



Auburn Technical Assistance Center Overview

How We Make Businesses More Competitive
An Auburn tradition...38 years and counting

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Agenda

- ▶ Overview of ATAC
 - Mission & History
- ▶ Areas of Assistance
 - Continuous Improvement
 - Quality
 - Growth/Innovation/Startups
 - Other
- ▶ Questions

ATAC Mission and Model

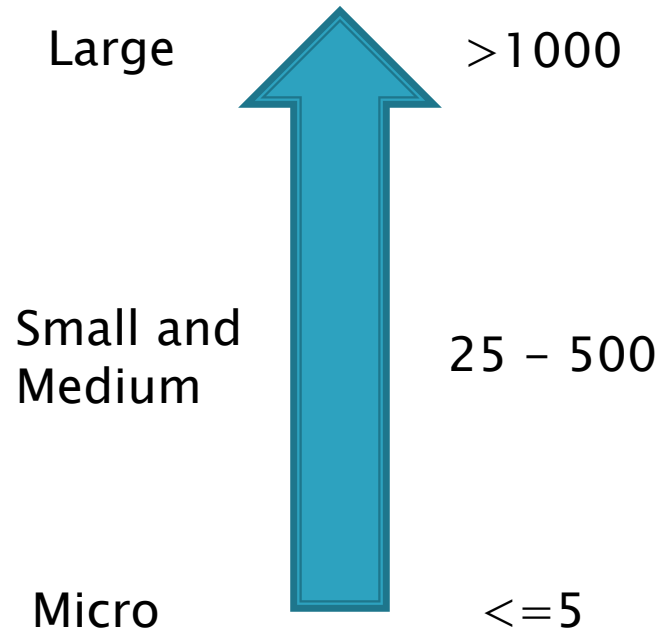
Mission:

To act as a strategic advisor to promote business growth and link manufacturers to Auburn resources essential for increased competitiveness and profitability.



Example Industries

- ▶ Agriculture, Forestry, Fishing and Hunting
- ▶ Utilities
- ▶ Manufacturing
- ▶ Wholesale and Retail Trade
- ▶ Transportation and Warehousing
- ▶ Finance and Insurance
- ▶ Healthcare
- ▶ Arts, Entertainment and Recreation
- ▶ Accommodation and Food Services
- ▶ Public Administration
- ▶ Incubator/Economic Development
- ▶ Non-Profits
- ▶ Start-ups



Organization size by number of employees

Benchmarking Companies - Alabama



- ▶ Briggs & Stratton – Auburn
- ▶ Steelcase – Athens
- ▶ Riverview Medical Center - Gadsden
- ▶ GKN – Tallassee
- ▶ Mayco – Birmingham
- ▶ AmTech – Alexander City
- ▶ Vulcan Sign – Foley
- ▶ Sikorsky – Troy
- ▶ MICOR – Decatur
- ▶ Austal – Mobile
- ▶ Quality Filters - Robertsdale





Key Service and Training Areas:

Continuous Improvement/Lean

- ▶ Continuous Improvement
- ▶ Six Sigma (Black Belt and Green Belts)
- ▶ ISO Quality Training and Assistance

Revenue/Top Line Growth

- ▶ Innovation Facilitation and Process
- ▶ New Product Development/Industrial Design
- ▶ Marketing/Online
- ▶ Startup Business Concept Vetting and Nurturing

Other Areas:

- ▶ Industrial Maintenance
- ▶ EH&S
- ▶ Sustainability

Lean Continuous Improvement

- ▶ Coaching & Mentoring
- ▶ Kata Habits
- ▶ Problem Solving – A3
- ▶ Daily Management System
- ▶ Lean Training – Boot Camp
- ▶ Training Within Industry
- ▶ Kaizen Facilitation
- ▶ People Centric Leadership
- ▶ Lean Accounting



Lean Continuous Improvement
An ATAC Product Description

Learn to produce more and be more efficient by eliminating non-value-added activities.

