

GUARDIAN INDUSTRIES – SUPPLY CHAIN
INTERNAL LOGISTICS OPTIMIZATION FOR GUARDIAN GLASS

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Guardian Industries is one of the largest global manufacturers of float glass and fabricated glass products. The float glass division, the largest in Guardian, has a global network of 27 production plants supported by warehouses and logistics. The plants and warehouses have historically worked in silos and enjoyed great autonomy. There is a significant opportunity for identifying and replicating the best practices across plants. Specifically, warehouse operations were identified by Guardian as a focus area because of high value potential and low risk from change management perspective.

The Tauber team spent the first 4 weeks on data gathering and prioritizing the opportunities within warehouse operations. The major opportunities identified were inventory control, reusable packaging assets management, warehouse layout and delayed differentiation of cut sizes. The total net present value (NPV) of these opportunities was estimated to be \$250M (\$100M working capital release, \$32M recurring fixed cost (\$190M NPV) based on internal and external benchmarking).

To address these opportunities, Tauber team developed a model to aid the plants in decision making of what to stock and how much to stock. These inventory policies were integrated with a warehouse location configuration model to improve the product slotting leading to increased labor and machine productivity. Further, to reduce execution time of loading/unloading operations, the team proposed a tablet based solution integrated with warehouse management system. A detailed analysis of customer accounts was carried out to identify reasons for loss of reusable packaging assets. Following this, policies were framed and evaluated for their financial implications to Guardian Industries.

Going forward, Tauber team’s recommendations and models will be presented in Global Plant Manager’s meeting to be held in September this year to prepare 2016 Operations Excellence Road map. 27 float plant managers will be expected to review the work and set priorities/targets for 2016 and 2017. As part of the transition, three American plants have started the process of developing layout models to determine improvement opportunities, and current inventory levels are being reviewed in coordination with sales team to identify inventory that can be discarded.