

DeltaV™ O2CManager™ Software for Liquids Terminals

Enterprise Order-to-Cash (O2C) Software for Managing the Full Lifecycle of Liquid Hydrocarbon Storage and Transportation



Streamline order-to-cash from contracts to invoicing for faster, smarter, terminal management.

Manage Order-to-Cash End-to-End

- Manage multiple terminals and assets within one instance of the application
- Deploy securely on-premises or in the cloud, and is available as a SaaS solution
- Manage fully automated terminals with Driver Kiosk for truck drivers
- Provide your customers access to view real-time inventories, download reports, and add orders within the Customer Portal

Support Diverse Movement Types

- Manage vessel, truck, tank-to-tank, rail, and pipeline movements
- Track checklist of activities (work order) involved in any operational movement
- Manage all custody transfer movements with meter and tank calculations
- Handle single and multi-shipper inventories in dedicated and co-mingled tanks, respectively

Improve Invoicing & Reporting

- Track and invoice tank heating, cleaning, and mixing activities
- Generate real-time and month end charges by sending clear and correct invoices directly to SAP
- Capitalize on a comprehensive and reliable paper trail for audits
- Identify and minimize demurrage events to reduce costs

Handling Customs for Terminals

- Support, manage, and track custom lots for inbound/outbound operations with warehouse transfers and other release types
- Integrate seamlessly with Customs authority thereby automating the manual process
- Avoid customs delays that strand vessels

Maximize Terminal Productivity by Seamlessly Integrating Processes

Achieve higher accuracy, greater efficiency, and better traceability by transitioning from disconnected commercial software and systems to an integrated order-to-cash (O2C) solution. DeltaV™ O2CManager™ Software for Liquids Terminals helps companies streamline the entire order-to-cash cycle at the enterprise level to drive higher performance and greater profitability. Our enterprise order-to-cash software integrates with SAP®, ATG, SCADA, Weighbridges, and other data warehouse applications. Commercial and operational data are integrated into a single, highly scalable software application to provide users with a holistic view that enhances transparency, communications, and data management.

Available for SaaS deployment, our secure cloud-based software provides users with anytime, anywhere access and enables operations to eliminate complex custom interfaces, cumbersome IT applications and complicated spreadsheets, resulting in a significant reduction in data entry errors and a more efficient process. In addition, terminals stay current with the latest technology and industry standards to fulfill customer requests quickly and efficiently. It automates workflows to reduce training time, centralizes customer support, and implements role-based permissions across the organization to further improve efficiency.

Using standard APIs and Service-Oriented Architecture, DeltaV O2CManager Software for Liquids Terminals seamlessly connects with other terminal operations systems, including nominations and scheduling applications, such as DeltaV SchedulingManager™ Software for Terminals and DeltaV TerminalManager™ Software for trucking operations. Our enterprise level software also integrates with ERP and SCADA systems, ensuring terminal workflows align with order fulfillment, shipment tracking and other processes while providing a centralized information repository that is organized and auditable.

Connecting these disparate systems together improves logistics management throughout a terminal, prevents bottlenecks to ensure products move faster within the terminal, and enables smoother and faster turnaround of tankers. The software also helps terminals reduce contamination and downtime to maintain maximum throughput and a high-performing operation.

As the energy industry continues to evolve, our product-agnostic software that supports the management of any liquids product moving through a terminal, including liquified natural gas (LNG), will continue to provide a highly flexible, future-proof solution.



Gain Real-Time Access to All Commercial Data

From order management to compliance and reporting DeltaV O2CManager for Liquids Terminals (formerly known as Synthesis™) is a powerful yet agile system that streamlines the order-to-cash process by ensuring easy, real-time access to all data related to commercial activities.

