

Honeywell | Connected Industrial

TRL/2 MIGRATION SOLUTIONS

Honeywell's Enraf Tank Gauging



Freedom to Choose the Best

Obsolete tank gauges and inventory systems are a common challenge. Poor performance or failures, challenges sourcing spares and lack of experienced maintenance can undermine efficiency, compliance efforts and safety.

Honeywell's Enraf automatic tank gauges and communication interface unit (CIU) offer a cost effective solution to replace obsolete, underperforming gauges and systems without disruption to the process or existing infrastructure.

The simplest route to high performance

Honeywell's Enraf SmartRadar FlexLine easily fit existing gauges' TRL/2 communication field bus, regardless of the gauge's manufacturer. With no need to replace the TRL/2 cabling, they also seamlessly integrate with the existing control room interfaces.

Honeywell's Enraf Tank Farm Gateway CIU 888 can quickly and easily replace the existing vendor's field communication units, and can integrate to any TRL/2 protocol gauges in field, making the TRL/2 migration solution as complete.

A phased approach to migration

Tank farm operators and others with old, obsolete gauging systems face a wide variety of potential problems:

- Poor reliability, resulting in unplanned maintenance.
- High costs and difficulty sourcing parts
- Inadequate support from existing vendors
- Exorbitant costs for expansion through their existing vendor
- Increased training costs to maintain outdated instruments
- Hardware incompatibility with outdated operating systems needed by existing inventory software.

Across a single facility, operators may face a range of different challenges from the obsolete gauges depending on their precise application and state (Figure 1). With pressure on costs, replacing all these in a single project may be prohibitive.

Enraf tank gauging TRL/2 migration solution enables users' to take a phased approach to migration. Addressing critical, compliance, safety and other immediate requirements first, storage terminals can plan migration of the remaining underperforming gauges over a longer period to control costs.

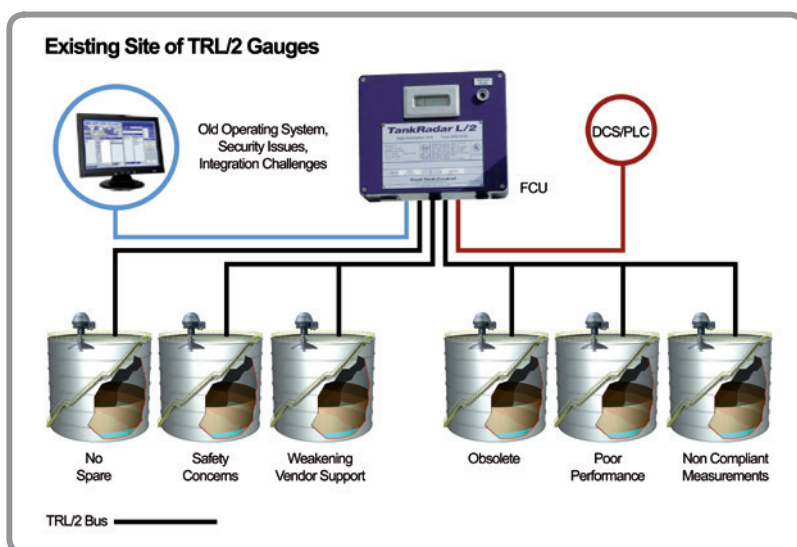


Figure 1: Obsolescence gives rise to a range of problems

Simple, Easy and Seamless

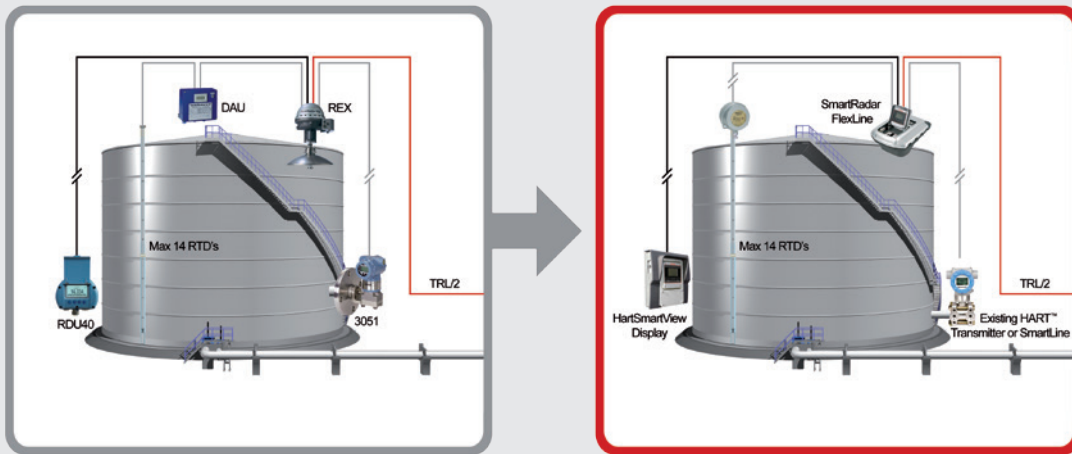


Figure 2: Swift and seamless migration

Low cost, high performance

Honeywell's Enraf tank gauges offer market-leading performance to reduce CAPEX and operational budgets. Providing accurate reconciliation of inventories, enhanced safety and lower maintenance spending, they enable terminal operators to cut costs, raise efficiency and extend asset life.

Enraf SmartRadar FlexLine comes with different antennas types ready to fit in all standard sizes of openings and stilling wells. Providing accuracies of ± 0.4 mm (1/64") compliant to the latest inventory and custody transfer standards, it also meets stringent updated safety standards. TRL/2 is a selectable communication option in all SmartRadar FlexLine gauges.