Lean is a systematic approach to identifying and eliminating waste through continuous improvement techniques.

Lean Training is for managers, supervisors, plant managers, team leaders, manufacturing engineers and floor/process personnel.

Lean Components Include:

- Setup Reduction
- Total Productive Maintenance
- Value Stream Mapping
- 5s
- Pull System / Kanban
- Kaizen Blitz
- Lean Office
- Lean Accounting

Eliminate waste to improve process flow and efficiency

Whether you are in a manufacturing environment, office or administrative function, and regardless of the type of business you are in, your operation can benefit from Lean Continuous Improvement.

How Lean Works
A "LEAN Enterprise" produces more with existing resources by eliminating non-value-added activities. Manufacturers are facing increased worldwide competition and the stakes are high. The winners in this competition work to eliminate overproduction caused by traditional scheduling systems and to only make what customers want when they want it.

Lean establishes a systematic approach to eliminating these wastes and creating flow throughout the whole company. It also helps you develop and implement a long-term plan to streamline your operations for success.

Training uses a hands-on approach involving a mixture of your company's management and staff members.

Lean Certificate Series
The Lean Certificate Series is a five-day "boot camp" that prepares Lean Leaders. Participants complete this training ready to take on key roles in leading an organization's implementation of Lean Continuous Improvement. Training consists of:

Principles of Lean: A full day of classroom instruction and hands-on exercises in a manufacturing simulation that promotes continuous improvement. Participants are introduced to standardized work, workplace organization, visual control, set-up reduction, batch size reduction, point of use storage, quality at the source, and work force practices and pull systems.

Value Stream Mapping & 5s: The VSM process consists of identifying value streams/product groups, mapping a current state of material and information flow, assessing waste in the process, and designing an improved process. The 5s system of waste reduction (sort, set-in-order, shine, standardize, and sustain) is the basis of making these improvements.

TPM & Quick Changeover: TPM is a Lean-based system applied to equipment maintenance. It focuses on a life-cycle approach using teams to improve availability, performance and quality of critical machines. The four-step changeover improvement process is based on the principles of the Single Minute Exchange of Dies (SMED) system, developed by Shigeo Shingo, to dramatically reduce or eliminate changeover time.

Pull/Kanban Systems & Cellular Flow: Pull/Kanban is based on the concept of building products based on actual consumption. The system uses visual signals when parts need to be replaced. Participants learn how to control shop floor inventory and production schedules by implementing pull systems. Cellular Flow is the linking of manual and machine operations into the most efficient combination of resources to maximize value-added content while minimizing waste.

Sustaining Lean: The Lean process must be sustained by management and

Lean Continuous Improvement

SUCCESSFUL OUTREACH ACHIEVES RESULTS  July 2007

An ATAC Client Success Story



AUBURN
TECHNICAL
ASSISTANCE CENTER
COLLEGE OF BUSINESS



American Technologies Inc. (AmTech) partnered with Auburn Technical Assistance Center (ATAC), an affiliate of the Alabama Technology Network, to launch a Lean Manufacturing program even before combining its two plants in Montgomery and Kellyton, Ala. into a single location in January 2006. Today, the company, which manufactures wiring harnesses and controllers for buses and medical equipment, is implementing kaizen (continuous improvement) events as a consistent component in its mission to become more productive and efficient.

Perspectives, culture changed by Lean journey

Even before combining its Montgomery and Kellyton, Ala. plants into a single location at Alabama...

"Because we produce some 1,500 different parts, approaching Lean had to be accomplished through a segmented strategy, Hendrick said. "We chose the Warmer Section as our first Lean area of challenge."

A multi-level, cross-disciplinary project team – including management and production employees – formed to identify

a single work cell, and create a point of use storage area for work materials, Hendrick added.

