Marine Movements

- Optimizes operations through dynamic planning
- Allows immediate response to changes in schedules
- Provides visualization of scheduled activities for seamless transition of shifts
- Prevents contamination through tracking materials in line segments
- Improves routing through visibility of inventory and quality data



Introduction

The Marine Movements module of the Syncade Logistics solution is specifically designed to help optimize marine movements for quick, accurate, safe and secure loading and unloading of materials. Emerson's solution helps facilities respond to changes faster through better planning of movements by combining information from orders, tanks, the marine authority, and terminal operations. This gives operators access to the most recent data concerning nominations, vessel progress during a voyage, terminal and port status, and actual inventory. Terminal operators have the data that they need to make changes to schedules in real-time and ensure a rapid response to new information.

Optimize Movement Schedule and Reduce Operational Costs

Prevent demurrage cost. The Syncade Marine Movements module identifies and resolves conflicts, speeding movement of materials and limiting laytime, which reduces the risk of incurring demurrage costs. The comprehensive planning view provides the data required to allow the terminal operator to reduce costs through conflict management and better management of ship time at the jetty.

Avoid contamination and improve material control. Tracking and control of the material sitting in a line are critical activities for avoiding contamination. By controlling association of line and tank, the Marine Movements module makes handling segments a low-risk activity.





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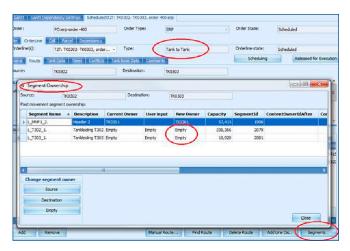
Operators can calculate book volumes of segments by leveraging tank parameters, display line displacement as a scheduled orderline or separate order to increase visibility, and replace material by displacing the line volume to a tank or from a tank. The total tank stock before and after the line displacement is monitored to ensure it stays the same for each tank, protecting your materials.

Manage assets more effectively. Use your assets more effectively by visualizing and resolving any conflicts that arise during multiple, simultaneous movements between jetties and tanks at your terminal. Syncade Logistics displays automated flow paths and also provides operator tools for making manual adjustments before the movement is initiated, creating opportunities to use your assets to their full capacity.

Prevent faulty jetty assignment. Correctly assign vessels to jetties or berths by effectively matching the characteristics of both vessel and jetty. The Marine Movements module allows the planner access to the data required to assign the right jetty for every vessel every time. The system can manually or automatically assign the occupation orderline for each jetty call based on the planner's needs.

Software prompts ensure that manual assignment of the jetty reflects any equipment constraints and can filter available options to reflect only those that are appropriate for the scheduled movements. Automatic controls take that a step further: the system uses an automatic path finding process to locate the appropriate and available jetty for the movement and makes the reservation based on that availability.

Improve tank to tank inventory management. Visibility of tank values for both destination and source tanks are critical to ensuring establishing actual moved quantity from tank to tank. The Marine Movements module allows terminal operators to easily access both tank values to verify and ensure inventory accuracy.



Efficiently manage tank to tank movement while preventing contamination.

Comprehensive Tool for Operators and Planners

Order Management. Create orders directly in Syncade or download from your ERP system. Orders can have multiple orderlines dedicated to each movement, with each orderline controlled both by source and destination. Order states can be reported back to the ERP as needed to support your business rules. Order quantity can be adjusted within the tolerance specified by ERP.

Planning & Scheduling. Berth and vessel master data in the system helps the planner choose the best jetty for the movement. Orders can be scheduled to ensure optimal use of resources. The module alerts the planner to any overlapping of resources.

Gantt chart representation. Syncade's Gantt representation of the schedule allows the planner to make easy drag-and-drop adjustments to the schedule, with changes automatically reflected throughout the schedule.

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Conflict alerts and resolution. All conflicts are identified by the system and can be resolved easily via the Gantt chart interface. Conflicts are configurable to be either "soft" or "hard" conflicts, and operators can even suppress specific alerts.

Automated routing. Automated route selection provides the best available route for each movement.

Data historian. The historian ensures that your data is secure and readily available for future reprint or review.

Line segment allocation. Ownership of material in each line is recognized and properly controlled for accounting. Operators can easily view previous material ownership in a segment.

Blending. Inline blending into tanks or vessels can be accomplished via path selection. You can direct multiple streams to run in parallel within a single order, specifying proper allocation of materials to provide control of the blend.

Tank swings. Seamless changeover from one source to another without interruption of flow is accomplished with the Tank Swing functionality.

Flying switches. Seamless changeover between destinations without interruption of flow is accomplished with the Flying Switch functionality.

Flying line fill. Support the expedited unloading of large crude ships by using two jetty lines in parallel with the Flying Line Fill functionality.

Use of Flow Meters. Movements can be tracked and measured using flow meters. All contingency is taken into account.

ERP Integration. Easily exchange information between Syncade and an ERP to keep data aligned.



User Secured. Syncade's standard user permissions and audit trails provide assurance of both security and regulatory compliance.

Inventory Management. Tank inventory calculations and reporting are achieved by our integrated inventory module.

Scalability. The Marine Movements module allows you to scale up to 35 concurrent users with half of those users doing high-volume activity with no impact on overall system performance.

Reports. Operators can customize reports for record-keeping or for deeper analysis. Export data in different file types (Excel, IPEG, Adobe, etc.).

System Requirements

Please contact your local sales office for a current copy of the Logistics Applications System Requirements document for detailed system specifications and compatibility information.

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