

# Success in **Operations**

*E3 process results in operational improvements and cost savings.*

## **GKN LAND SYSTEMS**



160 Employees



Woodridge, Illinois



[www.gkn.com/en/our-divisions/](http://www.gkn.com/en/our-divisions/)

### **SITUATION**

The E3 assessment reviewed the three value streams (agricultural, marine, and military) on the shop floor with particular focus on the agricultural drive shafts value stream. The total facility is about 140,000 ft<sup>2</sup> and the shop floor has an area of approximately 60,000 ft<sup>2</sup>. The supply chain is quite complex as there are a large number of suppliers located around the world. Many of the larger suppliers are other GKN companies in Europe. The parts and assemblies GKN produces are essentially made-to-order due to varying customer specifications and volumes – this is characterized as a “high mix/low volume” environment. GKN is also under pressure from customers to reduce lead times.

### **SOLUTION**

The Illinois Manufacturing Excellence Center (IMEC) provided economic and process efficiency advice. The E3 review involves hands-on assessment of production processes, recommendations for improvement, and assistance with implementation. GKN Land Systems involved top management, engineers, and floor supervisors in the E3 process. These individuals assisted the E3 team and provided information about product flows, material usage, processing time, and energy usage. Following their assessment, the team reviewed its recommendations and produced a final list of specific action areas in each of the three focus areas.

### **RESULTS**

- Installed destratification fans to control heating and retrofitting lighting
- Lowered system air pressure and reduced air leaks
- Installed aeration devices on sink faucets and dual flush valves on toilets to control and reduce water flow
- Installed hand dryers replacing folded towels and paper rolls in the rest rooms, eliminating waste paper going to landfill and cutting costs
- Developed detailed Value Stream Mapping (VSM) to drive improvement in their productivity and minimize waste throughout the production process

“*The E3 process resulted in operational improvements and cost savings. GKN has saved resources and could retain four jobs since engaging in the E3 program.*”

- Scott Caskey, Manufacturing Engineering Manager



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