

# Success Stories

NC STATE UNIVERSITY

INDUSTRIAL EXTENSION SERVICE



INDUSTRIAL EXTENSION SERVICE

Jane Albright

November 2008

## Cable Assembly: "Doing Great in a Lousy Economy"



The various cable sizes beside a work cell enable workers to switch quickly from making one kind of cable to another.

Cable Assembly, LLC, in Graham can barely keep up with explosive growth and so many new orders that the 40,000 square foot facility can barely contain them. While the US economy founders and many manufacturing orders drop, Cable Assembly had to add a second shift.

Their success lies with three strategic directions:

- First, they excel in a niche market making complex cables for companies requiring hundreds, not thousands, in a high mix (they make up to 12,000 differ-

ent parts), low volume assembly.

- Second, the customer relationship is so important that clients often call the plant manager in charge of their project directly on his cell phone, without going through a call center or a sales office.

- And third, they've embraced a lean culture from management to floor, thanks to a jump start with IES lean specialists.

"What can I say? We're doing great in a lousy economy," said Jon H. Clements, general manager.

Cable Assembly makes their highly specialized cables for General Electric's industrial windmills and for Thomas Built school buses. About 30 companies depend on Cable Assembly, and some have been doing so since the company began in 1988. Clements expects to do \$13 million in sales this year, up from \$8 million a year ago.

"We must be doing something right," he said.

Cable Assembly started its lean journey because its owners insisted. Lean manu-

facturing increases efficiencies and productivity by eliminating waste within a process. The out-of-state owners had seen what lean could do at other companies they owned, and demanded that Cable Assembly adopt lean.

In March 2007, IES specialist Steve Swain met with Clements and Bob Misiewicz, production manager, to plan the company's first lean lesson. Since then, IES lean specialists Steve Laton and Steve Forrest have conducted eight lean sessions with Cable Assembly management and workers. As a result of their lean work's increased efficiencies, Cable Assembly attributes at least \$2.5 million in new sales and 40 new hires, which increases their workforce to 170.

Misiewicz had heard about lean earlier, but admitted that he didn't have much experience with it. He had heard about one-piece flows and the visual indicators often seen in a lean environment. Now, he is a lean convert.

"People were amazed at how much time you could

### Strategic Directions:

- EXCEL IN NICHE MARKET FOR COMPLEX CABLES
- CUSTOMERS RELATIONSHIPS ARE IMPORTANT
- EMBRACED A LEAN CULTURE

**\$13 million in sales this year, up from \$8 million a year ago**

## INDUSTRIAL EXTENSION SERVICE

909 Capability Drive  
Suite 1600  
Research IV  
Raleigh, NC 27606  
Phone: 919-515-2358  
Toll Free: 800-227-0264  
E-mail: [ies\\_services@ncsu.edu](mailto:ies_services@ncsu.edu)

**“People were amazed at how much time you could save with one-piece flow”**

save with one-piece flow,” he said, remembering that first lean session. Production nearly tripled immediately.

Now he’s the self-selected lean policeman. “I’m staying on top of things and pushing and driving it,” he said while walking through the vast facility, where cables of various sizes and uses were being assembled on table tops. Brightly colored bins held parts within easy reach.

As with most companies, Cable Assembly workers have taken to lean and adapted it to suit their particular needs. “Not everything is one-piece doable,” Misiewicz said. “Maybe the old way suffices sometimes.” Misiewicz estimates that Cable Assembly has an 80 percent lean culture, and it goes beyond how work is done to include increasing employee engagement in the company.

Communication has improved tremendously. White boards located throughout the factory floor tell employees exactly how the company is doing in sales and production. Numbers in red marker are used when the company is not doing well, but on this October morning, all the numbers were written in black.

On those same white boards, frontline employees can write suggestions. One of those led to a pattern drawn



Assembling highly specialized, low production cables in a work cell at Cable Assembly.

for each cable, conveniently stored in nearby cubes. Any employee with a good idea gets a free lunch and sees their ideas implemented almost instantly.

“People are not afraid any more,” Clements said. “We’ve got an openness and trust now. There are no egos – all are focused on what’s good for the company.”

New records are set regularly. For example, they used to make \$50,000 of product a week, and now they can do that in a day.

“We work smarter, not harder,” Misiewicz said. “Employees motivate themselves.”

And in one of those little ironies of the global marketplace, Cable Assembly ships to China. Clements smiles

broadly talking about it. The cables made for the windmills are shipped to China, where the windmills are assembled. Competitors in China could provide the cables cheaper, but the quality of the Cable Assembly product and their responsiveness to the customer trump their higher prices and shipping costs.

This is how they do great in a lousy economy.

**“We work smarter, not harder”**