TAS.net™ TERMINAL AUTOMATION

TAKE COMPLETE CONTROL OF YOUR OPERATION!

Combining the latest technology available with proven design logic enables Dearman Systems, Inc. to provide the most advanced and adaptable terminal automation software solutions in the industry. Dearman™’s TAS.net™ is based on the Microsoft® .Net™ framework for the web based world and represents the industry standard in Terminal Automation. Only Dearman™’s terminal automation systems feature ALL of the following technological advantages:

- Specifically engineered for Microsoft® Windows® Server using Microsoft® .Net, ASP.Net AJAX Controls, Microsoft® SQL, and Microsoft® Reporting Services
- Application Development Platform for rapid customization
- HMI Development Platform for user customization of design layout
- P&ID Drag and drop platform to create custom, fully active terminal drawings
- User customizable BOLs created in Microsoft® Reporting Services
- User customizable Reports created in Microsoft® Reporting Services
- All BOLs and Reports saved as PDF images
- Database modifications to field types and sizes without recompile
- All references and codes are alpha-numeric and can be any length
- User friendly entity maintenance screens (data searchable by id or name)
- Limitless online data storage for instant retrieval – does not degrade performance and no more purging of important historical data like BOLs and ALL related information
- Delete protection for all data – deleted data is no longer visible or usable in ongoing operations, but is fully protected for use with historical data
- Integrated TWIC Interface to TSA approved readers
- Integrated TransCore® RFID Reader Interface for rail car or truck identification and monitoring
- Open architecture design allows flexibility to communicate with legacy administrative systems and modern presets, controls, or devices with published or open protocols
- Uniquely capable of multiple TDS, TABS, PETROEX and ELVIS communication simultaneously for Destination, Customer, Supplier, and Position Holder pre-authorization or BOL data transfer
- NTEP Certified (National Type Evaluation Program Certificate of Conformance for Weighing and Measuring Devices - Certificate # 07-113)

Upgrade today and see for yourself what a difference a Dearman™ System can make for your operation. With superior core design and our commitment to the technological evolution of the system, it will be the last terminal automation system you will ever buy. Please read on for more information about our industry leading software!

TAS.net™ KEY FEATURES AND BENEFITS

OPEN SYSTEM

Built with open system foundation layered architecture and can communicate with virtually any third party system, device or instrument with a published (or known) protocol.
STATE OF THE ART
Specifically engineered for Microsoft® Windows® Server using Microsoft®.Net, ASP.Net AJAX Controls, Microsoft® SQL, and Microsoft® Reporting Services using the latest software technology, standards, and open systems component interfaces.

EFFICIENT CODE, EFFICIENT CUSTOMIZATION
Our code is fully object-oriented and written using languages supported by Microsoft® Visual Studio.Net®. Additions and updates to the system can be quickly implemented and only require adding or updating pieces of the program, not the entire application. And MOST updates can be implemented on-the-fly without a system reboot.

DISTRIBUTED SOFTWARE APPLICATIONS
Multiple copies of TAS.net™ application modules can be distributed across any number of computers in any configuration.

WEB BROWSER BASED
No proprietary viewers needed! Users can access TAS.net™ directly from the Internet or corporate Dearman™ UNITY™ application (additional cost). One of the features of our UNITY™ application provides web services to isolate the terminal's TAS for additional security.

VISUAL SYSTEM CUSTOMIZATION
Dearman Systems has developed its own set of Application Development Platform (ADP) Computer Aided Software Engineering (CASE) Tools. These tools allow us to quickly and visually implement customizations your operation requires. It also gives us the ability to make changes to your customized system whenever they are needed in a fast, cost effective, and efficient manner.

STANDARD HMI TERMINAL GRAPHICS
Detailed standard Human Machine Interface (HMI) terminal graphics provide a real-time visualization of terminal activity. A Terminal Overview screen provides the status of all loading and unloading racks, weigh scales, entry and exit gates, and other secure areas. Detailed, bay specific HMI screens provide users with real-time pump, valve, product stream, additive injection, dye injection, temperature, flow rate, alarms, and communication status information. A history of the driver prompt sequences and current electronic preset display and status is also provided. The graphical storage location screen displays each tank’s product name, relative product level, product volume, gravity, temperature, and any alarm levels configured. Additionally, user configurable design layout (drag and drop) technology allows users to design a unique desktop for each terminal.

