MEP National Network™

MONTANA SUCCESS STORY

THE POWER OF BRAINSTORMING – MANUFACTURING EVENT PRODUCES SAFETY SOLUTIONS FOR FIBER COMPANY

ABOUT CLEERLINE TECHNOLOGY GROUP, LLC. Cleerline Technology Group, based in Missoula, Montana, is a fiber optics technology company that provides system cabling, parts, and installation solutions for electronic systems. Formed in 2012, Cleerline grew out of the merger of two audio-visual companies, of which one had been in the area for many years. In response to changing technologies, it developed a number of unique fiber optic components, including its signature fiber optic cable, Cleerline SSF™. Cleerline has grown into a $14 million company with 20 employees who serve residential and commercial customers throughout the country and world.

THE CHALLENGE. Cleerline employees wind, rewind, move, and store many reels of cable daily. These reels are very large and heavy. Each time cable is wound off a reel, it must be moved off and on its individual pallet. Due to the size and weight of the reels, the standard loading process is time-consuming and challenging for employees. Even more concerning, it leaves room for potential risk of injury. Cleerline management was interested in exploring safer alternatives to protect its employees.

MEP CENTER'S ROLE. The Western Montana Manufacturing Partnership (WMMP) – a regional network of manufacturers supported by MMEC, part of the MEP National Network™ - holds periodic events to address specific challenges faced by its members. Participants brainstorm improvement suggestions and create an "effort and impact" report to guide implementation. In late 2019, MMEC and the WMMP hosted a Manufacturing Excellence Lean event at Cleerline to solicit input from fellow manufacturers on safer methods to move and manage the cable reels.

After viewing the environment and the current method, participants offered several new strategies for loading and unloading the reels on the pallets, including a ramp, a clamp system, and a lifting winch. Ultimately, Cleerline implemented the lifting winch. Among its advantages, the winch uses engine lifters that can carry reels that are double the weight currently used by Cleerline. In addition, employees can operate the winch using a controller, so they can stand well clear of both the reels and the lifting apparatus during the loading process, greatly enhancing their safety in case of any difficulty or incident. The process also reduces the risk of damage to the product itself and saves time for employees each day.

"We had many ideas thrown our way during the lean event – we really appreciate all our peers who took the time to help us work through this problem and come up with a feasible solution that has made a huge impact on the daily safety of our staff."

-Austin Sant, Production Manager

RESULTS

- **$60,000+** in avoidance of unnecessary costs (injury)
- **$2,000** in new product/process investments
- **$1,600** in annual cost savings
- **$500** in workforce training investments
- **2%** increase in employee productivity

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MONTANA MANUFACTURING EXTENSION CENTER