

## Localisation of coating damage on buried pipelines using an electrochemical measuring method

This paper presents a summary of project results from a research project into dig-free methods of assessing the condition of buried water and district heating pipelines in built-up areas. Stable access to clean water, wastewater and district heating is a necessity for a sustainable and attractive city. Today, there are almost no methods to assess the status of piping systems without digging up the pipes at great costs and disturbances. Dig-free methods and new technical solutions have long been asked for by owners of piping systems in Sweden as well as globally. In this project five new dig-free methods for status assessment of piping systems have been evaluated for efficiency of localizing coating damages on buried steel pipelines. One method was shown to be effective for finding coating damages and areas of potential corrosion damage. This method based on electrochemical methods (similar to DCVG) is new in the district heating and water distribution sector in Sweden and could potentially provide large cost savings by reducing the number of excavations required to locate and maintain coating damages.

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