



Meeting the Challenges Facing Alabama Manufacturers

Alabama Technology Network
2003 Annual Report

Confronting Alabama's Manufacturing Crisis

Meeting the Challenges Daily

Many of Alabama's manufacturers are struggling to compete. A down economy and increased foreign competition is taking its toll on the state's manufacturing base. Inadequate worker training, inefficient manufacturing processes, and outdated technologies are resulting in eroding profits. This has led to the loss of over 37,000 manufacturing jobs between 2000 through 2002.

How can Alabama's manufacturers compete in this twenty-first century reality? We at the Alabama Technology Network (ATN) are addressing these serious issues. ATN was formed in 1996 to provide hands-on business and technical assistance to make our existing industry more competitive. We accomplish this through our dedicated team of industry specialists and through our affiliation with the Department of Commerce's Manufacturing Extension Partnership. Our specialists are located close to industry on various community campuses, the University of Alabama in Tuscaloosa and Huntsville, and Auburn University. We assist manufacturers in eliminating production waste, adopting new technologies and processes, and training workers to compete in a global economy.

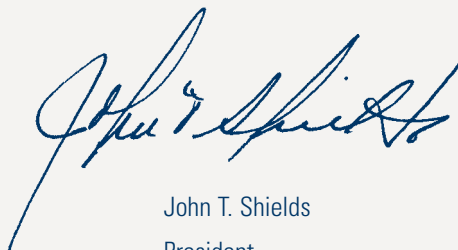
Clients receiving ATN assistance are regularly surveyed to determine the impact of our work on bottom line profitability, job creation and retention, and increases in sales. Synovate, one of the world's top 10 market research firms, conducts the survey on behalf of ATN. Survey results indicate that since January 2000, ATN has helped manufacturers create or retain over 4,500 jobs, increase sales by over \$332 million, and reduce costs by over \$67 million.

During our recently concluded operational year, ATN assisted companies in 52 Alabama counties on over 700 projects. Project assistance was provided in the following areas: Lean Manufacturing and Lean Office (eliminating non-value added work), Environmental Health and Safety, Quality Systems, and Information Technology.

While ATN's mission is to assist all existing industry, we are dedicating this year's annual report to Alabama's struggling manufacturing base. On behalf of the ATN team, I want to thank our Board of Directors, the NIST Manufacturing Partnership, our partners and stakeholders, the State of Alabama, and our clients for their continued support.

Since 2000, ATN Has Helped Make Alabama's Manufacturer's More Competitive by:

- Creating or Retaining over 4,500 Jobs
- Increasing Sales over \$332 Million
- Reducing Costs by over \$67 Million



John T. Shields
President

Wellborn Cabinets

Reduced Turnover and Improved Productivity Lead to Increased Profits

With an uncompromising penchant for quality, Wellborn Cabinets is a company poised for the future. Founded in 1961, Wellborn employs over 1,100 workers in the small town of Ashland. It is the area's largest employer and the employer of choice in Eastern Alabama. As a leading manufacturer of bath, kitchen, and entertainment cabinetry, Wellborn's products can be found in over 900 dealers nationwide.

Although the company has enjoyed success through the years, Wellborn is unwilling to rest on its laurels. President Paul Wellborn continues rigorously to pursue excellence and quality in all areas of the business. One recent pursuit involved expanding operations and improving productivity. A key driver in reaching these objectives involved reduc-



President Paul Wellborn

"The turnover reduction results were exciting to say the least, and the savings obviously impacted the bottom line significantly. Dr. Horne and his team brought much expertise to our efforts and partnered with us to make this a real winner for Wellborn."

*Ben Rosser, Director of Human Resources
Wellborn Cabinets*

Wellborn's goals, an ATN-Auburn University assistance team helped stabilize the company's workforce and made recommendations that ultimately reduced overall employee turnover by 36 percent. Additional benefits included a 34 percent reduction in the accident rate and a 54 percent reduction in the absenteeism rate. These actions, combined with assistance in implementing lean manufacturing principles, translated into significant cost savings.

