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| Investigating industrial corrosion with electrochemistry | |
| Best practice to simulate realistic pipe conditions using a Rotating Cylinder Electrode | |
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Herisau, 1 May 2020.  
Electrochemical measurements utilizing a Rotating Cylinder Electrode (RCE) are widely used in industrial corrosion studies when simulation of realistic pipe conditions are necessary in a laboratory environment. This white paper allows further insight into the particularities and parameters that govern the electrochemical measurements, in particular measurements performed in turbulent flow conditions, and shows a complete picture of the best practice use of this technique.

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| To further understand how an RCE experiment can model the corrosion in a pipeline, it also gives an overview of the terms and definitions, which are used to characterize the properties of fluids, and pipes as well as the different mass transport phenomena simulated in such experiments. Typical experiments using the RCE are described in detail and the resulting data is analyzed in detail.  The present White Paper demonstrates that results obtained by using electrochemical methods are more accurate, and the measurements are much faster when compared with the classical corrosion investigation methods (e.g., salt spraychamber methods), leading to both improved efficiency and productivity of any corrosion measurement laboratory. | Investigating industrial corrosion using electrochemistry |

The present White Paper

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Contact

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| Roman Moser  Marketing Communication  Metrohm AG Herisau  +41 71 353 86 68 [roman.moser@metrohm.com](mailto:roman.moser@metrohm.com) |  |

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