

Bookstock

Stock Reconciliation Feature

MHT Technology Ltd's Stock Reconciliation Feature



MHT Technology Ltd

Digital Transformation with Human Design

+44 1748 828820

www.mht-technology.co.uk

sales@mht-technology.co.uk

BookStock is a bulk liquid stock accounting application suitable for sites handling petroleum products and other bulk liquids.

Discover our Bookstock can help your terminal today.



Launched in 2011



Trusted by customers for over 8 years



Over 600 systems installed worldwide



Supports sites of up to 1,500 tanks

Overview

Bookstock is the stock reconciliation facility associated with VTW and SmartTAS. It serves to collect information regarding the movement of bulk liquids and reconciles the balances with the physical quantities on site. The solution is particularly applicable to sites operating a co-mingled stock strategy, where different companies collectively hold stock on a site in the same storage vessels.

While the software is applicable to sites that don't use VTW and SmartTAS, there are integrations built into the system for these systems to automate many aspects of collecting the movement and inventory data. With SmartTAS transactions from loading bays are automatically converted to movements, and VTW can be accessed to obtain end of day stock figures with a single click of a button.

The software package uses a Microsoft SQL Server database to store the data, which is accessed through a Windows application which can be installed on multiple Windows 10 client computers. Users' access can be managed through a comprehensive security system. A standard set of reports are provided with the software, which can be customised to suit using Crystal Reports.



Benefits



Co-Mingled Stock

Where stock from multiple customers is stored in the same vessels, accounting for stock losses and gains can be easily managed using Bookstock.



Data Management

Use of a standard database technology makes management of the data easy. Data security issues can be tackled using widespread expertise and tools.



Customisable Reports

If you want to change the design of your reports or require modifications to comply with corporate standards, then customised reports can be created using Crystal Reports templates. If you don't have the expertise in-house, then talk to us about your requirements.



Standard Inventory Calculations

We have years of experience with inventory calculations employed in the oil and gas sector the world over. You can be sure that your inventory is being calculated to the approved standards using Bookstock.



Integration

Automate data collection from loading bays and tank inventory using SmartTAS and VTW..



Radio Annunciation of Alarms

Keep informed whilst out on-site, prioritise the severity of alarms annunciated and incorporate alarms from other systems, alarms annunciated after any voice traffic.



Why do losses and gains occur?

Leaks – Loss of product through breaches in containment: accidentally (leak), deliberately (theft), intentionally (evaporation).

Measurement – Accountants demand precision – Volumes to the litre, Weights to the kilogramme. Tank gauging is not accurate enough to justify precision.

Different measurement methods - Measuring the same physical feature using different methods will yield different measurements.

Level gauge – infer the depth of the product in vessel and estimate volume using the calibration table.

Piston Flow Meter – infer volume of the product by repeated filling and emptying a chamber.

Software Features

Calculations in BookStock are performed to API/ ASTM standards to provide observed (measured), standard and mass figures based on the data available. Stock reconciliation can then be performed for each set of figures. BookStock provides two methods for correcting data entry errors. If the error is detected before the monthly accounts are posted, then the transaction itself can be altered and the figures recalculated from that point in time.

Should the error be detected after accounts have been published then BookStock provides a facility for entering adjustments to both tank and customer accounts. The general movement entry screen provides a comprehensive interface for entering stock movement details, but there are some special cases that are handled separately:

1 Stock Reconciliation

BookStock provides two methods for correcting data entry errors. If the error is detected before the monthly accounts are posted, then the transaction itself can be altered and the figures recalculated from that point in time. Should the error be detected after accounts have been published then BookStock provides a facility for entering adjustments to both tank and customer accounts.

The general movement entry screen provides a comprehensive interface for entering stock movement details, but some special cases are handled separately:

- Hydrant Movements - movements through a Hydrant system where a number of customers sell the product.
- Tank to tank transfers - movements where stock is moved from one storage vessel to another without affecting any customer's stock holding.



2 Co-mingled Storage

Where the products stored on-site is owned by several companies, but there are no discrete storage facilities for each company's stock, a situation often referred to as 'co-mingled storage' occurs. Loads and receipts are debited and credited to the customers' accounts, and later reconciled with the physical storage figures. At the month-end the losses and gains can be attributed automatically to the customers in proportion to their throughput.

4 Aviation

BookStock has some specific applications that have been designed for aviation:

- Hydrant movements – tank movement figures inferred from customer movement and closing stock data.
- Average density and temperature figures used where no attributable data exists.
- Sarbanes-Oxley compliant reporting to customers.

5 Reports

BookStock comes with a comprehensive set of reports which can be customised to specific customer requirements. All reports are designed with Crystal Reports although other reporting tools can be supported.

4 Interfacing

BookStock's open database architecture and use of modern communication technologies enables data to be transferred to other systems very easily.

A range of technologies are utilised e.g. ASCII, OPC, XML, ODBC etc.

Along with MHT's full suite of software products including VTW, SmartTAS, and LMS, BookStock is fully compatible with Windows 10 and Windows Server 2019.

5 Architecture

BookStock supports a range of different architectures from simple standalone workstations to large client server and distributed systems.

BookStock can be installed on the same machine as the tank gauging system, or on a separate system. Standard SQL Server back-end database. Microsoft.NET client software installed on each station. System is compatible with Windows Terminal Server for a centralised deployment.



System Architecture

Standard SQL Server back end database–Entire configuration and data held in one database – Just one backup required

- Microsoft.NET client software installed on each station.
- The system is compatible with Windows Terminal Server for a centralised deployment.
- BookStock can be installed on the same machine as the tank gauging system, or on a separate system.
- BookStock can be installed on the same machine as the tank gauging system, or on a separate system.
- Standard SQL Server back-end database.
- Microsoft.NET client software installed on each station.
- System is compatible with Windows Terminal Server for centralised deployment.
- Compatible with existing business systems.
- Fieldbus and device-independent.

Core Functionality:

- Product Transactions
- Orders
- Products
- Drivers/ Personnel
- Vehicles, Companies
- Gantry, Configuration
- Device/ Instrument
- Configuration
- Kiosk/ Queuing

PC Requirements

Operating system:	Windows 10 Windows Server 2019
Platform:	Microsoft.NET Core
Database:	Microsoft SQL Server
Disk space:	Minimum 80 GB
Memory:	Minimum 8 GB
Processor:	2 GHz Dual Core Processor
Resolution:	1920 x 1080
Core functionality:	Homepage, Grid View, Single & Multi-Tank Overview, Movements, Trending, Reports, Alarm Configuration, Alarm Summary, Inventory Calculator, Audit Trails, Device Commands, Manual Data, Tank Characteristics and Tank Capacity Tables



Talk to us about out how Bookstock can benefit your site