Operate with Peak Efficiency

Eliminate terminal downtime by unifying the entire order-to-cash process, including nominations, ticketing, inventory management, and invoicing, in real time through an intuitive web interface. Our software collects information about a customer's order for the movement of product into, out of, or within the terminal, reducing administrative overhead and ensuring up-to-date, accessible data is available to all relevant stakeholders. Measurement tickets and bills of lading are automatically captured from the terminal system to integrate rack activity. The software plans efficient product movements through a terminal to avoid contamination and reduce the need to flush lines. Communication is improved as users receive automated alerts when specific events are triggered in the workflow. DeltaV O2CManager Software for Liquids Terminals tracks and splits product batches to move through different tanks, automating mixing when necessary. Terminal teams optimize operations by accommodating spot reservations, minimizing IT support costs, and maximizing their asset utilization through our enterprise order-to-cash software.

Manage and Plan Orders with Ease

DeltaV O2CManager Software for Liquids Terminals enables users to oversee service and transportation requests from customers and efficiently assess transport and storage feasibility based on tank capacity. The software also manages purchasing and sales and other product custody transfers. Users can capture each product movement, manage the order lifecycle from draft to completion, and configure order statuses without code development. Customer registrations, purchase order entries, movement order entries, and pre-registration of drivers and vehicles are kept up-to-date and managed within the software. Orders for marine, truck, and rail movements are supported, and the software provides work order instructions for operational checklists. Daily, weekly, and monthly allocated quantities can be setup to better manage slot booking for trucks, dock booking for vessels, and railcar loading and unloading operations. These activities interface directly with existing control systems to provide a seamless solution to order management and planning pains, allowing users to manage unexpected events with ease.



Figure 1: View customer order status, inventory volumes, and charges by shipper quickly in an easy-to-understand dashboard.

Schedule Orders Effortlessly

Our order-to-cash software provides real-time visibility of orders and product movements through the terminal's network of pipes, valves, and tanks, saving users time and increasing productivity by eliminating cumbersome, complex, error-prone spreadsheets. The ability to easily access real-time data enhances safety and product quality by preventing unwanted mixing and contamination. The turnkey software also allows customers to input orders, with orders captured for all movements within a single software system. It defines timeslots and communicates slot booking for loading and unloading, ensuring smooth transactions between the terminal and its customers. By integrating with DeltaV SchedulingManager Software for Terminals, users can schedule movements, optimize terminal operations, forecast tank levels and linefill, and produce terminal work orders more robustly. The software automatically generates tickets for each movement to provide full visibility into tracking customer inventory by terminal, tank, or product. Our enterprise DeltaV O2CManager Software provides users with a complete view into nominations and movements, indicating what to move, where to move it, and how to safely and efficiently do so to minimize contamination and time-consuming line flushes.

Automate Truck Operations

DeltaV O2CManager Software for Liquids Terminals supports terminals relying on truck or rail operations by enabling truck drivers or carriers to book slots based on their arrival window. Slot booking facilitates on-time loading and unloading activities, allowing the terminal to remain on schedule.

The standalone Driver Kiosk application can be deployed for a fully automated terminal, allowing a driver to access the application at the kiosk and validate their information before accessing the terminal. Multiple validations are built into the Driver Kiosk application to avoid any unauthorized driver from generating extra documentation from the kiosk, securely ensuring that they only load and unload what their authorization allows.

