



Dynamic Planning of Yard Stowage

For most terminals, the conventional style of yard planning is extremely time consuming, costly and inaccurate. This makes it difficult for terminal operators to increase yard capacity and optimize terminal operations. Navis Expert Decking automates yard positioning, distributing containers throughout the yard based on predefined business rules. This comprehensive yard allocation module facilitates real-time, accurate and optimized stowage of containers in the yard and allows users to spend less time observing yard allocations and more time managing the yard.

Expert Decking considers the state of the yard in real-time, dynamically assessing container volumes, CHE locations, stack configurations and terminal specific business rules for “best-case” stacking of import, export and empty containers. Using over 60 business rules, the design of Expert Decking enables a terminal to set up an operational framework which can automatically manage yard stowage with a very comprehensive set of rules. This allows for enough operational flexibility to accommodate changes in how the gate, rail and vessel entry points direct containers to the yard.

With Navis Expert Decking, move decisions are made logically, minimizing the impact on future operations, such as container rehandles, and maximizing terminal operational efficiencies.

Expert Decking Benefits:

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|  1 Increase yard utilization |  5 Lower “Fail to Deck” impact at the gate |
|  2 Increase yard density |  6 Reduce rehandles |
|  3 Handle more containers |  7 Increase efficiency with faster, and more accurate moves |
|  4 Use fewer RTGs | |

Expert Decking contributes to overall operational improvements in productivity and customer service, allowing the terminal to manage general allocations for a majority of the boxes, which in turns increases the flexibility of the system and the opportunity for equipment productivity improvements through PrimeRoute. Expert Decking also provides a holistic approach to total yard management while maintaining designated yard allocation for dangerous goods cargo as well as supporting improved reefer management and monitoring processes.

Features of Expert Decking:

- Bases yard allocation decisions on where the RTGs are located in the yard at the time of the decking decision
- Manages existing yard stacks before moving on to an open yard stack
- Manages how cargo is mixed in yard stacks
- Segregates containers into general groups in specific yard areas
- Sets criteria for the best available section and stack for a container
- Saves separate strategies based on departure mode (road vs. rail vs. vessel)
- Supports the priority decking of 2x20' twin containers in the yard
- Ability to stack heavy containers closer to the truck lane
- Distance threshold extended to “distance from start” and “distance to next”
- Container turnover block modeling that accounts for stacking of containers by dwell time

“The Navis Optimization Modules of Expert Decking and PrimeRoute have helped us to dramatically improve the productivity of our operations. Our customers have experienced an improvement in service and we have been able to reduce our operating costs as a result.”

~ Alex Becce, Terminal and Commercial Manager, DP World Jeddah

About Navis

For more than 25 years, Navis has provided the global technology standard for managing the movement of cargo through terminals. The Navis N4 terminal operating system optimizes operations, unlocking operational efficiency, productivity and visibility for terminal operators. Navis combines industry best practices with innovative technology and world-class services that enable marine terminal operators worldwide to optimize their operations and maximize performance with reduced risk.

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