

# Mount Sopris Instruments Creates a Competitive Advantage

*“The team of gurus including Bob Forshay have taken us to whole new level of lean!”* – Thom Mandl, CEO, Mount Sopris Instruments

## Client Profile: 60 Years Producing Geophysical Instrumentation Systems

Mount Sopris Instruments is a leading manufacturer of geophysical slim hole borehole logging systems for groundwater, mining, research, geotechnical, and other applications – featuring a complete range of stackable wireline probes, rugged logging winches, versatile data loggers, and best-in-class WellCAD software.

For over 60 years, Mount Sopris has delivered innovative solutions to drillers, miners, engineers, and researchers in over 120 countries around the world. With an extensive product range and industry-leading customer support, Mount Sopris is dedicated to your success!

Mount Sopris was founded in Boulder, Colorado in 1951 at a time when locating uranium for weapon and reactor use was of national interest. The company’s first product was a portable scintillation counter. Early on, Mount Sopris joined forces with another Colorado company, one that made respirators for use by polio victims. Learn more at: [history of Mount Sopris Instruments](#).



*“The lean program from Transformance Advisors has given us a fast start with getting lean implemented into our organization.”* – Curtis Baker, Plant Operations Manager, Mount Sopris Instruments

## The Challenge: Market Conditions Require Increased Operation Efficiency

Given that Mount Sopris supplies instruments to the mining and natural resource markets, sales can be substantially impacted by fluctuations in natural resource prices. The recent down cycle in commodity prices has resulted in decreased demand from the company’s core customers, while at the same time, increasing competition from other geophysical instrument system manufacturers.



As a result of these challenges, Mount Sopris, under the leadership of President Thom Mandl, undertook a comprehensive review of its competitive position. The leadership team determined that decreasing customer order fulfillment cycle time offered significant value to customers and create a substantial long term competitive advantage.

Understanding that it needed to move quickly with this opportunity, Mount Sopris interviewed a number of consultants and decided to partner with Transformance Advisors for guidance, leadership, program development, and delivery. Project cost would also be supported by the Rocky Mountain Trade Adjustment Assistance Center (RMTAAC) through a U.S. Department of Commerce program that assists manufacturers impacted by increased import competition.

## The Engagement: Lean Culture Begins to Take Root, Step by Step

### First Steps: Certified Lean Master

Two members of the Mount Sopris team became [Certified Lean Masters](#) accredited by ISCEA International Supply Chain Education Alliance facilitated by Bob Forshay and team. This represented the first steps in creating a lean transformation and helped them understand the enormous potential of lean.

Once the team developed an understanding of the “Lean Tool Box,” they went to work on initial projects with the guidance of Bob Forshay as project lead and coach.

### Next Steps: Putting the Knowledge to Work

The highest priority issues addressed in the first phase included:

- Establishing a regular and formal process for Forecasting, Sales & Operations Planning, and Master Scheduling to identify opportunities to shorten order fulfillment cycle time.
- Order Lead Times now average less than 8 weeks where it previously was 15-20 weeks.
- Developing a new Sales Order validation and release process for Make-To-Order systems that completes a checklist of validation prior to committing to making a Ship Date Commitment. Customer satisfaction has improved exponentially!
- Establishing effective inventory control and transaction processing capability for all items has allowed for reduced inventories saving spend by ~25% within the first 90 days.
- Implementing a process to manage work orders using Kanban, and backflushing that is segmented for Make to Stock vs. Make to Order.
- Established a planning tool for managing a supplier Kanban to support shorter procurement lead times and effective stocking of raw materials.

### Additional Knowledge: Scheduling and Planning

Three key employees completed the APICS CPIM (Certified in Production & Inventory Management) program. This knowledge enabled them to drive process improvements in planning and scheduling. This allowed the team to take advantage of their MRP system.

***“I’m very impressed with the transformation at Mount Sopris, they are on their way to becoming a true quick turn manufacturer... in just a matter of months!” – Chris Stone, Project Manager, Rocky Mountain Trade Adjustment Assistance for Firms***

### The Results: Impressive Progress Leads to Measurable Improvements

On time delivery has improved quickly and still gaining. Customer orders are now booked as “systems” rather than “pieces.” This has also reduced accounts receivable.

Inventory turns have increased substantially along with a reduction in the dollar value of inventory.

Supplier on-time delivery performance has increased through improved coordination with component suppliers.

Customer order to ship days has been substantially reduced – the key objective for creating a competitive advantage.

The Mount Sopris leadership feels that progress, thus far, has improved its ability to quote aggressive delivery dates and compete in the challenging geophysical instrument market.

The company is well on its way to becoming a true Lean Enterprise.

***“The Mount Sopris team has done an exceptional job in applying the knowledge and tools they acquired in the Certified Lean Master and Certified in Production and Inventory Management programs” – Bob Forshay***



***Yes, Bob is doing an excellent job for us. We’ve made a ton of progress! – Thom Mandl, President, Mount Sopris***