ATN's team helped Wellborn expand during a time when industry around our nation has been shrinking. The team's work was recently recognized by receiving the National Association of Manufacturing and Technical Assistance Centers' Project of the Year Award.

ing employee turnover. Although low by industry standards, further reductions in employee turnover would result in simplifying the company's growth and expansion plans and ultimately improving its productivity.

In support of

Wellborn Cabinets, Ashland

- 36% Reduction in Employee Turnover
- 34% Reduction in the Accident Rate
- 54% Reduction in the Absenteeism Rate
- NAMTAC Project of the Year Winner

Axsys Technologies

Technical Assistance Improves Competitiveness of Department of Defense Supplier

Axsys Technologies, Inc. is a cutting edge precision machine and surfacing shop in Cullman with nearly 250 employees. The company is a leading supplier of precision optical, structural, and motion control components and assemblies to original equipment manufacturers (OEMs), including the United States Department of Defense and aerospace industries.

With continuous improvement always in mind, Axsys realized both quality and productivity could be improved by redesigning the chemical and nickel-plating labs.



Kay Harlow (ATN) and Martyn Acreman (Axsys) in the "clean" room



Jim Ingalls (ATN) and Keith Sizemore (Axsys) inspecting anodizing tanks

According to plant manager Martyn Acreman, the plant personnel had recommendations for improvements that could be made to the existing layout. ATN-Birmingham was retained as the project manager to redesign the labs and coordinate the various contractors.

By implementing lean manufacturing principles and using

new plant layout drawings, enhancements were made to

the plant safety, efficiency, and overall quality. These improvements enabled Axsys to secure a \$26 million NASA contract for producing telescope mirror material and contributed to reducing the company's costs by over \$300,000.

"Finally a lab we can all be proud of!"

*Martyn Acreman,
Plant Manager,
Axsys Technologies*

Axsys Technologies, Cullman

- Precision Machine Shop to Department of Defense
- ATN Assistance Improves Safety, Quality, and Productivity
- Leads to Increased Sales of \$26 Million and Cost Savings of \$300,000

Steelcase, Inc.

Lean Manufacturing Improves Customer Response Time

Even though recognized as a leading manufacturer of office equipment, Steelcase and its over 450 Athens based employees were experiencing a problem. The plant was not producing its Avenir office panels quickly enough to meet customer demand. For many workers in corporate America, these panels serve as the walls of office cubicles.

Steelcase's concerns were many. Throughput time, the length of time to turn raw materials into a final product, took between 10 and 12 hours. It experienced excess work-in-process (WIP), in both its pre-



Steelcase's Avenir Panels

and post-paint areas. The workspace was cluttered with too many material racks, and the workers had to travel far distances from the material supermarket to the paint line. The existing process and

"The team did a great job coming up with this new system. The reduced WIP will lower throughput time, allowing us to respond faster to customers, and it reduces the amount of inventory we keep in the plant. Everyone will win."

*Ray Kulmer, Superintendent
Steelcase Avenir*

layout could not support the required tasks and the desired lead-time of four hours.

Members of ATN's lean team from the University of Alabama in Huntsville assisted Steelcase employees in performing a Kaizen (continuous improvement) event, which involved documenting the current process, brainstorming wastes occurring in the current process, and

formulating improvements to eliminate the waste in a new process.

The new system decreased throughput time by 80 percent, to approximately two and a half hours, thus beating the company's goal of four hours. Steelcase also experienced a significant reduction in WIP inventory, which impacted its bottom line. ATN's assistance helped Steelcase to meet its customer demand and reduce the number of material racks used from 60 to 13, resulting in daily savings of \$1,408 per day and a yearly savings of \$1,321,600 in inventory.

Steelcase Inc., Athens

- World's Largest Manufacturer of Office Equipment
- Lean Manufacturing Assistance Improves Efficiency by over 80%
- Daily Savings of \$1,408

White Knight Engineered Products, Inc.

