MEP National Network™

TEXAS SUCCESS STORY

THE NUMBER ONE F-16 WIRING HARNESS AND ELECTRICAL PANEL COMPANY IN THE WORLD!

ABOUT INTERCONNECT WIRING. Founded in 1993 InterConnect Wiring continues to be a worldleader in supplying military aerospace electrical products. Over its history, InterConnect Wiring has supplied a wide variety of electrical products including electrical wiring harnesses, power distribution panels, and ground support equipment. Some of InterConnect Wiring's most noteworthy accomplishments include complete and partial rewiring of military aircraft. Headquartered in Fort Worth, Texas, InterConnect Wiring specializes in fast turnaround and developmental programs.

THE CHALLENGE. InterConnect Wiring has positioned their company successfully in the market, continuously delivering high quality services to their customers. However, there is always an opportunity to be better! The improvement initiative focused on the aircraft kit assembly – one of their main production lines. The process consists of a single operator retrieving all necessary components (some of which are manufactured in house) and assembling them. Although the company had a 99% on-time delivery rate, they often needed to be ahead of schedule because the time for getting kits assembled was longer than expected. Issues identified in the process were unbalanced workload, waiting for components, high levels of work in process, multiple 100% inspections, transportation between buildings and rework.

MEP CENTER'S ROLE. InterConnect Wiring's management team identified, analyzed and designed a new production model for the aircraft kit assembly line with the objective of achieving one-piece flow and reducing the processing time (and thus reducing the cost.) Management contacted TMAC, part of the MEP National Network™, for advice on applying lean best practices. Management also wanted employees involved in the initiative and to hold them accountable for controlling and continuously improving their processes. TMAC's approach to lean focuses on equipping customers with the knowledge, skills and abilities to become self-sufficient in improving performance typically follows 4 phases- introduce, practice, apply and reinforce. In addition, TMAC focuses on lean as an organization-wide initiative to achieve sustainable results. The first step at InterConnect Wiring was for the workforce to learn basic principles of lean manufacturing. InterConnect Wiring then formed a team with key members to analyze the process with a waste walk and a detailed value stream map to identify the bottleneck and areas of opportunities. A future state map was created and responsibilities and tasks for the one-piece flow line were defined. The new assembly tables were piloted and, as expected, some adjustments were needed and communication between "suppliers" (internal activities) was a key element for feeding the line and avoid delays.

RESULTS

- Increased number of contracts due to production lead times cut from 16 to 6 weeks
- Process lead time reduced from 92 to 5 days
- Work-in-progress inventory reduction from $150K to $30K
- Improved employee morale and engagement

CONTACT US

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"TMAC was key to helping InterConnect Wiring vastly improve our kit manufacturing line. It was a little embarrassing to see all of the wasteful practices that crept into our production line over the years. TMAC helped point them out and then worked with us to eliminate them. Thank you TMAC."

-John Ashour, President & Founder