KALERIS

Wins with TOS

Kerry Siam Seaport Optimizes Operations and Reduces Carbon Emissions with Navis TOS

EXECUTIVE SUMMARY

Kerry Siam Seaport Limited (KSSP), a multi-purpose deep sea port in Laem Chabang, Thailand, achieved significant operational improvements by optimizing the Navis N4 Terminal Operating System through a strategic partnership with Kaleris. The collaboration also introduced advanced planning tools, including Quay Commander and Prime Route, while implementing strategies to streamline yard management, truck operations, and vessel planning.

THE CHALLENGE

- Inefficient yard operations resulted in excessive unladen driving distances for terminal trucks, increasing fuel consumption and operational costs.
- Limited optimization tools led to unnecessary container rehandles, reducing overall productivity and efficiency.
- Managing extremely high yard utilization posed challenges in maintaining smooth and efficient terminal operations.
- A lack of advanced tools for strategic yard and vessel planning hindered operational scalability and collaboration with shipping line coordinators.

Kaleris delivered unmatched operational knowledge alongside a specialized approach that considered the uniqueness of our terminal operations while also sharing industry best practices. The optimization program improved the way work was done and delivered tangible results, said Sirirat Srerattanamongkon, KSSP's Director

PAIN POINTS

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Operational bottlenecks

Inefficient workflows caused delays in quay crane operations and extended drayage dwell times, impacting customer service.

Scaling challenges with growing volume

As KSSP's annual volume exceeded one million TEU, the terminal faced difficulties in maintaining operational efficiency while scaling sustainably and cost-effectively.



Ineffective collaboration

Limited coordination with shipping line stowage teams hindered the development of optimized vessel and crane workplans, impacting overall productivity.





Kerry Siam KERRY Seaport LOGISTIC



THE RESULTS

\$190k 20% Reduction in **Fuel savings** unladen driving per years in distance of liters terminal trucks 10%

Reduction in container rehandling

Failure-todeck events

HOW WE SOLVED IT

To address Kerry Siam Seaport's (KSSP) operational challenges, Kaleris partnered with the terminal to implement a comprehensive optimization program. Leveraging its expertise in supply chain technology and operational best practices, Kaleris tailored solutions to meet KSSP's unique needs while scaling operations to handle growing annual volumes exceeding one million TEU.

The Kaleris Optimization Services team conducted an indepth analysis of KSSP's operations, identifying improvement opportunities in yard strategy, truck operations, and vessel planning. Advanced planning and optimization software modules within the Navis N4 Terminal Operating System, such as Quay Commander, Berth Window Manager, Expert Decking, Prime Route, and Autostow, were deployed to streamline processes and enhance efficiency.

Quay crane productivity improved, accelerating service for customers. Additionally, yard planners were equipped with advanced tools to strategically manage operations, and collaboration with shipping line stowage coordinators was strengthened, resulting in optimized vessel and crane workplans.

Kaleris' collaborative approach and operational expertise ensured a seamless implementation, enabling KSSP to achieve significant productivity gains, cost savings, and sustainability improvements. By aligning global best practices with KSSP's local requirements, Kaleris delivered a solution that positioned the terminal for scalable, efficient, and sustainable growth.

FUTURE OUTLOOK

- KSSP plans to build on the optimization program by further refining yard and vessel planning processes to handle increasing cargo volumes seamlessly.
- The terminal aims to continue reducing its environmental impact by leveraging advanced technologies to minimize fuel consumption and emissions.
- KSSP will explore additional technology integrations and process improvements to maintain its position as a leading multi-purpose deep sea port in the region.

