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BUILDING AN INTEGRATED COLD CHAIN

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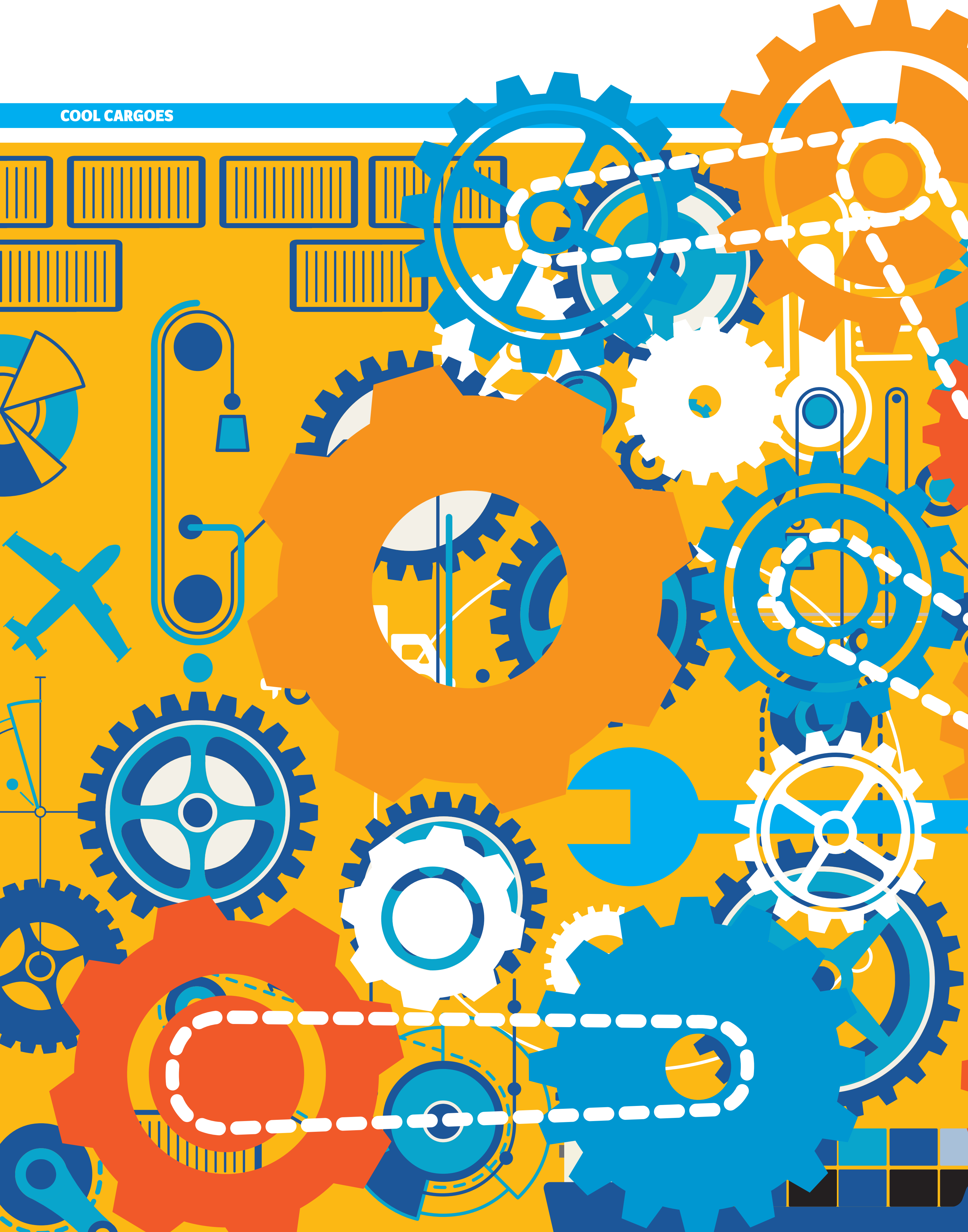