Combating Foreign Competition through Lean Manufacturing

With over 100 employees at its Childersburg plant, White Knight Engineered Products specializes in manufacturing surgical clothing. Its products include controlled environment suits and passenger comfort and face mask technology. While profitable, White Knight's margins had been challenged by low cost manufacturing countries such as Mexico and China. To prevent further market share

erosion, the company brought in ATN to assist and train key managers, supervisors, and team leaders the principles of lean manufacturing. This training was subsidized by the Incumbent Worker Training

"The Alabama Technology Network's approach to the manufacturing process is all about using common sense. Our people really liked working with them. They sparked our employees to look at different ways to remove waste."

*Lucinda Hodge
V.P., Operations*



White Knight's Childersburg Plant

Program of the Department of Labor.

As a result of ATN's assistance, White Knight reduced its product line floor space from

1,400 to 640 square feet. Product repair work has been virtually eliminated with scrap being totally eliminated. Daily production has dramatically improved on one product from 50 to 250 units, and from 55 to 90 units on another. Improved productivity and a reduction in manufacturing



*Workers on White Knight's
Production Line*

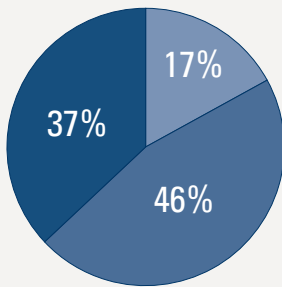
costs have improved White Knight's bottom line. In the short-term, a potential 100 jobs will be saved once the plant has fully adopted lean manufacturing principles.

White Knight Engineered Products, Inc., Childersburg

- Surgical Cloth Manufacturer
- 500% Increase in Production
- Reduced Inventory Carrying Costs
- 100 Jobs to be Retained When Fully Implemented

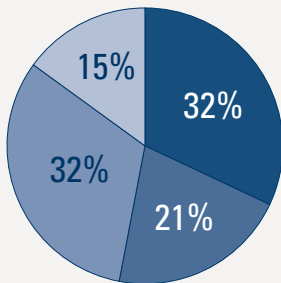
Operational Highlights

Total Projects (10/1/2002 to 9/30/2003): 720



Division of Activities

Assessments:	17%
Education/Training:	37%
Technical Assistance:	46%



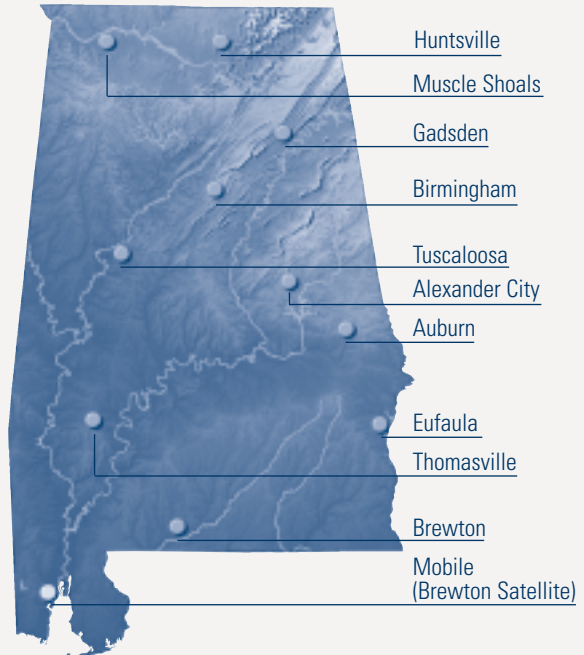
Budget

Fees	32%
NIST MEP	21%
Other	15%
State Appropriation	32%

Major Assistance and Training Areas:

- Business Systems
- Environmental/Health and Safety
- Human Resources
- Industrial Marketing
- Information Technology and Security
- Leadership Development
- Lean Manufacturing
- Quality Systems
- Strategic Management
- Workforce Development

ATN Center Locations



Board of Directors

Mr. Pete Black

Alabama River Pulp

Dr. James H. Cornell

Central Alabama Community College

Mr. William Canary

Business Council of Alabama

Ms. Theresa Dunn

Crystal Lake Mnfg. Company

Mr. James P. Hayes, Jr.

