



The Practical Application of Tracer Gas Leak Detection for Air Cooled Condensers

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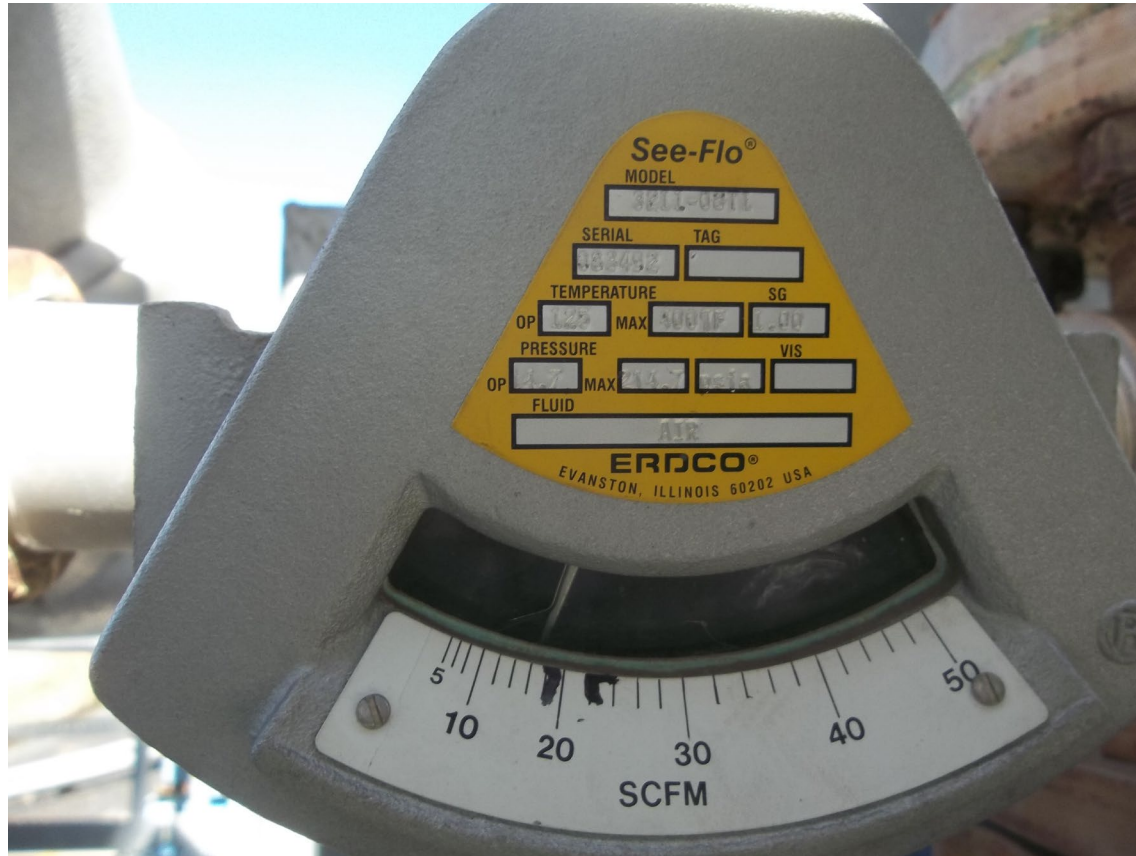
Tracer Gas Leak Detection

Focusing On:

- Air Removal-Sampling for leak detection
- Leak sources below ACC
- ACC Leaks and Methodology



