

Customer & Market Due Diligence Of Specialty Chemicals Logistics Service Provider: Establishing ISO Tank Container Growth And International Expansion Opportunities

The Challenge: One of our long-time PE clients was pursuing an investment in a leading provider of ISO tank container services for imports and exports of liquid specialty chemicals, with the leading presence in the U.S. and a growing presence in Europe. The target was benefitting from growth in the specialty chemicals industry trade and the growing use of ISO containers to ship chemicals. While attracted by this continued growth in demand for the target's services and further geographic expansion opportunity in the U.S., Europe, and potentially China, our client was concerned about the impact of increasing shale gas-driven U.S. chemical production. As such, our client asked Gotham to conduct a 2-phase (pre and post check-in bid) customer & market due diligence to establish: (1) specialty chemicals import/export dynamics and trends; (2) ISO container growth outlook and penetration level; (3) understanding of target's competitive positioning by port; and (4) international expansion opportunities.

ISO Tank Container Penetration Growth Opportunity Analysis: To address our client's due diligence objectives, Gotham undertook a multi-pronged, data-driven effort that entailed:

- Building a port-level market sizing model to establish ISO container penetration and size/growth of ISO container services:
 - Leveraged government data to establish import/export flows by chemical and by port in the U.S. and Europe
 - Analyzed PIERS data set containing 600 million rows of information on all U.S. import/export bills of lading over the past 10 years to determine use of ISO containers to ship specialty chemicals
- Conducting 93 anonymous interviews with NVOCCs, chemical manufacturers, and ISO tank manufacturers/lessors to gain insights into: ISO tank container penetration; ISO tank container usage for storage; ISO tank container services provider selection criteria and the target's reputation vis-à-vis competitors; NVOCC purchasing process; and threat level of depot insourcing
- Developing a port-by-port view of competitors by profiling every competitor and its location in the U.S. and Europe
- Identifying and analyzing all U.S. chemical plant investments to establish their potential impact on trade flows and their geographic proximity to the target's ports
- Conducting a deep-dive into a key account (one of the world's largest chemical manufacturers) to assess potential risks – including an understanding of various chemical blends, their end uses, and shipment/storage patterns.

Liquid Specialty Chemicals Import/Export Flows Expected To Remain Strong

Gotham's analysis established that global demand for specialty chemicals is growing at 2.4% CAGR, driven by personal care, food & beverage, electronics, housing, and automotive demand across China, India, and developed nations such as the U.S. In fact, consumer end-markets accounted for over 60% of liquid specialty chemical shipments. As chemical manufacturers tend to produce intermediate chemicals at their large factory complexes (typically in the U.S. and Europe) and ship them to be finished closer to demand, there is a consistent demand for import/export of specialty chemicals. As shale gas production has grown, olefin-based chemicals are exported from the U.S. while the U.S. imports aromatics-based chemicals. The target benefits from this trend as a more balanced import/export flow boosts asset utilization, thereby improving profitability.

U.S. ISO Tank Container Market Is Expected To Grow At 9.2% CAGR

Gotham's market sizing model revealed that ISO tank container usage in the import/export flow is expected to continue growth at 9.2% CAGR, driven by ISO containers' growing share of liquid specialty chemicals transportation. Gotham estimated that ISO tank container penetration is at ~25% now, with additional 60% headroom available for conversion as ISO tank containers are appropriately sized, cater to the customers' preference for supply chain flexibility to ship in smaller quantities, allow for efficient transport of more blends as specialty chemical blends are increasing, and lead to optimization of working capital employed in the chemical manufacturing value chain. With the size of ships increasing, bulk shipping costs are also increasing due to IMO emission regulations. Gotham established that ~18% of parcel tanker shipments are <1,000MT and are candidates to be shipped in ISO tank containers, with these containers also experiencing a reduction in cost, driven by equipment manufacturing moving to low labor cost regions. Furthermore, the growing use of ISO tank containers is driving their increased use for storage purposes as chemical manufacturers prefer to keep safety stock to compensate for inefficiencies in global supply chain.

Target Is The Leading Full-service Player In The U.S. ISO Tank Container Services Market With Opportunities To Grow In The Fragmented European Market And Potentially Also In The Fast-growing Chinese Market

The shipping industry is led by NVOCCs, who work as an intermediary between businesses and shippers. The target is the go-to provider for NVOCCs due to its large geographic footprint, broad service offering, and above-average reliability, particularly for customers moving high volume. While the target has already consolidated the U.S. market, it still has additional opportunities to expand its U.S. port coverage. Further, the fragmented European market presents a significant consolidation opportunity. After achieving the scale in the U.S. and Europe necessary to collaborate directly with chemical companies, the target has an opportunity to disintermediate the NVOCCs. The Chinese market offers another expansion opportunity due to rapid growth in chemical production and usage and growing use of ISO tank containers due to safety concerns.

The Outcome: Gotham's comprehensive, data-driven assessment provided our clients a clear view on the ISO tank container penetration opportunity, as well as on the target's competitive positioning, allowing our client to prevail in the hotly contested auction.

