

# Australian Automotive Manufacturing Client Case Study

**Tactical Engineering Solutions (TES)** provides practitioner-based consulting and training services that deliver measurable results for our clients. We work with our clients to understand their objectives, identify solutions that are capable of execution, and develop appropriate plans to achieve, validate, and sustain the intended benefits.

## **SERVICES:**

**Operations  
Performance  
Lean  
Six Sigma  
Rapid Improvement  
Logistics  
Quality Management  
Program Management  
Change Management  
Collaboration and Time  
Data Management  
Training &  
Certification**



**Opportunity:** An automotive manufacturer in Australia who manufactured 4 different vehicles types contracted TES to launch MODAPTS and lead a direct labor reduction project. The company had heard of the successful projects TES had performed in North America in applying Lean manufacturing techniques to reduce overall labor costs.

**Project Goal:** The project goal was to apply MODAPTS to all base operations in Trim and Final Assembly. Direct Labor manpower was to be reduced by 14%, in addition to absorbing a substantial amount of new content for a new model launch.

TES has the skill sets and experience to expand an organization's ability to make improvements and was contracted to deliver tangible results. TES provided the Industrial Engineering support for a direct labor reduction of 17% over existing and new model content. The opportunities for manpower reduction cost savings had to be engineered simultaneously with the application of MODAPTS standards to direct labor operations. These productivity improvements also had to be implemented with zero impact to safety, quality and ergonomics. TES provided the plant engineers with the specific skills in line balancing techniques to complete this project. The project methodology was as follows:

- Applied MODAPTS standards to base operations in Trim and Final Assembly
- Increased operator efficiency by reducing waste and implementing improved methods.
- Identified rebalance opportunities through "frontloading" work to upstream operations.
- Reviewed proposed opportunities with ergonomic and launch engineers to ensure zero impact to safety, ergonomics and quality.
- Applied MODAPTS standards to new model content and incorporated them into existing operations in Final Assembly.
- Assisted Ford production staff with implementation of proposed rebalances.

TES used the customer's proprietary software to input MODAPTS studies into a main database, and assisted their engineering staff through training in the use of this software.

Following the implementation of the project recommendations, TES delivered on its required cost targets and surpassed its productivity improvement targets.

## **Benefits of Project:**

All direct labor operations in Final Assembly have validated MODAPTS studies. Direct labor reduction of 17% was achieved, or more than \$2.5 million annually. Customer's Engineering staff was trained in use of MODAPTS and proprietary software.

New model was launched with no additions to production direct labor.



# Tactical Engineering Solutions Overview

## SOLUTIONS:

Continuous Monitoring  
Process Flow Mapping  
Workstation Layout  
(5S)  
Material Movement  
Problem Solving  
Workgroup Development  
End User Training  
Supplier Development  
Value Stream Mapping  
Standard Work  
Workload Optimization  
Simulation  
Six Sigma  
Facility Layout  
Visual Factory (Andon)  
Pull Systems  
Enterprise Performance

For more information on any of our products or services please visit us on the Web at:  
[www.tacteng.com](http://www.tacteng.com)

TES is a Manufacturing Engineering services firm focused on helping our clients develop **and implement** sustainable operational improvements that deliver measurable results. We work in a collaborative manner with you and your team through the difficulties of the implementation phase and we can ensure that changes will deliver and sustain improvements for your customers and staff.

Our transformation work focuses on three elements:

- Developing new operating systems to improve productivity and flow using Lean Six Sigma techniques, with limited capital investments
- Creating the performance management system for leaders to monitor and improve performance
- Building realistic, practical capabilities and confidence that our clients will need to continuously improve

Our specialists in Lean Six Sigma can help clients deliver performance by:

- Developing transformation programs (e.g. labor and manufacturing efficiency improvements, process improvements)
- Supporting existing change initiative
- Conducting performance diagnostics
- On site facilitation for Value Stream Analysis and Kaizen events
- Creating performance management systems (e.g., tracking tools, accountability programs)
- Building organizational capabilities
- Executive leadership and coaching
- Zero cost productivity improvements

We bring best practices from leading manufacturers from around the world and a broad base of industries. We measure our success by the sustainability of our impact and the capability we transfer to clients.

## About Us

**Tactical Engineering Solutions** is a veteran-owned/women owned disadvantaged small business, serving the business needs of both private and public sectors. Headquartered in Michigan, our roots originate in the manufacturing industry and as we have grown, our portfolio of resources continues to expand upon this foundation into other industries, to include Transportation, Electronics, Aviation, Aerospace, Healthcare, Power, Department of Defense, and more.

It is this rich heritage that allows Tactical Engineering Solutions to support our clients with a first-hand understanding of the challenges that businesses face.

Tactical Engineering Solutions is registered with Dunn & Bradstreet and the Federal Government's Central

## VISION

TES executes programs that are on-time, on-budget and technically accurate to help our clients reduce overall cost and improve throughput while increasing customer satisfaction.



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