The ATAC Lean Team facilitated a series of kaizen (continuous improvement) events for the Warmer Section. The result: Inventory was reduced by more than 15 percent; walking time and distance were reduced

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- Strategy Deployment
- Team Leader Development
- Problem Solving
- Kata
- Visual Management

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Six Sigma Plus

- ▶ Green Belt- 2 Weeks
- ▶ Black Belt- 4 Weeks
- ▶ Project with Hands-on Assistance
- ▶ Six Sigma Champion
- ▶ Root Cause Analysis
- ▶ Lean-Six Sigma



Six Sigma Plus
An ATAC Product Description

Target perfection and learn how to achieve it.

Six Sigma is a highly disciplined management strategy to use statistical tools and project work to achieve consistent excellence in quality, reduce costs and deliver products to customers on time.

Six Sigma Training is for manufacturers, service firms, healthcare, pharmaceuticals, and other organizations interested in:

- Reduced Cycle Time • Better Control • Reduced Defects
- Improved Quality • Increased Customer Satisfaction

Components Include:

- Green Belt Training
- Black Belt Training
- Six Sigma Champion
- Root Cause Analysis
- Lean-Six Sigma Integration

6σ⁺ : Identify and remove the causes of defects and errors

No matter what kind of organization you're in, the Six Sigma experts from ATAC at Auburn University can help you make your processes nearly perfect... 99.9997% defect-free!

Six Sigma is:

Six Sigma is a highly disciplined management strategy to use statistical tools and project work to achieve consistent excellence in quality, reduce costs and deliver products to customers on time. Six Sigma is a business management strategy, originally developed by Motorola that today enjoys widespread application in many sectors of business and industry. Six Sigma uses a problem solving methodology to:

- Define
- Measure
- Analyze
- Improve
- Control

It also is a way to make breakthrough improvements in your process that will show up on the bottom line; a very technical problem solving approach that works; a continuous improvement effort; a way to control variables that cause defects in your products; a data driven problem solving approach that will steer you in the right direction; a metric to measure the true performance of your process.

Six Sigma training creates a special infrastructure of people within the organization ("Green Belts" "Black Belts") who are experts in these methods. Each Six Sigma project carried out within an organization follows a defined sequence of steps and has quantified financial targets (e.g. cost reduction or profit increase).

The statistical representation of Six Sigma describes quantitatively how a process is performing. To achieve Six Sigma, a process must not produce more than 3.4 defects per million opportunities.

A Six Sigma defect is defined as anything outside of customer specifications. A Six Sigma opportunity is then the total quantity of chances for a defect. Process sigma can easily be calculated using a Six Sigma calculator.

Green Belt Training

Green Belts play an important role in the Six Sigma process improvement project. They have been characterized by some as being the "player" on the team. They execute and implement the tools and practices of the Six Sigma initiatives. They are the "front-line problem-solvers" in the organization.

Green Belt candidates can be employees at virtually all levels of the organization. They are not, however, usually in full-time process improvement positions. The designation "Green Belt" refers to people who have mastered the basic skills, and are assigned to Six Sigma projects as needed. Green Belts are usually led by the Black Belts to apply the right tools at the right time to make process improvements to relatively difficult problems.

Developing Green Belt in your organization is very important for the overall success of the Six Sigma initiatives. Benefits to the company are realized only when process information, through appropriate analysis, is transformed into knowledge.

The Green Belt course provides candidates the tools to turn that

Six Sigma Example

SUCCESSFUL OUTREACH ACHIEVES RESULTS



February 2008

An ATAC Client Success Story



AUBURN

TECHNICAL
ASSISTANCE CENTER

COLLEGE OF BUSINESS

Boise Inc. manufactures a wide range of specialty and premium paper products, containerboard and corrugated products, imaging papers for office and home, printing and converting papers, newsprint and market pulp. The company has partnered with Auburn Technical Assistance Center (ATAC) for a number of years to provide Six Sigma training for green belt and black certification. Its in-house continuous improvement projects have resulted in millions of dollars in bottom-line cost savings and process enhancement applications.