EPA RENEWABLE IDENTIFICATION NUMBERS (RIN) COMPLIANCE
TAS.net™ handles not only the generation of RINs as required for producers or importers of renewable fuels, but also the transfer, inventory management, and compliance reporting of RINs by obligated parties involved in the distribution of renewable fuels. An EMTS (EPA Moderated Transaction System) node efficiently and accurately handles all EPA processing.

INTEGRATED TWIC INTERFACE TO TSA APPROVED READERS
Open system foundation layered architecture provides the flexibility to incorporate additional biometric security requirements imposed by the TWIC program.
E-MAIL OR FAX BOLS AND REPORTS AUTOMATICALLY
BOLs and any report the TAS.net™ generates can be sent to any number of recipients. Users choose how they wish to receive their reports; Microsoft® Excel, PDF, HTML, or CSV format.

EXTENSIVE REPORTING
Choose from an impressive library of standard reports or customize your own in Microsoft® Reporting Services™. Reports can be viewed, printed automatically, on demand, and/or exported from the system to a corporate share folder in your choice of formats.

MULTI-POSITION BLENDING CONTROL
Dearman™'s cost effective blending solution incorporates the use of existing load rack equipment and our revolutionary compartment loading functionality using touch screen graphical interface devices. The result is safe and error-proof multiple position sequential blending of ethanol, biodiesel, or any product in which expensive blending equipment or potentially inaccurate manual splash blending were considered the only options.

FLEXIBLE ALLOCATIONS
Virtually any allocation method imaginable is possible with TAS.net™. Using our 4-dimensional allocation scheme, you dictate exactly who gets what product, where, when, and how much. Allocations are configurable for any combination of products, terminals, or terminal groups.
UNIT TRAIN AND RAILCAR HANDLING

Dearman™’s comprehensive railcar loading, unloading, and trans-loading functionality allows you to take complete control of your rail operations – whether for individual cars or unit trains. Schedule inbound loads, load or unload multiple railcars on the same bill of lading simultaneously, produce bills of lading containing volume and weight for each car (even for products loaded or unloaded at temperatures above 300°F), and keep track of your on-site railcar inventory. As an authorized distributor of TransCore® RFID products for electronic identification and monitoring of rail and intermodal equipment, Dearman Systems can provide the equipment necessary for rail, port, marine, and trucking companies to identify, track and monitor equipment economically and effectively.

ADMINISTRATIVE/SECURITY INTERFACE

- Internet web browser accessible
- Data filters applied based upon access security matrix definitions
- Administrator defined “User Groups"
- Administrator defined “Group Privileges"
ORDER-BASED, ON-LINE PROCESSING

- Automatic and pre-dispatched orders
- Locally entered orders
- Externally retrieved orders (interface development may incur additional costs)
- Bulk shipment/receipt orders
- TABS and TDS (dial-up and Internet)
- Order and product authorization
**SYSTEM MANAGEMENT**

- Simultaneous local and remote control of terminal operations
- Terminal local or network single point distributed database maintenance
- Simultaneous local and remote multiple point HMI control and display
TERMINAL ACCESS

- Supervisory access override
- Access by data entry or access card or fingerprint - any combination
- User entered access records providing any combination of driver, carrier, tractor, truck, trailer, delivery, destination, buyer, seller, and product provider

PRODUCT MOVEMENT DOCUMENTATION IN PDF AND HTML FORMAT

- Bills-of-Lading
- Loading tickets and instructions
- Meter tickets
- Scale/weigh bridge ticket
- Bulk shipments and receipts
- Safety sheets
- Meter proving
- Pre-loading tickets

