

OPERATIONAL EXCELLENCE

IN 2007,

Minerals Technologies instituted a system of continuous improvement throughout the company that we call Operational Excellence (OE). The focus early on was to improve productivity and efficiency in our manufacturing operations, but in 2008 we began to apply the same Lean principles to our staff functions, like Finance, Human Resources and Legal. We knew that the processes would take employees time to learn and to institute, but that once embedded, the system would reap multiple benefits, and it has: The most telling contribution of our continuous improvement effort is the five percent per year compound annual growth in productivity.

Some of the OE processes that have become embedded in the company by a thoroughly engaged workforce are:

- **5S:** A foundational way to organize the workplace, epitomized by the phrase: “A place for everything and everything in its place.” This process highlights waste and serves as a basis for continuous improvement. The 5 S’s are: Seiri (Sort); Seiton (Set in Order); Seiso (Shine); Seiketsu (Standardize); Shitsuke (Sustain).
- **Standard Work:** A detailed definition of the most efficient method to perform a task to ensure a safe, stable, repeatable and unambiguous process to achieve the reliable output of processes and superior quality.
- **Total Productive Maintenance:** A process to optimize equipment effectiveness, eliminate breakdowns and promote autonomous operator maintenance through day-to-day activities involving the total workforce.
- **Daily Management Control:** A system that supports the ability to manage departments, functions and processes. Key operational data is collected, measured and charted for visual tracking. This tracking facilitates rapid response to sudden operational issues or the adoption of countermeasures to slowly developing adversity.

- **Kaizen Events:** Highly focused improvement workshops that address a specific process or work area. (Kaizen translates to “change for the better.”) The events, which can be multi-day or a few hours, typically involve a cross-functional group and may include suppliers and customers.

In 2013, MTI employees held 1,850 kaizen events to identify ways to reduce waste in hundreds of processes—more than a 200-percent increase over the number of kaizen events conducted in 2010.

MTI’s Global Suggestion System uses a computerized platform to advance our never-ending journey for continuous improvement.

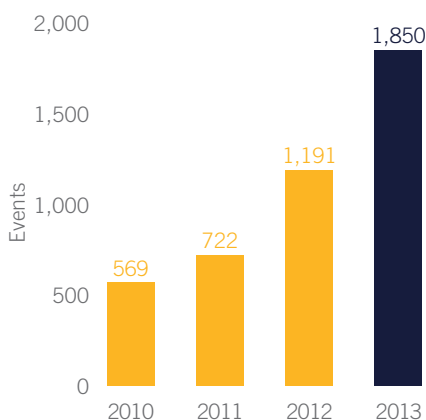
The system enables and encourages the generation of ideas for improvement in the following areas:

- New product and process development
- Expense reduction
- Operational Excellence
- Customer service
- Sales and revenue generation.

As you can see from the chart, in 2013 our employees submitted more than 15,000 improvement suggestions—that is nearly eight suggestions for every employee.

Operational Excellence

MTI Kaizen Growth



MTI Suggestion System Performance

