

a few words from our clients

Joseph Bishop, Facilities Director, Jackson, WY:

"We were anticipating an estimated \$2 - \$3 million cost to relocate our entire museum and rebuild the fire suppression system due to MIC. Working closely with HullVac, a plan was formulated and the Arid Pipe Dehydration™ system was installed and operated. In the five years since initial treatment, air and water leakage due to MIC has been eliminated."

"Recently our system became flooded and required another dry-out. After manually draining the sprinkler system, the Arid Pipe Dehydration™ system removed an additional 151 gallons of trapped water from headers and pendants."

"Simply stated, the HullVac Arid Pipe Dehydration™ system is a proven method and the only one that I would personally recommend."

Cameron M. Taylor CM, Chief Engineer, Fort Worth, TX:

"We are extremely pleased with the Arid Pipe Dehydration™ system. To date it has dehydrated all nine of the museum's pre-action sprinkler manifold systems, and has performed beyond our expectation. Random inspections of the piping after dehydration revealed no standing water or signs of moisture within the trunks, dead legs, and throughout the entire manifold."

"I highly recommend the Arid Pipe Dehydration System to any facility seeking an advanced level of MIC prevention for their fire suppression systems. HullVac Corporation has developed a state-of-the-art system that consistently achieves this goal with relative ease."

HullVac supplies future MIC technology today: Currently microbiologically influenced corrosion remediation and prevention methods are chemically based, mechanically intensive, and not always reliable. With HullVac's advanced Arid Pipe Dehydration™ system, remediation and prevention are now eco-friendly, simple, and dependable.

Your need drives our solutions: Museum administrators facing a costly MIC remediation shutdown contacted HullVac. Motivated by their need, we created a solution able to lower cost, avoid a shutdown and eliminate their MIC threat. The Arid Pipe Dehydration™ system is that solution.

If your need is similar, contact HullVac or your representative today.

Your Local Representative is:

Cadence Sales Group LLC

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KEEP IT DRY...

KEEP IT CORROSION FREE!



Pipe Dehydration Technology

**State of the Art
Control of Microbiological
Influenced Corrosion in Fire
Sprinkler Systems**



eco-friendly

HullVac pump corporation

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WIPE OUT MICROBIOLOGICALLY INFLUENCED CORROSION (MIC)



Pipe Dehydration Technology

SOLVES MIC PROBLEMS

What are the many benefits of the **Arid™ Pipe Dehydration Technology?**

- Arid™ addresses MIC from a preventive maintenance standpoint
- Avoid costly repairs and disruption
- Single connection point to the sprinkler system
- Minimal disruption during treatment
- Sprinkler system remains on duty during the Dehydration process
- Minimal operator attention required

Arid™ is

eco-friendly and safe...

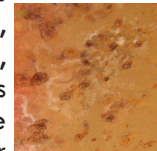
- Eliminates need for toxic biocides
- Safe for pipes and systems
- Safe for staff and visitors

1. What is "Microbiological Influenced Corrosion"?

MIC is a mode of corrosion initiated by microbes that react with metallic materials and cause their deterioration.

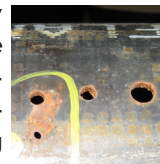
2. What causes MIC?

MIC is caused by bacterial microbes in combination with four other conditions: metals, nutrients, water, and oxygen. Some types of bacteria need only very small amounts of oxygen. These bacteria are present in the environment and piping materials. When all of these environmental conditions are present, microbial growth will occur. As the nutrients in the system are consumed, the microbes become dormant. When nutrients and oxygen are replenished, the microbial growth resumes. Sources of this replenishment include: flow testing, draining and refilling of systems, addition of water to replenish losses from leaks or maintenance, or the periodic filling of dry fire sprinkler systems for testing.



3. What happens if MIC is present in pipes?

As MIC bacteria grow, consumption of the metal in the pipe occurs. Pitting is a likely effect and the walls of the pipe may be penetrated. The flow characteristics of the pipes are degraded and loose scale or rust plug sprinklers and valves.



4. Why should testing for MIC be done?

NFPA 25 requires an obstruction inspection every 5 years or when there is evidence of rust, foreign debris, untreated water or pin-hole leaks. Further, it requires that if any tubercles or slimes are observed, they shall be tested for indications of MIC. (NFPA 25-2002 Section 13.2.1.2)

5. If the building has a dry sprinkler system, can there be a problem with MIC?

In many cases, MIC has been found to have progressed more rapidly in "dry" systems than in wet systems. After a system is flushed or used, stagnant water remains in the fitting edges, drops, and in slight dips in horizontal lengths of pipes. MIC bacteria tend to find more favorable growth conditions in oxygenated stagnant water.



**KEEP IT DRY...
KEEP IT CORROSION
FREE!**