

CAVS Extension ... *Impacting Mississippi*

Reshoring Panel

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CAVS – Extension - At a Glance



Making a Difference

- Economic Impact: \$5.4 Billion
- 2,300 jobs created or retained

Through ...

On site Projects and Professional Development Workshops (e.g., **Lean Six Sigma, Problem Solving, Kaizen Events**, Simulation Modeling, Solid Modeling, Finite Element Analysis ...)

Recent Successes

Simulation Modeling: Plant Start-Ups
Prototype to Full Scale production (9 mo.)
80% Improvement in Plant Quality
400% Increase in Plant Throughput (3 mo.)



Bad Boy Buggies

Background: Bad Boy Enterprises (BBE) was a small 4 wheel drive electric vehicle manufacturer located in Natchez, MS. BBE employed less than 50 people, but established a national brand name , *Bad Boy Buggies*, in the “hunting “ vehicle industry.

Company was purchasing 80% of vehicle content from China, prepaying 3-month prior to delivery, and reworking quality problems instead of returning to vendor. **Considering sending more key components offshore.**

Project Objective: CAVS Extension , an MEP.ms Affiliate Center, assisted the company in re-engineering their production system .

Work involved process documentation, 5S, line balance, assembly line layout and implementation and **supplier development**.

Project Results: Production increased from 3-5 buggies/day to 20 buggies/day in a 3 month time frame.

Vehicle quality improved 80%.

BBE lead effort to increase US product content from 20% to 80%.

Product lead times decreased from 3 months to less than a month.

Purchased by E-Z-Go and moved to Augusta, GA



BBE “Reshoring” Experience

- ✓ **Reshoring Work & Jobs** – Bringing work & jobs back to US from other countries
- ✓ **Retaining Work & Jobs** – Analyzing costs and/or developing processes and facilities to justify keeping work & jobs in the U.S.
- ✓ **Growing Work & Jobs** – Becoming more efficient & competitive in cost/quality/etc. to facilitate growth & keep products from being *offshored* to other countries.

‘Mechanisms Utilized’:

Comparative Analysis:

- ✓ **Formal Cost Analysis**
- ✓ **Strategic Reasons** (Lead time, Quality).

‘Best Practices’:

- ✓ **Plant Master Planning** (*Layout, Flow, Facilitation, etc.*)
- ✓ **Process Modeling & Simulation**
- ✓ **Lean Implementation/Training** (*Flow, Waste Elimination,)*
- ✓ **Quality Improvements** (*Standard Work, Check sheets*)
- ✓ **Supplier Development** (*Moving Work & Jobs to U.S. Suppliers*)

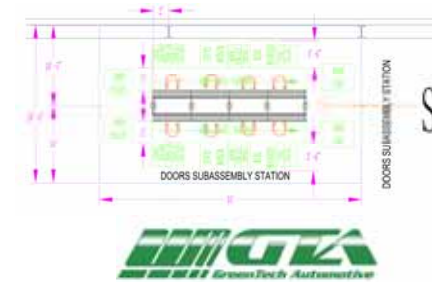
Start-up Support: GreenTech Automotive

Company Background:

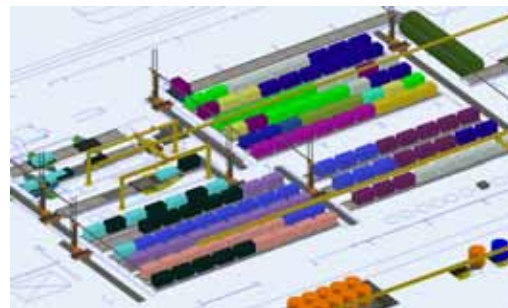
- “Start-up” electric car manufacturer located in Horn Lake, MS.
- Targeting initial creation of 150+ jobs

Project Results

- CAVS Extension team – responsible for assisting the design of the assembly line and other support processes.



Plant Master Planning – ESCO Plant Expansion



Project Results

- Specified new material handling system which reduced costs (labor, forklifts) and improved throughput.
- Successfully designed new plant layout for multi million dollar investment (plant expansion & capital equipment).
- Simulation Model guided Plant Expansion decisions.
- Produce more product in US and MS

