

Optimizing Inventory at Sandvik: A Cost-Saving Strategy

Sandvik is a global leader in manufacturing equipment for the mining and construction industries and relies heavily on its aftermarket parts, which are the wear and the spare parts, to keep mining sites operational. Late deliveries of these parts can halt entire operations, leading to significant financial losses. Recently, there have been rising interest rates which increase the cost of holding inventory. There has also been a trend of customers demanding faster delivery and higher availability, which means that optimizing inventory management has become crucial for Sandvik.

The focus of this study was to develop a strategy to move excess aftermarket parts from regional distribution centers back to the central warehouse. The aim was to find a cost-effective way to manage inventory, minimizing holding costs while maintaining high service levels throughout Sandvik's warehouses. Key cost factors such as transportation, handling, and storage were identified and analyzed to understand their impact on the decision to move parts between different locations.

One significant finding is that redistributing up to 76% of obsolete items from regional distribution centers to the central warehouse can reduce the amount of excessive stock within Sandvik's warehouses. This confirmed Sandvik's theory that centralizing stock in this way allows for better management and more effective reduction of excess aftermarket parts. This is crucial because it provides a clear, actionable step for Sandvik to optimize its operations.

To help in deciding what to redistribute, the study developed a practical framework to help Sandvik decide which aftermarket parts to redistribute when considering associated costs like transportation costs and order handling costs. This framework allows Sandvik to evaluate redistribution from a cost-perspective, leading to more efficient warehouse space use and reduced logistics costs without impacting service levels. The research underscores the importance of strategic inventory management, especially during periods of high interest rates and customer expectations. It demonstrates that with careful analysis and planning, companies can make smart decisions that enhance operational efficiency and competitiveness. This work is specifically addressed to Sandvik's challenges, but the type of analysis conducted can be used as a foundation for other companies facing similar issues within their inventory management. For anyone interested in redistributions and its impact on operations, this research provides a good example of effective problem-solving within this field.