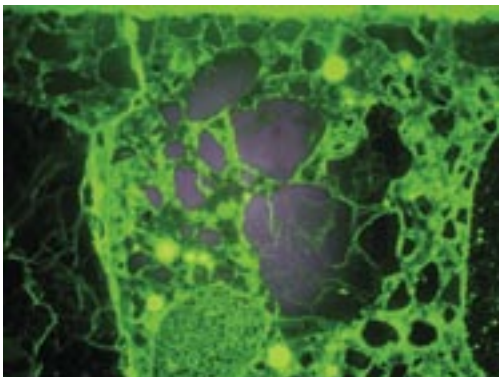
Petrographic Analysis

Macro and micro analysis on thin sections and plane sections for determination of:

- Composition of material
- Physical damage analysis (cracks etc.)
- Chemical deterioration (ASR, acid attack etc.)
- Quality control



Macro analysis on cross section of core treated with phenolphthalein.



Fluorescence micro analysis showing crack perpendicular to the surface.



Red sandstone column in Istanbul with cracks due to low bending-tensile strength.

All services and equipment are certified by DNV (Det Norske Veritas) according to ISO 9001.

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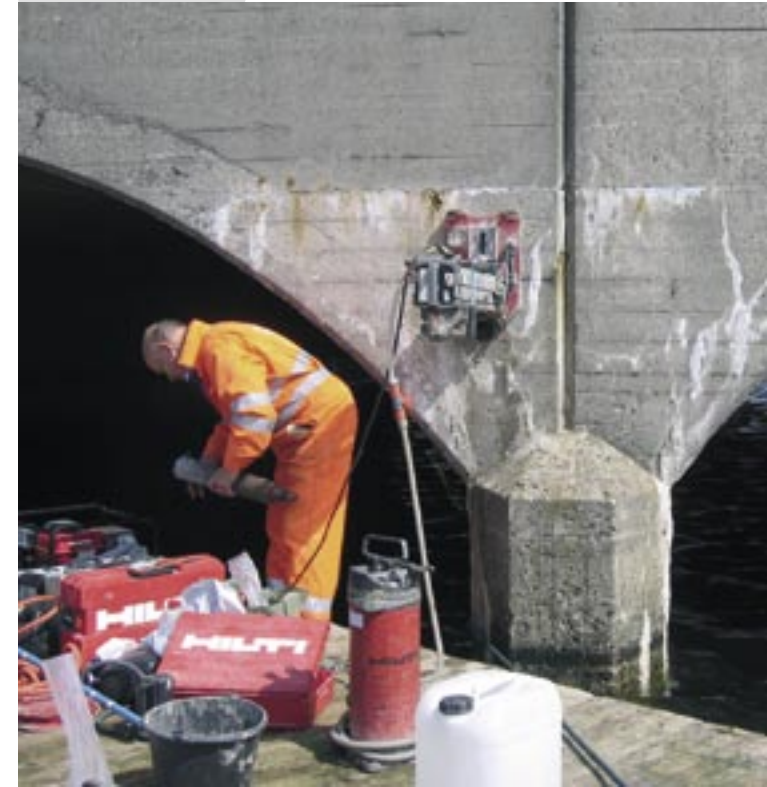
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COWI is a leading northern European consulting group. We provide state-of-the-art services within the fields of engineering, environmental science and economics with due consideration for the environment and society. COWI is a leader within its fields because COWI's 3300 employees are leaders within theirs.

Condition Surveys



COWI specialists are mastering all necessary *state-of-the-art* equipment for conducting highly skilled investigations and analysis on-site and in the laboratory.

Impulse Response

Impulse Response testing for determination of:

- Voiding beneath concrete slabs in highways and floors
- Anchoring of panels
- Delaminations and honeycombing in bridge decks, slabs, walls and large structures such as dams, chimney stacks and silos
- Debonding of asphalt, concrete overlays and patches from concrete substrates
- Foundation problems at runways



Tunnel wall testing.



Debonding of asphalt.



Honeycombing.

Corrosion Rate



Corrosion Rate determination for:

- Service life estimation
- Evaluating of inhibitors performance, and electrochemical methods e.g. removal of chlorides
- Condition surveys of structures in wet environment where the classic potential mapping is difficult to evaluate
- Monitoring reinforced concrete structures for corrosion activity



Localised corrosion of red areas.

Natural Rocks

There is an increasing demand for investigations of natural rocks concerning:

- New structures
- Restoring of old buildings
- Determination of reasons for discoloring of surfaces, spalling and crack formation



Spalling of granite surface due to rust formation.



Cracked granite floor due to low strength granite and poor grouting.