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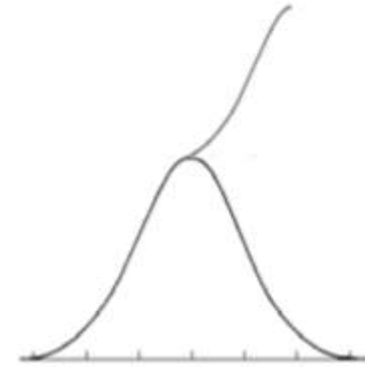
Other Capabilities

Innovation Engineering

Tools For:

GOAL: A Continuous Flow of Innovations

- ! **Creating** Meaningfully Unique Ideas
- “” **Communicating** Ideas Clearly
- \$ **Commercializing-**
Shipping/Implementing



Define



**Clarity on
Raw Concept**

Discover



**Fail FAST
Fail CHEAP on
Key DEATH Threats**

Develop



Make it REAL

Deliver



Go to Market



Auburn University has the only Industrial Design Department in the State of Alabama and is Ranked the 6th Best Program in the Country



Some of the companies that have sponsored studios at Auburn's Industrial Design Department



Customized Assistance

- ▶ Project Teams from Across Campus
- ▶ Lean in Government
- ▶ RFID
- ▶ Additive Manufacturing
- ▶ Web Design Optimization
- ▶ Bank Directors Conference
- ▶ Student Teams
- ▶ Finance for the non-financial manager
- ▶ Presentations to Local Groups



WHY INNOVATION IS VITAL TO YOUR BUSINESS
THINK DIFFERENTLY
"THUNDER DAY" WORKSHOP

October 10
11:30am-1:30pm
SAL
Lunch included
English Breakfast
Parking
4000 DuPont Drive
Baptist, AL
Reservations required
\$100 cash price at
wbc@auburn.edu

The world is changing...
We need to be changing faster than the market place for America to have that hope for meaningful growth.
What your services and/or products are valued in a meaningful way, companies are great and sustained, management is agile and everyone makes more money and has more opportunities.

WBC-SAL
Auburn University
SBA

Join Innovation Engineering Director and Entrepreneur, David Minton, as he uses the proven Innovation Engineering Management System to show you how to overcome challenges by reducing the cost and increasing the speed of innovation.

David Wilson is an innovation leader for the Toyota Technology Center which is being implemented across manufacturing and infrastructure and has been instrumental in the success of the SBA's 100+ small businesses and organizations through their innovation, marketing, and financial growth programs.

Successes of ATAC

- ▶ 3 out of 5 Years (2007, 2010, 2011), ATAC has either won or assisted a client that won the Southern Growth Policies Board Innovator Award



The screenshot shows the Auburn Works website homepage. At the top, the header features the 'AUBURN WORKS' logo and the 'AUBURN' logo with a tower icon. Below the header is a navigation menu with links: MAIN, MY PAGE, ATAC, PROGRAMS, REGISTRATION, CALENDAR, GROUPS, BLOGS, VIDEOS, DISCUSSION, PHOTOS, MEMBERS, CHAT. The main content area is divided into three columns. The left column contains an 'AUBURN WORKS MENU' with links to various training programs like 'Lean Manufacturing Training', 'Six Sigma Training', and 'Business Growth'. Below this is a 'LATEST ACTIVITY' section with a list of recent blog posts and comments, each with a small profile picture and a timestamp. The middle column features a 'WELCOME TO THE ATAC NETWORK' section with a registration notice for a 'LEAN CERTIFICATE SERIES' and a video player for 'ACCOUNTING FOR A LEAN ENTERPRISE WORKSHOP'. Below the video is a 'VIDEOS' section displaying a grid of video thumbnails with titles like 'GO FOR THE FUTURE' and 'IBEL LEAN JOURNEY'. The right column has a 'MEMBERS' section with a grid of member profile pictures, an 'ATAC ON FACEBOOK' section with a Facebook logo and profile picture, and an 'ATAC on LinkedIn' section with a LinkedIn logo. At the bottom of the page, there is a copyright notice: '© 2011 Auburn University All Rights Reserved'.

QUESTIONS?

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