





YOUR PARTNER FOR **CUSTODY METERING SOLUTIONS IN TAS**

Enhancing System Performance through Reliable & Accurate measurements



THE CRITICAL ROLE OF VOLUME ACCURACY IN TERMINAL AUTOMATION FOR REFINED FUEL LOADING

In the refined fuel industry, precision is not optional—it's essential. Terminal Automation Systems (TAS) are the digital backbone of modern fuel terminals, ensuring that every liter of product is measured, tracked, and transferred with accuracy. At the core of this process lies a critical factor: volumetric measurement.







A GROWING FORCE

Over the past decade, the TAS market has seen remarkable growth.

THE TERMINAL AUTOMATION SYSTEM (TAS) MARKET:

This surge is driven by the increasing need for:



Oil terminals are vital hubs in the energy supply chain, where refined fuels are stored and dispatched.



Automation in these terminals reduces human error, streamlines operations, and ensures data integrity.



As terminals become more intelligent and connected, the demand for accurate, real-time volumetric data becomes even more critical.

Accurate volumetric measurement is fundamental during the loading and unloading of refined fuels. It directly impacts:

WHY VOLUMETRIC MEASUREMENT MATTERS IN TAS

Custody transfer Regulatory **Operational** Safety

Precise billing and inventory tracking ensuring every liter is accounted for in

accuracy

commercial transactions Even minor inaccuracies can lead to significant financial and operational consequences.

Meeting legal and metrological standards

compliance

Reducing product loss and optimizing

loading cycles

efficiency

Preventing overfills

and ensuring safe

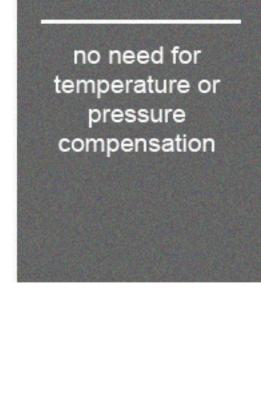
handling of flammable products

WHY POSITIVE DISPLACEMENT (PD) METERS ARE THE GO-TO TECHNOLOGY FOR TAS

Positive Displacement (PD) meters are the preferred technology for volumetric measurement in gantry loading. Here's why:

Mechanical

reliability



Direct

volume

measurement

Consistent performance across varying flow rates and viscosities

High

accuracy and

repeatability

These features make PD meters a trusted choice for terminal operators who demand precision and

Fewer moving parts and robust design for harsh environments

Simplified servicing reduces downtime

Ease of

calibration

and

maintenance

No need for inferential calculations

Direct

volume

measurement

For over 70 years, Liquid Controls (LC) has been a pioneer in PD metering technology. Known for its legacy of MOST SUSTAINABLE ACCURACY & LONGER SERVICE LIFE, LC meters are synonymous with:

reliability.

LIQUID CONTROLS

A GLOBAL LEADER IN CUSTODY MEASUREMENT

Global CONTRACTOR OF THE PARTY

certification for custody transfer

in terminals, refineries, and distribution hubs **Seamless** integration

with TAS platforms

Widespread

adoption

Direct Volume Measurement

Simplicity

Cost-Effectiveness



(Requires conversion)

(Needs compensation

for temp/pressure)

(Higher initial costs)

PD Meters Mass Flow Meters Feature

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| Global Proven Field Performance | | Less compared to PD meters |
|---|--|----------------------------|
| Regulatory Acceptance | | |
| In gantry loading, where volume is the billing unit, PD meters provide unmatched accuracy and operational simplicity. | | |
| CONCLUSION: ACCURACY THAT DRIVES CONFIDENCE In the high-stakes world of refined fuel distribution, volume accuracy is a business imperative. Terminal Automation Systems rely on precise volumetric data to ensure fair trade, compliance, and efficiency. Liquid Controls' PD meters are at the forefront of this mission—delivering trusted performance and setting the global standard for custody measurement. | | |

As the TAS market continues to evolve, the importance of accurate volumetric measurement will only grow. And with Liquid Controls, terminal operators can be confident that every drop counts.

