



➔ The Client

Toro is a \$2.0B leader in the lawn, garden, and landscape equipment manufacturing market including the production and sales of high-grade commercial irrigation products for the golf industry.



➔ Pain Points & Challenges

- ⇒ High failure rates and rework for satellite control systems used for remote control and monitoring of complex golf course irrigation systems
- ⇒ Over \$23 million expense in a large recall of affected control systems that required extensive and costly rework

“Pragmatek was instrumental in helping us over-come a complex product defect issue that had significant rework, warranty cost impacts on our business while decreasing customer satisfaction. Pragmatek provided a sustainable process that help us resolve complex product defect issues allowing us to maintain our industry quality leadership.”

–Leo Meyer, EVP of Global Operations

➔ Pragmatek Solutions

- ⇒ Deployed a highly effective Six Sigma Quality analysis to define the root causes of equipment failure
- ⇒ Developed and implemented a sustainable pre-emptive corrective action system to attack and permanently remove product defects driving the cost of rework and field warranty

➔ The Payoffs

- ⇒ Discovered all of the root causes of control system failures
- ⇒ Attacked and corrected the root causes of product defects
- ⇒ Implemented a sustainable and pre-emptive failure analysis process the client is using to obtain six sigma standards for all products – less than 3.4 Parts Per Million defect rates
- ⇒ Reduced recurring rework costs by \$13 Million in the first six months after project deployment