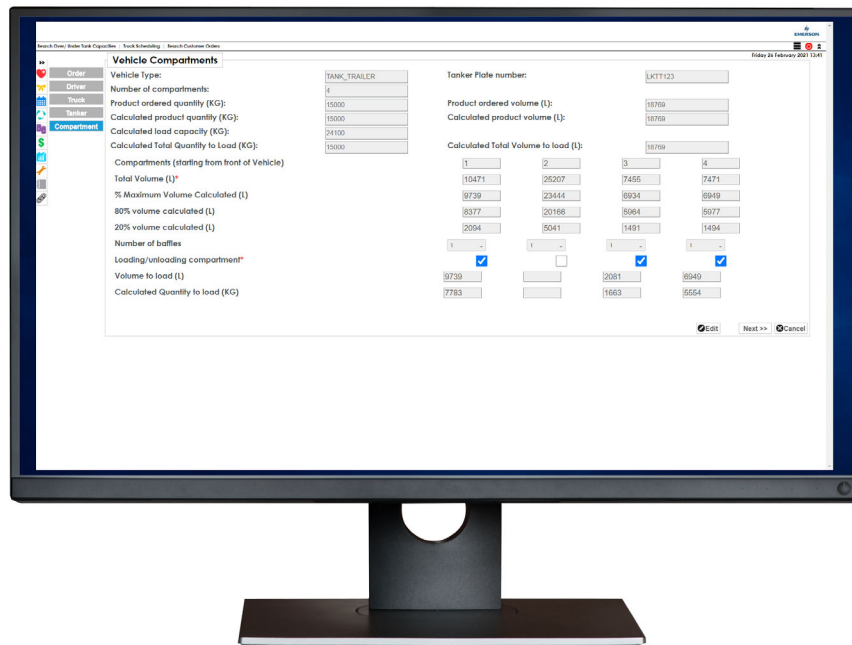


Figure 2: Manage fully automated terminals with our standalone Driver Kiosk application for truck drivers.

Increase Customer Satisfaction

Our modern software significantly improves customer engagement by providing an easy-to-use, self-service portal. Customers can easily submit requests, view tickets and bills of lading, and manage orders online. This level of transparency improves customer satisfaction and loyalty by enabling access to accurate and timely information on shipments and inventory positions. The self-service portal leads to better collaboration between customers and terminal operators, ensuring quick response times and accurate tank inventory management. To further improve relations, the software automates gains and loss allocations and cost allocations to improve accuracy, while enhancing visibility, traceability, and accountability. Customers can also obtain invoices directly through the self-service portal. By providing a turnkey solution, DeltaV O2CManager Software for Liquids Terminals increases trust and confidence by reducing complexities and the chance for error. The software prevents contamination, automates customs and excise reporting, and assures clear and correct invoicing to improve the terminal's reputation and increase the likelihood of repeat customers.

Clear Customs Quickly

Easily navigate the complexity of international operations and customs with DeltaV O2CManager Software for Liquids Terminals. Our software processes customs forms and automatically submits them to the proper authority, preventing vessels (or trucks) from being stranded while personnel scramble to complete the correct forms. While the batch is being processed in the terminal, the software processes the customs application and submits the data to the proper customs authority. When the customs authority returns clearance, our software system automatically updates status and documentation, allowing the vessel to depart as soon as clearance is granted. Automating the clearance process ensures vessels are processed quickly to maintain a high-performance terminal that can load and unload a higher number of ships, railcars, and trucks.

