Terminal Management Systems

Solutions for efficient terminal operations
Terminal management has traditionally been wrought with problems ranging from theft of product to inaccurate and inadequate control over operations. The advent of Industry 4.0 is creating a competitive landscape that not only favors technology adopters, it also punishes companies that still rely on inefficient systems. A good terminal management solution covers not only the accurate transfer of products, but helps improve facility performance, monitoring & control of operations on various levels of organizational hierarchy and safety as well – ushering companies into leading the Industry 4.0 revolution.

Terminal Management

Introduction

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Why INTECH’s Terminal Management Solutions?

At INTECH, we take pride in infallible automation systems that not only endorse Industry 4.0, but herald it as a benchmark for others to follow. INTECH has excelled system integration and led oil & gas automation around the world for over 25 years. Terminal automation at INTECH ensures a fully automated facility with thorough accountability of products, robust control and safety systems, transparency and visibility across business layers, and leading-edge security. INTECH’s Terminal Management consolidates data and reports for both operational and strategic KPIs. Our solution thoroughly monitors losses, theft and other issues, ensuring quick ROI for companies investing in complete terminal management and automation.

Standards Used

- **API MPMS 2.2 A & B**
  Manual of Petroleum Measurement Standard chapters 2.2 A & B for measurement and calibration of liquids in tanks e.g. API 2550 & 2552
- **API RP 551**
  Process Measurement Instrumentation Systems
- **API RP 554**
  Process Control System
- **OIML R 85-1&2 EN**
  Automatic level gauges for measuring the level of liquid in fixed storage tanks
- **API 1620**
  Bulk design and operating practices to protect product quality of gasoline and distillate fuels
- **API 2350**
  Overfill protection for storage tanks in petroleum facilities
- **API STD 2560**
  Reconciliation of liquid pipeline quantities
- **IEC 61508-2 Ed. 2.0 b:2010**
  Functional safety of electrical/electronic/programmable electronic safety related systems

Standards Used

**Complete Terminal Automation**

- **Batch Controllers**
- **Flow Computers**
- **PD Meters**
- **Air Eliminators**
- **Control Valves**
- **Transmitters**
- **Earthing & Verification**
- **Gripping & Overfill Protection**
- **Prefabricated Loading Skids**
- **Automatic Tank Gauging**
- **Access Control Systems (Entry/Exit, RFID gate passes etc.)**
- **On-premise and/or Cloud-based ERP/Business System Connectivity, Cybersecurity, KPIs and Dashboards**
- **Distributed Control System (PCS, ESD, F&G, HMI, Historian)**
- **PAGA System**
- **ERP Orders**
- **TAS Orders**
- **Order Management**
- **Metering Systems and Batch controllers**
- **Loading Automation**
- **ESD, F&G, Pump Control**
- **Central Control System**
- **Tank Farm Management, Tank Gauging**
- **Inventory Control**
- **RFID, Smart Gates, CCTV and Software Data Validation**
- **Access Control**
- **Advanced software solutions**
- **Data validation & reconciliation (DVR), control loop optimization, alarm management**

**Terminal Management Software**

INTECH has developed its extensive software library for complete front-end functionality and modularized terminal operations, which can be utilized to address any terminal operator needs. This functionality and associated system-based libraries provide efficient engineering practices compliant with various industrial standards and requirements.

**Terminal Operation & Maintenance**

INTECH Terminal Operation & Maintenance (O&M) services take responsibility of your assets from start to finish, leaving you with practical solutions that cater for your terminal’s needs. Our asset lifecycle responsibility assures availability, performance, quality, and safety to meet your goals. This value commitment is a key attribute that continues long after the project has been completed and promises a trustworthy relationship with all our customers.

- **Startup, pre-commissioning & commissioning services**
- **Resident/on-call/remote operation, maintenance and training services**
- **Terminal survey and troubleshooting services**
- **Spare parts and obsolescence management services**
- **Safety and Control System audit services**
- **Advanced software solutions**
- **Data validation & reconciliation (DVR), control loop optimization, alarm management**
I commend you on your efforts in customizing the business analysis software for deployment for a Web Based Alarm Management Dashboard. It meets our objectives and has produced the desired results.

Control & Automation Leader

What Our Customers Say

End User

“I would like to commend INTECH’s on-site team for going beyond individual primary responsibilities, exhibiting a diverse skill set to progress towards project completion.”

Project Supervisor

Sr. Engineer

“After successful commissioning I would express my satisfaction at duly meeting the project schedule. The work was done in most professional manner and we shall favourably consider your company for future work.”

EPC

Control & Automation Leader

OEM