



Inventory Control  
with Servo Gauging  
Global Experience. Locally Applied.



To monitor and manage physical inventories terminal operators need reliable gain/loss calculations, reliable tank gauging and inventory management systems. Fierce competition means margins are squeezed, while operators face stringent safety, environmental and measurement legislation.

Tank gauging is central to meeting these challenges. A reliable assessment of tank contents for inventory control and tank farm management helps the terminal run profitably and reliably. Accurate and reliable measurements not only keep everyone safe, but also are crucial for satisfying stakeholders and supporting decisions to improve performance and drive down costs.

## Safe, Reliable, Efficient Tank Gauging

Focused on accuracy, ease of use and integration, our servo tank gauging systems put you in control of the inventory. We help you stay compliant, meet custody transfer requirements and manage the inventory for an efficient and safe operation.

SIL certification from TÜV Rheinland enables terminals and storage facilities utilizing existing Honeywell Enraf servo gauge technology to comply with stringent environment and safety regulations without additional hardware. Existing servo gauges installed can become SIL compliant for overfill protection with a simple software upload, while all new gauges are equipped with the diagnostic feature by default.

Robust, compact and modular solutions for inventory control are backed by local support and designed for the lowest total cost of ownership. Whether it's a world-class greenfield project or minor upgrade, we have solutions for a more profitable operation.

### Easy to Use

User-friendly programmability and a quick and simple startup demonstrate the power of simplicity.

Installation is easy. Almost any nozzle 2" and up can be used, even with the tank being in service. To simplify startup, calibration and servicing, the portable Honeywell Enraf terminal can be used to bypass the central system. Clear thinking makes for a better solution.

### Experience Makes the Difference

Honeywell Enraf pioneered modern tank gauging when we introduced automatic servo level gauging technology in the 1950s, and soon after introduced the first automatic level system for bulk liquid storage tanks.

Today, Honeywell Enraf's systems combine the latest technology with this proven measurement concept for an unrivalled solution to help terminals across the world create safer, more reliable and more efficient operations. And with more than 500 years' combined in-house engineering experience and over 8 million hours of engineering and support delivered every year, you can rely on our expertise to ensure equipment is implemented right, first time, for a faster startup and improved performance.

# A Versatile, Proven Approach

Honeywell Enraf's highly accurate, advanced force transducer is used to continuously measure the apparent weight of the displacer. As the level of liquid rises or falls, the transducer's reading is used to control the measuring drum, which raises or lowers the displacer to keep a consistent apparent weight by ensuring the displacer remains partly immersed. This allows for an accuracy of 0.4 mm (0.016 inch) over the whole measuring range.

## More Functionality: Interface Levels

You can also use Honeywell Enraf's 854 XTG and 854 ATG gauges to measure the interface level between two liquids. The servo motor and actuator can lower the displacer to the point where its apparent weight corresponds to the programmed interface setpoint of the second liquid.

This functionality can determine the interface level between water and liquid stored in the tank or even between two density layers within one product.

## Safety

A unique, simple software add-on can be loaded on any servo 854 installed to add diagnostics and allow it to be used in SIL rated loops. With these diagnostics, the safety proof-test interval can also be extended to 5 years. All newly delivered servo gauges are automatically equipped with this feature. Together with a design featuring minimum moving parts and a modular construction for easy maintenance, it helps drive down operational costs, while it increases safety.

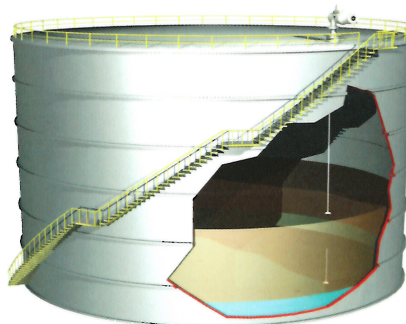
## More Functionality: Density

Use servo gauging for density measurement and density profiling, as well as average continuous density measurement, by connecting one or more HART pressure transmitters.

## Optimized Performance with Intelligent Software

The servo gauges are fully microprocessor controlled. All instrument functions are driven by smart software to optimize measurement accuracy.

You can also use Honeywell Enraf software to compensate for hydrostatic deformation of the tank. This feature improves the measurement performance for when the tank is not equipped with a stilling well (stand pipe).



## For More Information

To learn more about Honeywell Enraf's Inventory Control Solutions, visit [www.honeywellenraf.com](http://www.honeywellenraf.com) or contact your Honeywell Enraf account manager.

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**Honeywell Enraf**

Your Terminal Operations Partner

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