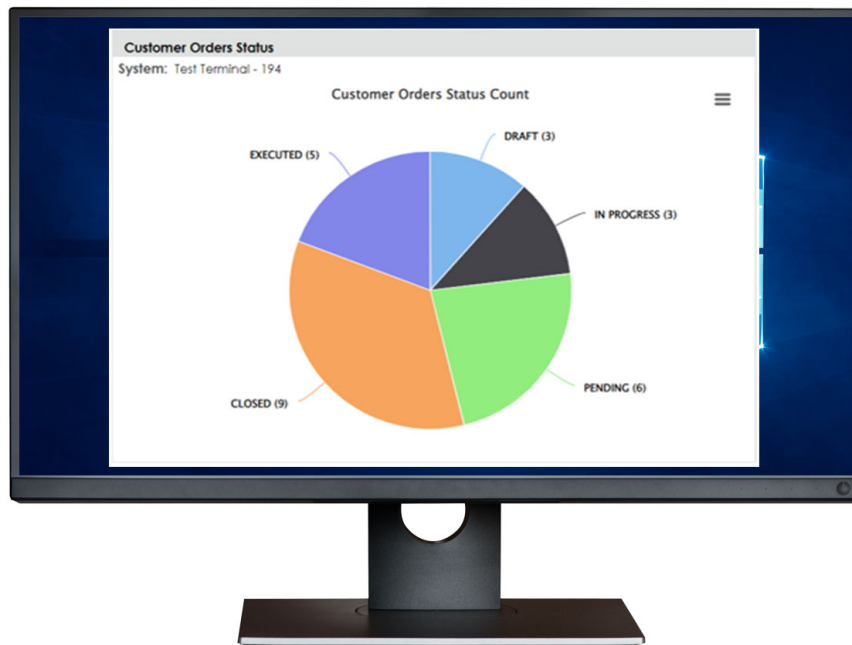


Figure 3: Visualize the status of customer orders.

Manage Movements Safely

Since safety protocols must be followed whenever a pump is turned on, a valve is opened, or any activity related to moving product from tank to tank occurs, it is critical for terminals to mitigate risk by minimizing unnecessary activities. DeltaV O2CManager Software for Liquids Terminals provides built-in, automated safety tools that eliminate the use of paper checklists and complicated signoff processes when approving movements and activities, supporting safe operations and improving efficiency. Users can run safety checks in real time and transmit the results to others in the facility instantly. Site access and pre-weighing procedures can be shared with customers ahead of time, ensuring only authorized personnel are allowed entry into the loading bay

Take Control of Your Inventory

Reduce losses and optimize storage capacities with precise inventory control. DeltaV O2CManager Software for Liquids Terminals provides real-time updates and management of operations to ensure the efficient handling and accurate accounting of liquid hydrocarbon quantities while allowing for further analysis. Users can calculate and report inventory positions by product, customer, location, and/or tank.

The software captures inventory levels and streamlines management processes, offering real-time visibility of liquids products across the facility. It supports volume calculations from tank strappings, meter and tank calculations, performs stop gauge and gain/loss calculations, and tracks tank physicals.

The software also accurately manages gains/losses across multiple customers and manages bulk movements across the terminal while accommodating for multiple Units of Measures for inventory tracking and measurements, such as mass, volume, and British thermal units. To further facilitate movements and improve inventory control, the software pre-authorizes line-ups, offers ground/overflow protection, and ensures safe disconnects from gantry systems during loading and unloading. After the loading or unloading process is completed, DeltaV O2CManager Software for Liquids Terminals manages the post weighing process, issues all necessary documentation, and communicates the departing procedure to the truck, railcar, or vessel.

By Accounting period		By Transaction period								
Product	Book Location	Open	Receipt	Delivery	Loading	Transfers	Adjustment	Over/Short	Total	UOM
Showing Inventory: 06/01/2025 00:00 - 07/01/2025 00:00 Last Accounting Period Close: 08/01/2025 00:00										
Shipper: COMPANY A										
1000 - Propane	Test Tank1 - 1	7,000,000.00	5,500,000.00	0.00	149,986.56	0.00	0.00	0.00	12,350,013.44	L
2000 - Butane	Test Tank2 - 2	8,000,000.00	3,900,000.00	0.00	103,211.88	0.00	0.00	0.00	11,796,788.12	L
Sub Total		15,000,000.00	9,400,000.00	0.00	253,198.44	0.00	0.00	0.00	24,146,801.56	L
Total		15,000,000.00	9,400,000.00	0.00	253,198.44	0.00	0.00	0.00	24,146,801.56	

Figure 4: View inventory management by accounting period or by transaction period.

Administer Contracts & Tariffs Efficiently

Enhance customer contract management by basing charges on specific scenarios with business rules applied as those specific scenarios occur in real time. DeltaV O2CManager Software for Liquids Terminals captures the terms and types of services available for each customer, supporting both throughput charges and non-product movement charges, such as tank heating, tank cleaning, and tank rentals. Our robust software also automates the management of contractual service charges, including tank leasing and ancillary services (i.e., heating tanks and line flushes) to ensure comprehensive and efficient contract management.

