MICROBIAL INFLUENCE CORROSION (MIC)

In the Fight Against MIC, Proactive Testing Means Cost Savings and Safety!

Mett-Bio

ISO IEC 17025:2017 Accredited

www.mett-bio.com

"Protect Your Assets from Invisible Corrosion with Our **MIC Testing** Solutions"

Why mitigate MIC ?

Protect your assets from unseen threats with our comprehensive Microbiologically Influenced Corrosion (MIC) testing services. MIC occurs when microorganisms such as sulfate-reducing prokaryotes (SRP), acid-producing bacteria (APB), metal-oxidizing bacteria, and methanogens form biofilms on metal surfaces, accelerating corrosion processes. Our specialized testing identifies these harmful microbes and assesses their impact on your equipment. Using advanced analytical techniques, we provide detailed reports and actionable insights to help you implement effective mitigation strategies. Ensure the longevity and efficiency of your systems by detecting and addressing MIC before it leads to costly repairs or downtime.

EARLY DETECTION AND PREVENTION

Regular monitoring allows for the early identification of corrosive microorganisms, enabling timely intervention before significant damage occurs. This proactive approach minimizes the risk of catastrophic failures and extends asset life .

OPTIMIZED MAINTENANCE STRATEGIES

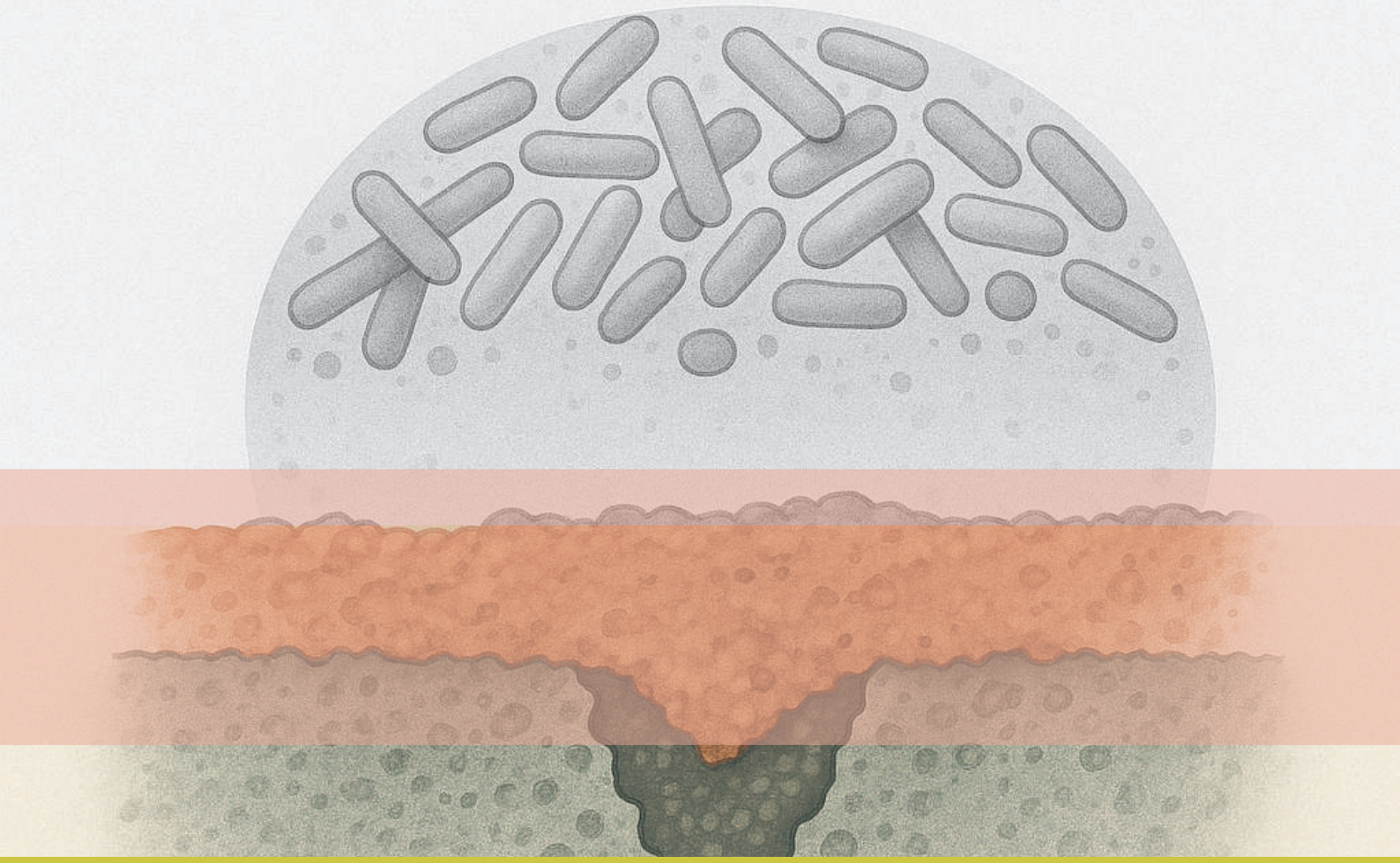
By understanding the specific microbial communities present, organizations can tailor their maintenance and treatment protocols. This includes selecting appropriate biocides or adjusting environmental conditions to inhibit microbial growth, ultimately enhancing system reliability.

COST EFFICIENCY

Detecting MIC early can lead to substantial cost savings by reducing downtime, preventing extensive repairs, and avoiding the replacement of corroded components. Implementing targeted mitigation strategies based on microbial characterization ensures resources are allocated effectively.

ENHANCED SAFETY

In industries like oil and gas, water treatment, and marine transportation, MIC can pose safety hazards due to potential leaks or structural failures. Effective monitoring helps maintain operational safety standards by ensuring that infrastructure remains intact.



We offer services to evaluate microbiologically influenced corrosion (MIC) on materials used in the oil and gas industry, aiding in the identification of MIC risks and assessing how different microorganisms affect materials in harsh environments to support targeted corrosion prevention strategies. Additionally, we conduct field monitoring of microbial activity for on-site analysis, enabling clients to detect and manage MIC risks in real time. With a structured approach, we ensure accurate data collection to guide timely actions and reduce corrosion-related failures.

Our services also include testing the effectiveness of biocides in controlling microbial activity a key step in selecting and optimizing biocides for various industrial systems to ensure robust MIC control. This includes evaluating different biocide formulations, helping industries protect system integrity by effectively mitigating MIC risks.

Characterizing and detecting microbiologically influenced corrosion (MIC) offers several advantages across various applications, particularly in industries where metal integrity is critical.


OIL & GAS
MONITORING PIPELINES AND STORAGE TANKS FOR MIC TO PREVENT LEAKS AND ENSURE SAFE OPERATIONS
TYPICAL INDUSTRIAL APPLICATIONS
MARINE ENVIRONMENTS
PROTECTING SHIPS AND OFFSHORE STRUCTURES FROM CORROSION CAUSED BY MARINE MICROORGANISMS.
WATER TREATMENT FACILITIES
ASSESSING CORROSION IN WATER DISTRIBUTION SYSTEMS TO MAINTAIN WATER QUALITY AND INFRASTRUCTURE INTEGRITY.