Ultrasound Technology for Microscopic Leak Detection

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SF6 Leak Detection Methods

- Low gas pressure alarm (gas call)
- Soapy solution
- SF6 leak detectors (Dilo)
- Bag method
- Flir SF6 camera
- UE Ultraprobe 10,000

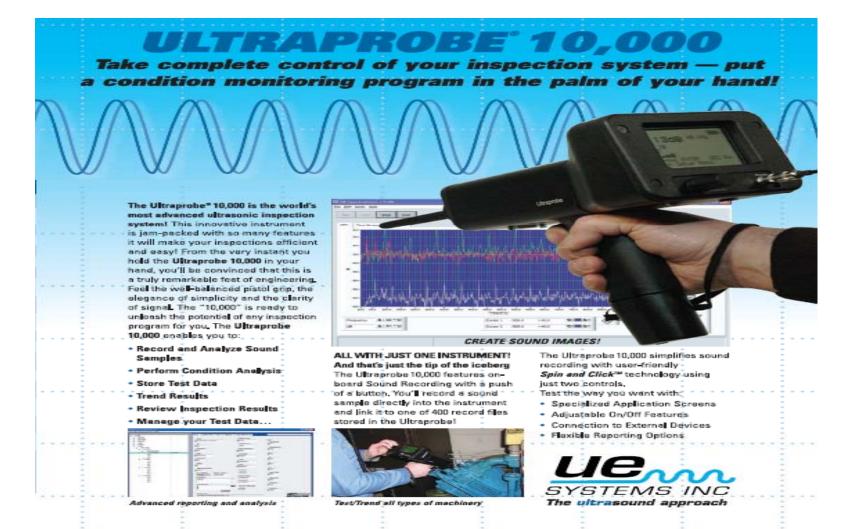


GIS Bus (Leak Detection Challenges)

- Indoor station
- Ambient air temperature is similar to enclosure temperature
- Large volume leaks
- Difficult to detect with SF6 camera



UE Ultraprobe 10,000



UE Ultraprobe at GIS Substation





UE Ultraprobe 10,000 Kit





Leaks Identified at Con Edison

- Tubing / Fitting
 - Cabinets
 - Bus piping
- Flanges
- Weld defects
- Pinholes in GIS cans
- Linkage seals



Conclusion

- UE Ultraprobe is one method of leak detection
- Useful in Indoor applications
- Useful on GIS and other dead tank equipment
- Must use in close proximity to pinpoint leak
- Off-the-shelf equipment
- Helped to decrease emissions at Con Edison

Questions

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