EDPA

Dr. Roy Johnson

Alabama Dept. of Postsecondary Education

Mr. H.D. McCuiston

Robbins, LLC

Mr. Barry McGriff

McGriff Industries, Inc.

Mr. Tom McMillan

Smackco, Ltd.

Mr. William F. O'Connor

Campaign for Alabama

Dr. Malcolm Portera

The University of Alabama System

Mr. Robert D. Powers

The Eufaula Agency, Inc.

Mr. Joe Robinson

Robinson Foundry

Mr. James H. Sanford

HOME Place Farms, Inc.

Dr. William Walker

Auburn University

Mr. Keith Wilson

Wyle Laboratories, Inc.

Mr. Guy Woodliff

Woodliff & Associates

Dr. Linda C. Young

Wallace Community College

Clients

3M Company • 4M Manufacturing, Inc. • ABCO Office Furniture • ABH Enterprises, Inc. • AC Incorporated • Ace Precision Castings • Ace Products Inc • Addison Fabricators, Inc. • Alabama Inter-Forest Corp • Alabama Pallet Company, Inc. • Alabama River Newsprint Company • Alabama River Pulp Company, Inc. • Alamo Industrial • Alston Electric • Altec Industries, Inc. • American Cast Iron Pipe Company • American Crane Systems • American Metal Technology, Inc. • American Seating Company • American Water Works Association • Anniston Army Depot • ARD Logistics • Arley Plating Service • ATRION Medical Products, Inc. • Auburn Versa Hoe • Aureus International • Austal USA • Available Plastics, Inc. • Axsys Technologies, Inc. • B&C Instruments, Inc. • Beaver Creek Festival • Ben Pearson Archery Company, Inc. • Bhat Environmental Associates • Birmingham Fastener & Supply, Inc. • Birmingham Hot Metal Coatings • Bishop Cabinets, Inc. • Black Creek, Inc • BMW Manufacturing Corp. • Boise Paper Solutions • Borden Chemical, Inc. • Bowater Newsprint Coosa Pines • Briggs & Stratton Corporation • Bush Hog, LLC • Cahaba Valley Timber Company, Inc. • Camden National Bank • Carbo Ceramics, Inc. • Carlisle Engineered Products, Inc. • Cavalier Homes of Alabama • Chadwick Timber, Inc. • Character Initiative of Escambia County • Charoen Pokphand USA Inc • Charter House, Inc. • Chattahoochee Valley Forestry Services, Inc. • Cherokee Nitrogen • ChexDirect • Citation - Bessemer • Citation Alabama Ductile • Citation Corporation • Clarke American • Colonial Pipeline Company • COLSA Corporation • Compass Bank • Compliance Specialists, Inc. • Composite Technology • Continental Conveyor & Equipment Company • Cooper Lighting, Inc. • Coral Industries, Inc. • Cowikee Water Authority • Createx Corporation • CRH North America, Inc. • CTA, Inc. • Custom Panels, Inc. • Cylinder Repair Components, Inc. • Cytec Industries, Inc. • DaimlerChrysler • Dana Corporation, Spicer Trailer Axle Plant • Danny Little Trucking • Daphne Public Library • Degussa Corp. • Delta Apparel • Demopolis Police Dept. • Design Alternatives • Designs By M • Dixie Pacific Manufacturing Company • Dixie Tool & Die Company, Inc. • Dixie-Pacific Manufacturing Company, Inc. • Donaldson Company • Dumas Manufacturing Company, Inc. • Dunbarton Corporation • Dyncorp • ECONEC Net 1 Telecommunications, Inc. • ECSI-Foids, Inc. • EG&G Alabama, Inc. • Elastic Corporation of America, Inc. • ENSR Consulting & Engineering • Ergon Refining, Inc. • Falk Corporation • Federal