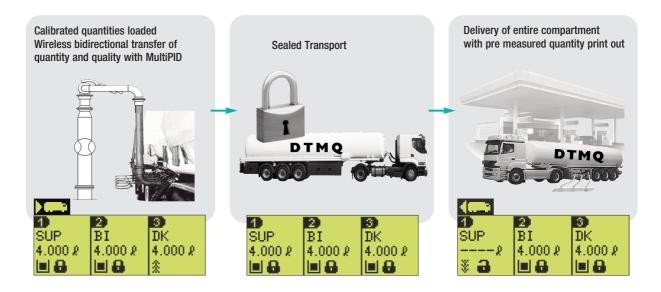
# **DTMQ**

## Calibrated delivery for meter-less trucks





Quantities is a guide for systems for the delivery of measured quantities without the use of metering equipment on the tank truck. The quantities and qualities which have been measured respectively specified on the gantry during the loading process are transferred to the tank truck.

[WELMEC, paper 10.2]

(http://www.welmec.org/publications/10-2.asp)]

**SPDS** Sealed Parcel Delivery System complying with DIN EN 15208 seals the compartments during transport and establishes this way the basis for DTMQ.

**MultiPID** Multiple Product Identification Device complying with DIN EN 14116 serves as interface between gantry and tank truck.

## **Alfons Haar DTMQ**

- Check for loading permit
- Retained product monitoring prior to loading
- Transfer of compartment size to gantry (limiting preset as additional overfill prevention)
- Check of correct assignment of loading arm and compartment
- Compartment related transfer of loaded quantities and qualities
- Sealing of compartments individually directly on loading arm disconnect
- Display and print of integrity (seal status), quantities and qualities on unloading site
- One single quantity measurement to avoid differential results

#### **Alfons Haar SPDS**

- Monitoring of bottom valve, API/MAPI and manlid
- Integrated and consequently functionand manipulation-safe sensors

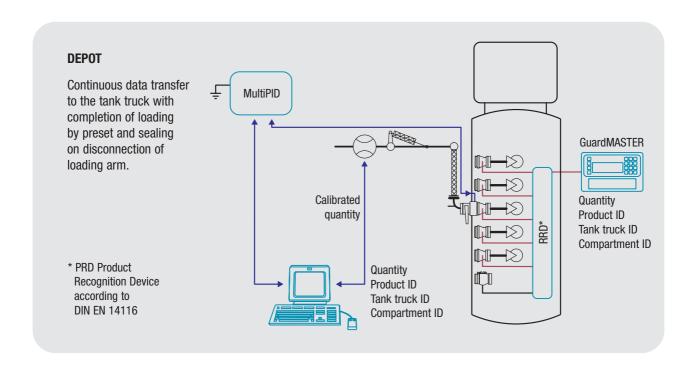
### Alfons Haar MultiPID

- Remote switching of quality codes (different additives on same loading)
- Safe bidirectional communication between tank truck and loading controller

# **DTMQ**

## Calibrated delivery for meter-less trucks





### **SERVICE STATION**

The ALFONS HAAR SPDS provides the integrity of calibrated quantities. The calibrated data and the seal status is individually displayed, recorded and can be printed.

The data can also be transferred via FTL-interface to a PDA (Personal Digital Assistant). The interface enables the data transfer in both directions.



GuardMASTER