Off-Gas Measurement





Off-Gas Measurement





Off-Gas Measurement





Analyzer

Analyzer Set-Up in Vehicle





SJAE





Jet Isolation Valve





Jet Isolation Valve





Leakage Back Through Hogger Exhaust when Isolated





Leak Under Insulation





Insulation Removed





Leak/Flow Erosion





Stress Crack on Weld





Gland Steam Trap Leak





Gland Steam Trap Leak





Gland Seal Drain / Trap





ACC Exhaust Duct Manway Leak



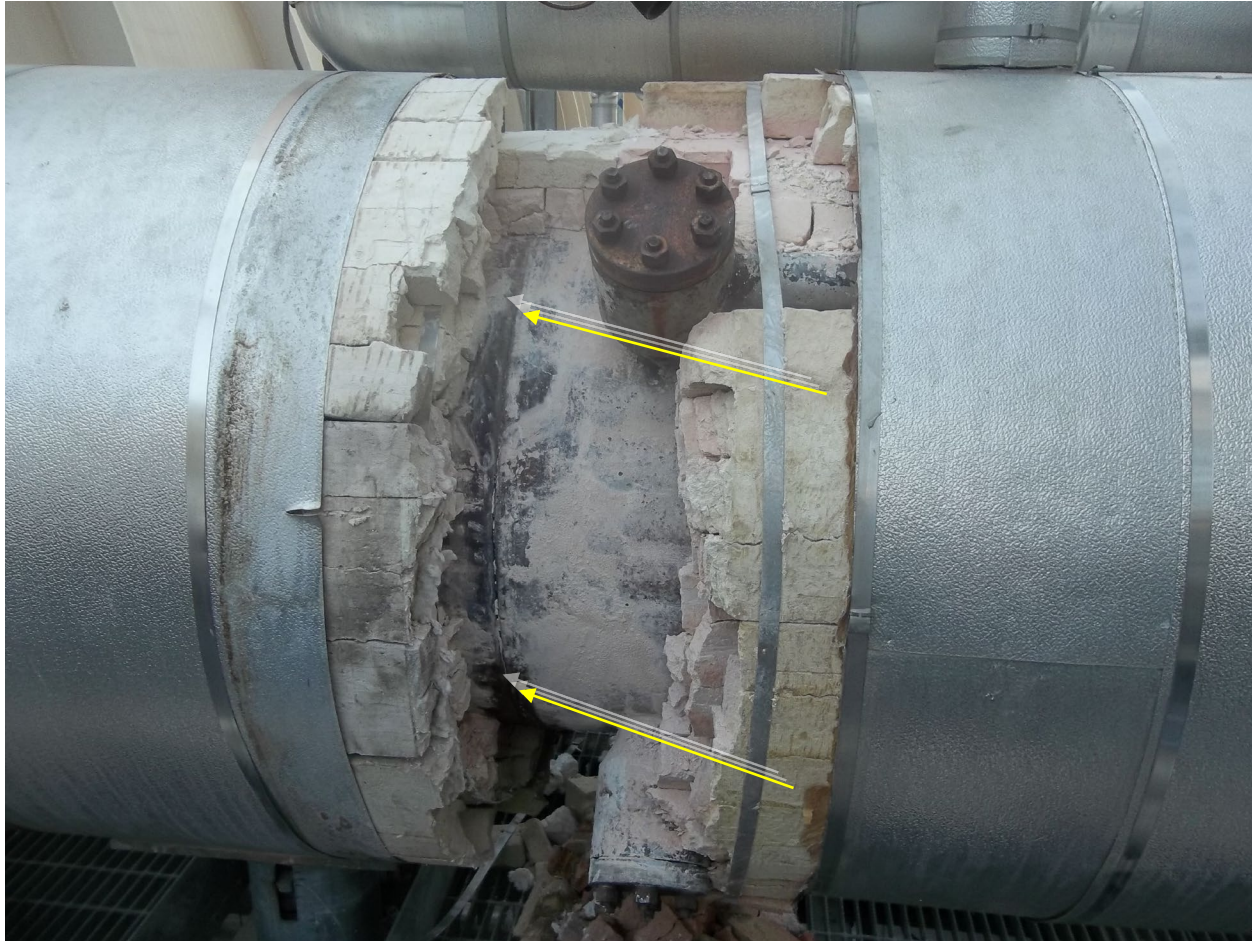


WOW!





Circumferential Crack





Exhaust Riser Bellows Leak





Exhaust Duct Riser Leak





Lifts





Rupture Discs Leaking





Dissolved O2 Leak





D.O. Leak





D.O. Leak





Schwimmkondensatableiter





ACC





Large ACC





Small leak on duct





1/4" Crack





Extensions





PVC Extension





Top Welds, Ducts, Defleg.





Rupture Disc Leak





Leak on Duct





Duct Weld Leak





Duct Isolation Valve





Loose Bolting





Lower Bundle Leak





Lower Bundle Leak





Expanding Foam





THE DEPHLEGMATOR

A dephlegmator is a device arranged for the partial condensation of a multicomponent vapor stream. The vapor stream flows vertically upwards and the condensate runs back down under the influence of gravity.

USED A LOT IN STILLS!



First Tube Weld Leaks on Either Side of Bundle Welds





Tube Deformation





Tube Deformation





Sleeve Repair



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Stress Cracking After Temporary Repairs





6" Hairline Crack





Tube Leaks Above and Below





Base Weld Leaks at bundle weld





Pipeline





Debris





Questions?

