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EMMICO: How to Establish Economic Order Quantity

A Tauber Institute for Global Operations team from the University of Michigan was working with newly integrated EMMICO (based in Rochester, N.Y.) and Franz Kuerten (based in Vienna, Austria) to improve inventory control. The project was part of a 14-week multidisciplinary collaborative internship program during which students worked on operations and manufacturing issues to potentially save the sponsoring organization millions of dollars through operational excellence. The team consisted of three students supported by two University of Michigan faculty advisors, one from the College of Engineering and the other from the Ross School of Business.

The issues facing the student team revolved around the integration of the Franz Kuerten plant into the corporate operations of EMMICO. Frank White, director of sales, Europe, and head of the integration effort, pointed out that the key EMMICO metric of operational performance, economic value add index,ⁱ was negatively impacted by the large amount of inventory carried at the Vienna plant and at its external warehouse.

When the Tauber student team arrived at the Vienna plant in May 2015 they realized that a project of this scope and magnitude offered many areas in need of investigation to meet the objective of improving operational performance through better inventory control.

As EMMICO, which manufactured emissions controls, began integrating Franz Kuerten into its European operations, it recognized many challenges that needed to be addressed to take advantage of the synergies that had justified the acquisition. The integration team, under White's leadership, aimed to identify the Franz Kuerten issues, resolve them, and bring its operational performance in line with other EMMICO plants in the region.

The team identified a number of factors that had caused the plant to be in a great state of flux. It had not been efficiently managed prior to the acquisition. The culture of the Franz Kuerten organization was not results-driven and employees were not encouraged nor empowered to make improvements. The business

ⁱ The economic value created at a plant from raw material input to outgoing product.

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