ELECTRONIC DATA INTERCHANGE

- Petroex
- TABS - multiple concurrent authorizations by order
- Automatic Fax of spreadsheet product movement and inventory
- Automatic E-mail of spreadsheet or user defined file (via customer provided email server)

INVENTORY MANAGEMENT

- Inventory schedules
- Book and physical variance calculations
- Reporting
- Adjustments
- Bulk receipts, shipments and intra-terminal transfers
- Blending and re-grading
END OF DAY ACTIVITY MANAGEMENT

- Automatic, Semi-automatic, and Manual control supported
- Discretionary control
- Configurable for both date and time
- Selectable date and time for end of month reports
- Pre and post entry of tank gauges and meter totalizers
- Automatic tank gauges

HOST COMMUNICATIONS

- Modem, network, Internet, Intranet, VPN transfer of spreadsheet, flat file or user-defined format
- ODBC to host or local database
- XML Web Service, FTP, HTTP, TCP/IP
- Multiple concurrent hosts
- Product provider, product seller, and product buyer

REDUNDANCY, FAULT TOLERANCE, AND ENHANCED RECOVERY

Standard recovery features include:

- Automatic Data Recovery
- Off-Line Transactions
- Manual dataset replication
- Automatic restoration of in-progress activities

Optional recovery features include:

- Fully redundant hardware
- Fully redundant software
- Automatic database replication
- Fault tolerant interfaces
- Interface load sharing
- Multiple PC support

TECHNOLOGICAL ADVANTAGES INCREASE RETURN ON INVESTMENT

- The most advanced AND affordable automation solution
- Intuitive and user friendly application makes data management simple
- Easy access to valuable data in usable formats for admin system use
- Increases terminal efficiency providing an incentive for drivers, carriers, and customers to return to your terminal
OPTIONAL FEATURES

INTEGRATED IRS APPROVED ExSTARS 4030 v2.2.4 EDI REPORTING
Dearman™’s ExSTARS.net™ reporting system (ExSTARS 4030 v2.2.4 compliant) is a robust, fully functional tax basis inventory system for your 720-TO and 720-CS reporting needs (available for an additional cost).

DEARMAN™ TERMINAL GRAPHICS BUILDER™
The Dearman™ Terminal Graphics Builder™ software (available for an additional cost) allows you to take complete control of your terminal’s process management functions and improves the efficiency and quality of your operations. Utilizing drag and drop technology, the Dearman™ Terminal Graphics Builder™ software creates a graphical representation of the various distributed process lines employed within your facility and integrates the PLCs, process controllers, pumps, and motor operated valves of those process lines into a fully interactive system. With control over the individual subsystems, the overall process can then be managed centrally and represented graphically as a complete system.
SUPPORTED INTERFACES

- Smith Meter® AccuLoad® III (All Models)
- Smith Meter® AccuLoad® IV (All Models)
- Smith Meter® microLoad.net®
- Smith Meter® microFlow.net®
- Daniels DanLoad 6000
- Emerson DL8000 Preset Controller
- TopTech MultiLoad II
- TopTech MultiLoad II Slate
- Micromotion Mass Flow Meter (MODBUS® RTU)
- Avery Scale
- Fairbanks Scale
- Toledo Scale
- Blend-Pak and Mini-Pak
- Any injector controlled by any supported preset
- Scully Groundhog
- Scully Intellitrol®
- Scully Intellitrol® V.I.P.® (Vehicle Identification Prover®)
- TransCore® Encompass® 4 RFID Reader
- Automated Tank Gauging – GSI ASCII or any with MODBUS® RTU
- PLC – MODBUS® RTU (serial or TCP/IP)
- Opto-22 Optimux
- Allen-Bradley® Industrial Computers and Monitors
- Dearman Systems, Inc. Data Entry Unit
- HID Proximity badge reader
- Smith Meter® Proximity Card Reader
- Any supported preset as data entry
- OPC, RTU, ARTS-NEDAP, HMI connection
- Innometriks Inc. Rhino Biometric Reader

Please contact us if you do not see your system or device. We are continually adding to our list of supported instruments and systems.

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