Stakeholders weigh in on current trends and what they mean for the future of refrigerated logistics around the world

By Lara L. Sowinski

BUILDING AN INTEGRATED COLD CHAIN

THE GLOBAL COLD chain is in the midst of rapid expansion. Growing volumes of perishable imports and exports are impacting stakeholders throughout the global cold chain, especially as more refrigerated cargo migrates to the intermodal sector. Executives from various interests, including ports, cold storage providers, third-party logistics providers and carriers, spoke candidly about the challenges during a roundtable discussion at the JOC's 15th Annual TPM Conference in Long Beach, Calif., in March. One of the key takeaways for beneficial cargo owners is that stakeholders view refrigerated cargo as a growing and profitable segment of their business and sizeable investments are occurring on multiple fronts to build and strengthen the integrated global cold chain.

PORTS

Major container ports are feeling the effects of expanding trade in chilled and frozen cargoes, and they're making infrastructure improvements to better handle time- and temperature-sensitive commodities.

Conventional breakbulk ports are typically designed to allow vessels to berth adjacent or near the refrigerated warehouse, unlike container ports where the cold storage facilities are usually outside the immediate port area or sometimes even further, said Frank Camp, sales and marketing director for non-containerized sales at the Jacksonville Port Authority. In order for container ports to invest in cranes and other equipment and for facilities to cater to reefer shipments, there must be a return on investment.

Noel Hacegaba, managing director of commercial operations and chief commercial officer for the Port of Long Beach, agreed that considerable investments are necessary for container ports to accommodate intermodal reefer containers. The Port's Middle Harbor project, for example, includes plans to add 3,000 reefer racks and improve intermodal links to support reefer business, he said, "and these investments are expensive."

Infrastructure development is good news for BCOs, but service remains a concern. Turnaround times and proper handling of reefer boxes by ports are high on the list of priorities, for example, while BCOs say slow-steaming by the container carriers continues to have a negative effect on perishable shipments.

Hacegaba believes some refrigerated shipments will divert from the U.S. West Coast to the East Coast when the Panama Canal opens its expanded locks in 2016, but "the real game changer will be the size of the vessels." Hacegaba sees an upside to the canal expansion for West Coast ports: "So much of our imports come from Latin America, and we'd like to see more of that Latin American containerized cargo come up through the expanded canal and to the West Coast."

Ultimately, however, the canal expansion's success "depends on what the railroads do, because you have intermodal rail competing with the all-water rail," he said. Long Beach's $4.5 million infrastructure investment and efforts to tighten up the supply chain will help the port "continue to command the lion's share of trans-Pacific trade," he added.

Camp believes the canal expansion is an opportunity to gain market share. "When we look at perishables we see an opportunity to pull down more seafood from Asia, more beef and dairy from Australia and New Zealand, and more fresh produce from the west coast of South America," he said.

MAERSK LINE

"SHIPPERS WANT TO STORE THEIR GOODS NEAR THE PORT TO LOWER THE OVERALL SUPPLY CHAIN COSTS."

Ryan Brower, strategic account executive for Penske Logistics, doesn't see a huge west-east shift after the canal expansion opens. "I don't see a lot of volume leaving the U.S. West Coast, maybe 3 percent might leave for the East Coast," he said. "In addition, from the steamship lines' perspective, they're going to get a lot more utilization on pendulum services between Asia and the West Coast versus a longer 60-day voyage to the East Coast then back to Asia."

COLD STORAGE PROVIDERS

Carla Silveira, director of international logistics for Lineage Logistics, said it's preferable to build cold-storage facilities near ports because of the current lack of capacity. This port-centric warehousing approach is part of Lineage's network strategy, which favors a supply chain with road and rail links, ports and cold storage facilities in proximity to one another.

"Shippers want to store their goods near the port to lower the overall supply chain costs," Silveira said. "Those ports offering an overweight corridor are really giving an advantage to shippers who are trying to maximize the container weight."