Migrating the control room

Lack of support for hardware, old operating systems and changing tank farm requirements can lead terminal operators to seek to replace control room hardware, such as the field communication unit (FCU), and tank management software and tank

farm computer. Like gauge replacements, migrations in the control room can be prioritized for immediate replacement or as part of a phased approach, depending on need.

In both case, Honeywell's Enraf Tank farm gateway CIU 888 meets all application needs. Integrating with existing field bus such as TRL/2, Modbus and BPM, the Enraf CIU 888 provides unrivalled flexibility. It allows terminal operators to migrate to a CIU and the Enraf Entis Tank Inventory HMI without changing the field bus and while keeping communications with existing gauges.

With a planned migration to Enraf CIU 888 and Entis, tank farms can reduce dependencies on existing vendors of obsolete devices and system. It opens the tank storage site to the latest measurement technology (Refer fig. 3) without compromising security of tank inventory data. Not all tank gauging application same and opening up site using Enraf tank farm gateway CIU888 helps deployment of other measurement technologies such as Servo tank level measurement.

Painless migration

- No rip-and-replace
- Use existing power and signal TRL/2 cabling
- No hot work required
- Keep existing accessories like temperature sensors and HART™ based pressure transmitters
- Seamlessly integrate with existing field communication units through the proprietary protocol such as TRL/2, and also serial RS232 or RS485 Modbus RTU.
- Minimal shutdown for installation and commissioning.



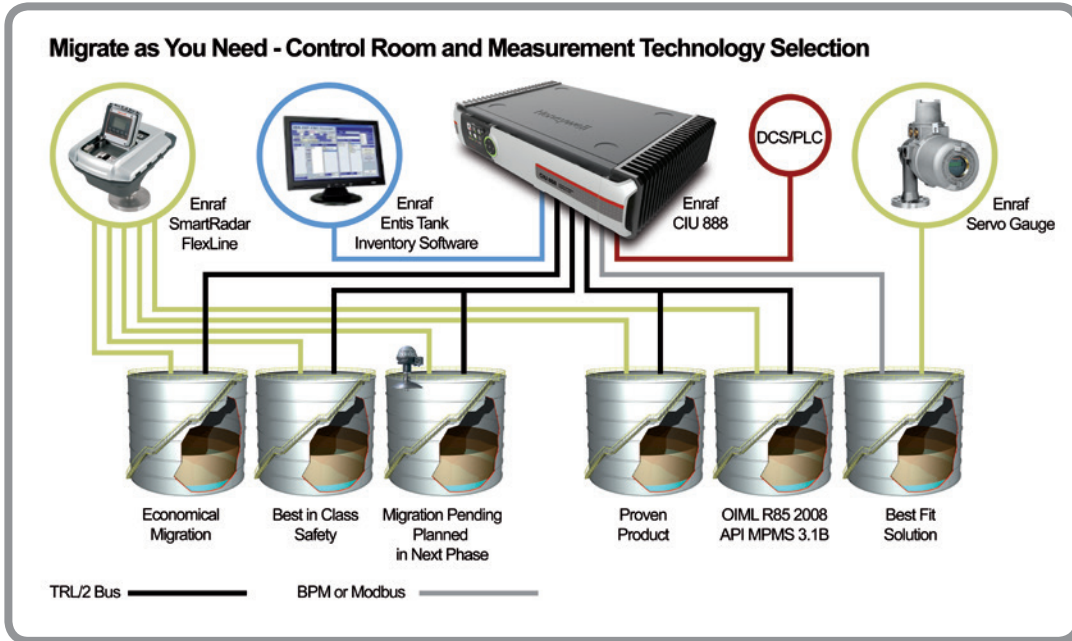


Figure 3: Opening up your site to new possibilities

Unique features of Honeywell's Enraf SmartRadar FlexLine:

- Performance as per w&m requirements even with smaller nozzles of 6" or 8"
- Suitable for stilling well size up to 24"
- Best in class diagnostic cycle time of <3 msec
- Performs even in stilling wells with reduced size opening
- Unmatched safety features allow maximum utilization of tank storage capacity
- Smaller beam angle allows nozzle closer to tank shell

It's great when you don't just emulate

Honeywell's Enraf TRL/2 migration solutions are so easy to deploy because they don't rely on emulating the protocols of obsolete gauges, but still use existing infrastructure for maintenance of replaced gauging system and to communicate accurate measurement data.

Without relying on emulation, migrating users don't have to worry about requirements such as electrical compatibility between the new gauge and the existing bus or having software compatible with the existing Tank Master system. Enraf TRL/2 migration solutions help saving shutdown cost and time, by giving possibility of remote configuration via the TRL/2 cabling without the need of redirecting wires in control room, sub-station or at the gauge. This is un-matched in tank gauging solutions. It's just another way Honeywell is leading the way in tank gauging, helping you run a safer, more efficient, more reliable and profitable operation.

Talk to us today to plan your cost-effective route to a better tank gauging and inventory system.

For more information

To learn more about Honeywell, visit www.honeywellprocess.com or contact your Honeywell account manager.

Honeywell Process Solutions

1250 West Sam Houston Parkway South
Houston, TX 77042

Honeywell House, Arlington Business Park
Bracknell, Berkshire, England RG12 1EB

Building #1, 555 Huanke Road,
Zhangjiang Hi-Tech Park, Pudong Shanghai

www.honeywellprocess.com