Expedite Accurate Invoicing

DeltaV O2CManager Software for Liquids Terminals automates capture charges to provide a simple method for sharing invoices with minimal under or over charge corrections. The software supports multiple charge types and ensures all service and handling charges for movements, including the handling of nitrogen, vapor production, pigging, and power, are collated and invoiced correctly. Reconciliation is also automated, providing terminal teams with an accurate account of stored product versus the amount of product recorded in the system.

With this robust dataset in the system, the software generates highly accurate invoices, ensuring the terminal is paid for the correct amount of product. The software also automatically sends invoices to the ERP system for a turnkey process to allow accounting personnel to focus on closing the period faster.

Automate Reporting & Compliance

Detailed reporting and analytics help terminals enhance decision making and improve operational planning. DeltaV O2CManager Software for Liquids Terminals allows users to view, download, and send report packages to all stakeholders, including customers and management, while maintaining compliance with local rules and government regulations. Our software acts as a centralized information repository for terminals, ensuring data is well organized and sanitized for daily use and easily accessible during an audit. The software provides terminal operators with a comprehensive and reliable paper trail for audits that ensures movements can be traced to the original batch. Reports are customizable and can be sent on demand or automatically at the end of every day or another specified period. Our comprehensive software complies with system and organization control parameters for security, availability, system integrity, and confidentiality of data.

SUMMARY							
SYSTEM	CHARGE LOCATION	ORIGIN	LOCATION	PRODUCT	TYPE	CHARGE QUANTITY	TOTAL
Transaction Period: 07/01/2025 - 08/01/2025							
Test Terminal - 194 - Test Terminal		le - Terminal A	le - Terminal A	1000 - Propane	THRUPUT (BOL BASED)	149,986.56	\$1,199.89
				2000 - Butane	THRUPUT (BOL BASED)	103,211.87	\$825.69
	Test Tank1 - 1	le - Terminal A	Test Tank1 - 1	1000 - Propane	STORAGE	5,500,000.00	\$5,500.00
	Test Tank2 - 2	le - Terminal A	Test Tank1 - 1	2000 - Butane	STORAGE	3,900,000.00	\$3,900.00
Sub Total						9,653,198.43	\$11,425.59
TAX TOTAL							
INVOICE TOTAL						9,653,198.43	\$11,425.59

Figure 5: Correctly invoice for multiple charge types, such as throughput or storage.

Automate Logistics Management at Busy Marine Terminals

Operating inefficiencies in marine terminals can lead to long vessel turnaround times and higher demurrage bills. These unique challenges require purpose-built software that serves specific requirements, such as vessel scheduling, customs clearance, and demurrage management. With the Marine Terminals Module for our DeltaV O2CManager Software for Liquids Terminals, marine terminal operators can capitalize on the same support the robust software provides for land-locked liquids terminals while also getting the expanded benefit of marine-specific functionality, including vessel scheduling, customs clearance, and demurrage management. Our software automates activities across marine terminals to reduce turnaround times, improve the speed and efficiency of product loading and unloading, and allow for more vessels to be serviced. Real-time data integration enables users to easily view schedules, customer requests, and other critical data points across the enterprise. By combining the functionality of the software and the module, marine terminal operators can now streamline the logistics management of a wide variety of liquid hydrocarbons by capturing all relevant data in a single software system.

Enhance Scheduling

Marine terminal operators can effortlessly schedule vessels to their respective docks using the software's intuitive graphical interface. The Marine Terminals Module simplifies sharing and communicating the dock schedule with all stakeholders. Vessel arrival and departure times are scheduled with a few clicks, and operators can view jetty or dock assignments through a Gantt chart. The module also manages and configures arrival times and departure timestamps with targeted time intervals. Users can easily access and review all service and transportation requests submitted by customers. The Marine Terminals Module also captures vessel deliveries and receipts, including vessel volume at both the originating and receiving facilities. The software's robust inventory management function leverages this data to efficiently integrate all product movements.

