

## Moisture Detection Imaging™: Acuren's Latest Noninvasive CUI Testing Method For The Ammonia Industry



Acuren introduces Moisture Detection Imaging (MDI)<sup>™</sup>, an addition to our industry leading tandem of noninvasive testing methods for the Ammonia Industry. MDI<sup>™</sup> paired with Acuren's 5-year Mechanical Integrity (MI) inspection of ammonia refrigeration systems provides the best understanding of pipe wall condition achievable.

Combating Corrosion Under Insulation (CUI) is the top priority of any 5-year MI inspection. Moisture inside of the insulation, against the pipe surface will cause loss of pipe wall thickness due to corrosion. The  $MDI^{\mathsf{TM}}$  tool can best identify the location of moisture to help pinpoint the location of further wall thickness assessment.

# The only CUI tool that will identify if moisture is, or is not, present without having to remove insulation.

Detecting moisture is one way to attack the root cause of corrosion versus focusing on symptoms. MDI™ is part of a comprehensive CUI inspection program providing information that enables operators and owners to make decisions and prioritize where to focus more targeted inspection methods.



### Acuren offers the most comprehensive pipe wall thickness tools in the ammonia refrigeration industry.



- Real Time Radiography (RTR) is a screening tool that sees through the jacketing and insulation to show the technicians the pipe surface. RTR helps identify abnormalities that could be corrosion and wall loss. RTR offers increased productivity, hundreds of feet of pipe system can be screened daily.
- Moisture Detection Imaging (MDI)<sup>™</sup> is a screening tool that helps pinpoint a saturated point of the system. Any time carbon steel pipe is in moisture, corrosion and wall loss can happen. These spots will be points of interest for Digital Radiography to measure.
- Digital Radiography (DR) offers a clear x-ray cross section image that can measure pipe to the thousandths of an inch. This will then determine the percentage of wall loss that will be used to pass or fail the pipe based on your company's wall loss acceptance criteria.

#### **WHY ACUREN?**

- Robust CUI inspection programs with unparalleled technology, of which MDI™ is a component
- Single turnkey vendor with 90+ locations to execute comprehensive CUI programs:
  - rope access
  - industrial services trades including insulation, pipefitting, welding
  - mature company with investments in technology
- insulation removal and re-insulation
- full suite of NDT technologies
- engineering expertise and management engagement

#### MDI PRODUCTIVITY FACTS

- Rapid acquisition rate
- Acuren field engineering services with composite crew mixing available
- Detailed reporting provided within 24 hours of service
- Extremely high detectability of moisture and H₂O
- Ingress, qualitative precision positioning and high data and measurement integrity

#### **Examples:**

- Straight Run-600m/1800ft per 12-hour shift
- Complex Piping 300m/900ft per shift
- Complex Piping with RAIS 200m/600ft per shift
- Real time data acquisition, all data stored for client review
- Scan large areas quickly



CONTACT OUR MDI™ EXPERTS TODAY

1-800-218-7450