Los Angeles and Long Beach offer overweight corridors, allowing transportation of cargo containers weighing up to 56,000 pounds on certain streets surrounding the ports with a special permit. "On the East Coast, we're going as high as 64,000 pounds … getting to the max payload allowable on the containers," Silveira added.

Brower explained that not all cold storage construction is occurring near the Los Angeles-Long Beach, however. "We're seeing a move toward the Inland Empire (east of the Southern California port complex). The reasons are primarily labor," he said, adding that while transportation costs would be higher, the price per square foot for warehouse space is much cheaper.

Although the Inland Empire might offer cheaper warehousing costs, the benefits of the ports' overweight corridors, which essentially allow shippers to add 10 to 20 percent more weight to their containers, would be forfeited if the shippers were transporting containers outside the overweight corridor boundaries, Silveira responded.

THIRD-PARTY LOGISTICS PROVIDERS

For Brower, it's congestion, not the Panama Canal expansion, that will be the big driver of West Coast cargo diversion. "Ongoing labor disruptions could really push volume away from the West Coast," he said. "That's something that lingers in people's minds. They want to avoid headaches."

Hacegaba says Long Beach is doing "everything in our power to instill confidence in the BCOs," just months after many were unable to divert containers around the severe congestion resulting from difficult longshore contract negotiations, and were forced to watch helplessly as their shipments spoiled at the ports.

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"We heard from many BCOs about their plans to divert cargo, but they also prefer not to because it amounts to additional costs, in some cases up to $30 million over a 12-week period," Hacegaba said. "We know how important this gateway is, and our focus as a port authority — working in conjunction with the Port of Los Angeles — is to fix what's in our control, to improve velocity and not just build infrastructure alone."

CONTAINER CARRIERS

"It's obvious the road infrastructure in the U.S. is overtaxed, and we can expect even more restrictions going forward," said Bill Duggan, Maersk Line's vice president of North American refrigerated services. "Moreover, the U.S. is competing against other countries in a cutthroat environment."

Trade in proteins is especially competitive, because every cent per pound counts when competing against foreign suppliers, Duggan noted. For that reason, utilizing overweight corridors to maximize the container load and getting closer to where the reefer cargo is being exported is paramount. "We have to think creatively, and how we use our footprint around the ports is one way to go," he said.

Although technology allows for round-the-clock visibility of cargo and remote container monitoring, only the pharmaceutical shippers and a handful of others with high-value products are willing to pay for it, Duggan said.

Interestingly, when Soren Skou took over as Maersk Line CEO in 2012, remote container monitoring was one of about 25 projects he chose to keep on the list that previously numbered about 95. Although its importance is recognized, it takes human and financial resources to develop, Duggan said. With reefer rates having declined substantially over the past two years, particularly in North America, projects such as remote container monitoring face an even tighter squeeze.

As to the question of whether shippers eventually will have control to change set points during the journey, Duggan replied, "That was not in the original prototype." There are many liability factors in such a scenario, he said. Add the complications that could arise if multiple shippers use various third-party temperature-monitoring devices inside a single container, and it's obvious there are a lot of issues to work out.

Still, the benefits of remote container monitoring are worthwhile, even for lower-value produce shipments. Duggan cited the example of farmers and the risk they face when sending a container of perishable produce overseas, where buyers reserve the right to reject a shipment if the quality is unacceptable. "Sometimes they have an ulterior motive," he said, and they reject the shipment because they were able to purchase the produce from another supplier for a lower price. In this case, remote control monitoring can provide a defense for farmers and shippers.

Brooks Royster, president of MTC Logistics, suggested that giving shippers the ability to change set points during the voyage could allow them to begin thawing certain frozen products prior to arrival at the port, presumably so products would be ready for consumption right away. The concept isn't entirely new. For years, Chiquita used a similar process to start the ripening process for bananas inside the container so the fruit would be at its prime when it reached the grocery shelf. **CC**

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