

**A Sustainability Strategies**



**KLA-Tencor Responds Stat With Global Logistics Strategy**

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In semiconductor manufacturing, nothing hurts more than a production shutdown. For manufacturing equipment makers like **KLA-Tencor**, this means service parts distribution takes on urgency not unlike human organ transport, conjuring images of helicopters on rooftops and hearts packed in ice. It's exactly the way KLA's customers would like to imagine their service parts being handled. Of course, this also implies an abandonment of any pretense that efficiency counts at all. "Cost (and carbon) be damned—get me that part!"

Such pressures force KLA-Tencor's global service and support organization to balance fire alarm metrics like customer satisfaction and parts fill rate against slow-boil business viability metrics such as operating cost and asset load. The basics of the traditional service level versus cost tradeoff are familiar enough, but the urgency is higher and the complexity greater than in most service parts operations, partly because of the value of time, and partly because of the technical complexity of the engineering. Add in the financial challenges of boom-and-bust cyclicity, and a global logistics strategy takes on a big role in KLA-Tencor's business.

Within this context, KLA-Tencor's geographic footprint has undergone some significant changes in recent years that affect its distribution center network strategy. Asian customer sites now comprise an ever larger share of total outbound shipments, with a new KLA-Tencor manufacturing facility in Singapore altering the pattern of inbound shipments. At the same time, differentiated service levels (i.e., contract customers versus time-and-material customers) call for increased and better communication with customers about what they can expect given what and how they pay.

To tackle the question of how best to reconfigure its global service parts distribution network, KLA-Tencor engaged a small but experienced supply chain consulting outfit called **The Results Group**. By analyzing variables like historical order data, transportation routes and rates, warehousing and other handling costs, and product engineering specifications, the project team considered multiple scenarios for locations of its distribution centers around the world.

The primary goal of the project was to identify cost savings that could be achieved without compromising on service. In Europe, the analysis pointed to a new location for the large regional distribution center that feeds local distribution points. Seven local stocking locations across the network were eliminated via consolidations, bringing the global total down to 28 with further consolidation possible in the future.

Although the medivac image of delivering service parts at any cost is appealing to customers dependent on KLA-Tencor service parts, the business reality demands cost control. This project was able to find a 19% cost savings in the service parts operation and an 8% carbon footprint reduction to boot. As service-level differentiation continues to emerge as an important part of KLA-Tencor's business strategy, the ability to revisit service parts distribution network design should allow customers to keep their equipment up and running without breaking the budget.

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