

Marine terminal design and simulation

Körber’s cloud-based scheduling and berthing simulator solution for ports and terminals automates manual process and enables everyone, from operations managers to mooring teams, to optimize vessel calls.

Challenges for ports and terminals

Scheduling vessels into and out of marine terminals is extremely complicated, presenting a number of challenges, particularly for the oil and gas industry.

- Multi-million-dollar levy charges imposed on waiting vessels (demurrage)
- Frequent changes to vessel ETAs due to unpredictable conditions and long waiting times
- Multiple management issues – e.g. vessel draft, safe movement regulations, tug availability
- Environment concerns as a result of excess fuel waste while vessels are waiting in port

“I’ve had over 28 years’ experience of marine-side oil terminals. The day-to-day issues a marine terminal faces can be anything from weather to shipping, port authority constraints, volume of traffic and shortage of pilots, etc. All these things must be considered when you’re scheduling shipping.”

Julian Brown

Consultant, Port Plus Operations Consultancy



Key benefits

Manage multiple challenges

Factoring in a number of data points such as tide, vessel size, inventory and traffic, our algorithm is able to manage a range of challenges to ensure safe passage of ships, while optimizing the use of your available infrastructure and key resources.

Improve vessel tracking

Supplying accurate information on vessel positioning, ETAs, transfer progress and pilot disembarkation, our scheduling and tracking solution helps you to manage the entire call lifecycle, while increasing supply chain efficiency and reducing demurrage.

Mitigate risk to maximize safety

With vessel information accessible to the port community via an interactive planning board, users can easily combine data such as maritime conditions and infrastructure constraints with vessel tracking, to mitigate risk and ensure safer, more productive vessel calls.



Superior forecasting: Optimizing efficiency and reducing costs

Used by terminals and ports around the world, our leading berth scheduling and simulation application allows you to improve berthing efficiency and gain an advantage over your competitors.

It achieves this through an innovative algorithm, drawing on data across the supply chain to provide your employees with a deeper understanding of a number of factors to better predict the arrival and departure times of vessels.

This not only helps businesses reduce waiting times and increase cargo transfer rates, it limits the environmental impact by cutting the amount of time vessels are running idle in port.

“Scheduling vessels into and out of terminals is an extremely complex and time consuming task, with all the factors you must consider. Körber’s mission is to optimize your infrastructure and move more products across the berth in a safe, efficient and productive way.”

Simon Shore
Körber

The Körber difference

While our competitors provide manually driven planning boards, based on spreadsheet-style Gantt charts, Körber’s scheduling algorithm offers a more effective way for your schedulers to optimize vessel calls, increase the volume of cargo transferred, and more accurately track and schedule resources.

Our solution improves port performance



Reduction in demurrage



Reduction in waiting time



Reduction in time to schedule

Our solution in use



Port Taranaki

We recently developed a solution for this major New Zealand port. The delighted client praised Körber for our “commitment, attention to detail and passion throughout the entire project.”



Port Plus Operations Consultancy

This consultancy represented a client who needed to replace manual paper-based systems with a digital solution that would capture and manage all the terminal’s constraints.



Associated Petroleum Terminals

Körber delivered a dynamic change management tool that provided this company with an extremely easy to use window into the business.

Contact us to discuss your terminal’s requirements