Self-Service Customer Portal

Simplify processes by providing customers with direct, online access to DeltaV O2CManager Software for Liquids Terminals, enabling them to submit requests and orders, view tickets and bills of lading, review inventory positions, obtain invoices and more.

Reduce Demurrage

Complex manual processes at marine terminals can cause delays in clearance, resulting in stranded vessels that create bottlenecks and obstruct other ships from unloading and loading, reducing the terminal's throughput and efficiency. The resulting challenges include missed deadlines, complicated schedules, and higher demurrage. A marine terminal may incur demurrage fees as customs offices await the required clearance documentation.

Our Marine Terminals Module for DeltaV O2CManager Software for Liquids Terminals captures all necessary information to accurately identify and prevent demurrage events and automatically communicates with the customs authorities for streamlined clearance. It also catalogs and categorizes events to facilitate ongoing demurrage management, helping to reduce bills, minimize vessel turnaround times, and/or prevent demurrage altogether.

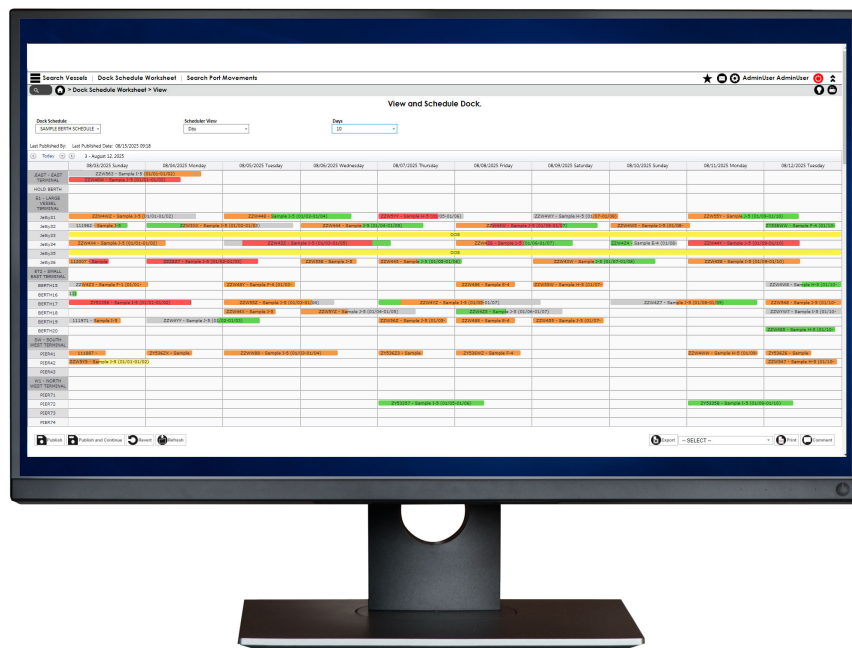


Figure 6: Improve turnaround times and reduce demurrage by monitoring and sharing the daily dock schedule.

Agile Software Solutions for an Evolving Industry

Modernize complex processes and systems to increase throughput reliability, enhance safety, and maximize asset utilization, including LNG. Operators who adopt modern, integrated software solutions that automate complex tasks and provide a holistic view across the value chain will break down silos and have a competitive advantage. Integrating DeltaV O2CManager Software for Liquids Terminals with DeltaV TerminalManager and DeltaV SchedulingManager for Terminals delivers a unified view of the entire order-to-cash process, providing you real-time visibility, improved efficiency, and empowers data-driven decisions to stay competitive and profitable in the evolving energy landscape. Our approach enables organizations to meet growing energy demands while maintaining safety standards, product quality, and profitability.



Extract the maximum value from your technology investments while digitally transforming your enterprise and order-to-cash processes.

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