



Industrial Wireless Enabling Safety

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Case Studies

Honeywell

- *Time Critical Perimeter Monitoring*
- *Tank Farm Safety Compliance*

Honeywell



Case Study 1 Perimeter Monitoring – Time Critical

LNG Facility in Middle East - Brownfield

Challenges

- Alarming system for detection of gas leaks without extensive cabling.
- Meet 3 seconds alarm requirement.

Solution

- FDAP based ISA100 Wireless network with XYR6000 Universal Transmitters and solar power panels.
- Fully redundant system end to end.

Results

- Improved site safety system within budget.
- 3 seconds alarming requirement met.
- Compliance to government regulations for HSE.





Remote antenna

Honeywell XYR 6000
Universal I/O wireless
transmitter featuring
both DI and DO



“...requirement for the end to end cycle of the moment of detection of fire and gas until the moment of activation of the sounders and beacons, as well as *with absence of line power.*”

ISA100
Wireless
COMPLIANT

Project FAT Results

- FAT successfully completed March 2014.
- The wireless solution consistently delivered an activation time of 2.9 seconds with the horns and beacons activating simultaneously.
- The system met and exceeded the stringent customer requirement of 3 seconds.
- The customer put the system through rigorous tests that were beyond the scope of the FAT, to display redundancy, fail-over and network stability.
- The wireless system withstood all their tests and attempts to show flaws and displayed its resilience and ruggedness.
- The system has been installed and commissioned at the customer site in June 2014

Case Study 2

Meeting Safety Compliance

Tank Farms across India - Brownfield

Challenges

- Secondary level tank gauging to meet safety compliance - M B Lal recommendations
- 49 locations spread out around the country
- Require end to end solution within budget

Solution

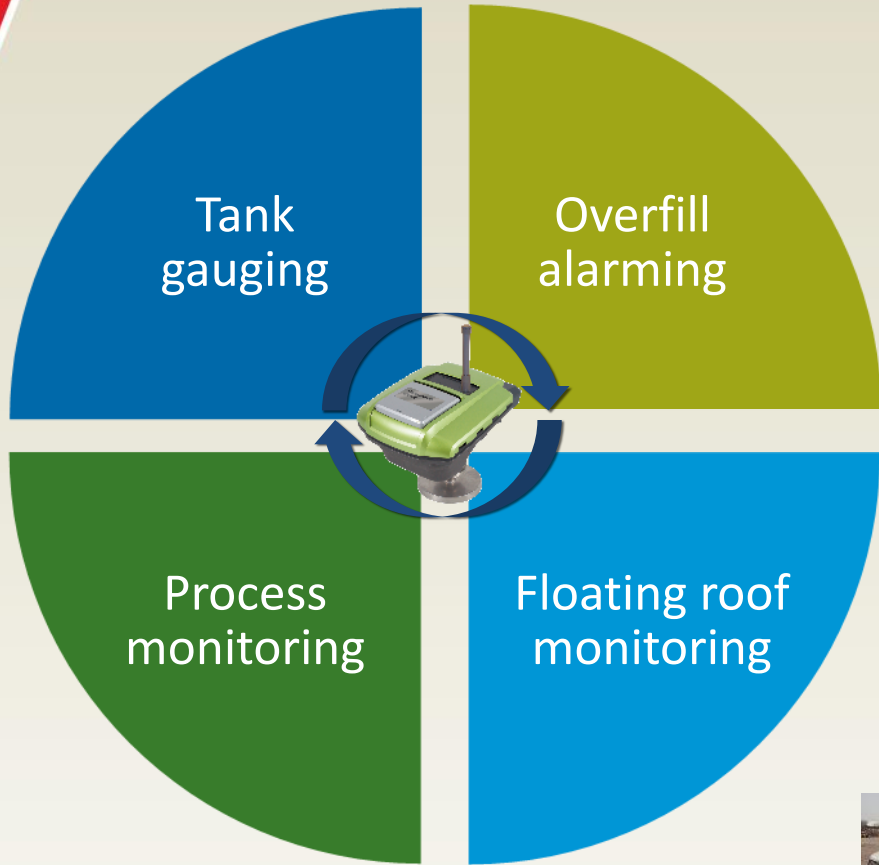
- Honeywell Enraf FlexLine ISA 100 Wireless with OneWireless Network using FDAPs
- Total 90 FDAPs, 98 WDMs and over 550 Enraf FlexLine ISA100 Wireless radar gauges being deployed across the 49 locations

Results

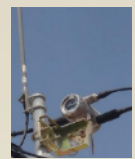
- Compliance within budget and project schedule
- Consistent deployment across all sites
- Comprehensive solution to meet requirement



OneWireless Terminal Solution



Gas Leak Monitoring



Safety Shower Monitoring



Vibration Monitoring



Valve Position Monitoring



Personnel Safety Monitoring



Mobile Applications



Remote Area & Perimeter Video Monitoring



Wireless applications beyond tank gauging



Case Studies Summary

Case Study 1: Solar powered gas leak detection. With ISA100 Wireless, Honeywell was able to meet the “near real-time” alarm requirement of 3 sec to comply with government regulations.

Case Study 2: Improve safety with secondary tank gauging. Multiple Brownfield locations, difficult to wire. ISA100 Wireless enables Honeywell Enraf to communicate wirelessly.

With ISA100 Wireless Standard, Honeywell is able to design and integrate a wide range of devices including other wireless manufacturers devices.



Questions?

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