Mogul Sealing Systems • Fitts Industries, Inc. • Fleet Air Technologies, Inc. • Flexco • Florence Fire & Rescue • Foley Convention and Visitors Bureau • Fontaine International • Foster Farms • Fredrickson Brokerage • Galbreath, Inc. • Gallet & Associates, Inc. • GenFlex Roofing Systems, Inc. • Goodyear Tire & Rubber Company • Great Southern Engineering, Inc. • Great Western Products Co., Inc. • GS Design and Machine • Guardian Equipment, Inc. • Harden Manufacturing • Hart & Cooley, Inc. • Hartzog and Company PC • Hillsdale Tool & Mfg Co. • HiSan Corporation • Hol-Mac Corp. • Honda Manufacturing of Alabama, LLC • Impact Learning Center • Indian Rivers Community Mental Health Center • Infographics Information Services, Inc. • Inspec Tech, Inc. • International Diesel of Alabama • International Paper Company • Joy Enterprises • Juniper Creek Development, Inc. • Kappler Protective Apparel & Fabrics • Kerry Stephens Logging • Kershaw Manufacturing Company, Inc. • Knud Nielsen Company, Inc. • Lamar International • Lawrence County Chamber of Commerce • Lee Precision Machine Shop • Leonard Peterson & Company, Inc. • Liberty Machine, Inc. • Linden Lumber Company • LMR International, Inc. • Lockheed Martin Missiles and Fire Control, Pike County • Louisiana-Pacific Corporation • Louisville Ladder • Lower Dixie Timber • M&H Valve • M.C. Dixon Lumber Company, Inc. • Machine Products Company • MACTEC Engineering & Consulting • Madix Inc, Eclectic Plant • Madix, Inc. • MAGNATRAX • Manar, Inc. • Martin Beck • Martin Sales Company, Inc. • McGriff Industries, Inc. • McGriff Treading, Inc. • McNeil Nutritional Specialty Products • Menasha • Meow Mix - Formerly Friskies Petcare • Mercedes-Benz US International, Inc. • Mesker Door, Inc. • Mid-South Products Engineering, Inc. • Mobile Rosin Oil Company, Inc. • Motion Industries, Inc. • Mrs. Stratton's Salads, Inc. • Muskogee Metalworks • NASA/CMDS • NCI Manufacturing, Inc. • Neptune Technologies Group • Nexcel Synthetics, LLC • North American Bus Industries • Novus Technologies, Inc. • Nutec Metal Finishing, Inc. • Nypco Alabama, Inc. • Ogihara America Corporation • OMNOVA Solutions, Inc. • Oris Automotive Parts AL, Ltd. • Pall Corporation • Peerless Coatings, Inc. • PEI Electronics Inc • Pemco Aeroplex, Inc. • Phoenix Industries of Huntsville • Pillowtex Fieldcrest Cannon, Inc. • Pine Belt Communications • PineBelt Wireless • Pinson Valley Heat Treating Company • Plasma Processes, Inc. • Polyamide High Performance, Inc. • Polyengineering, Inc. • Porter, White & Company • Precision Automatics, Inc. • Premier Mantles, Inc. • Progress Rail Services Corp. • Proximity • Pursell Technologies Sylacauga Plant • Quality Filters, Inc. • R.I. Lowndes & Associates • Rainbow Tool & Machine Company • Raingard of Alabama, Inc. • Regions Financial Corporation • Rehau Corporation • Reliable Products Inc • Renaissance Woodworking Company, Inc. • Replica Plastics • Revere Control Systems, Inc. • Rheem Manufacturing Company • RMS Precision, Inc. • Robbins LLC • Robert Bosch Tool Corporation (Vermont American) • Robinson Foundry, Inc. • Roe Plastics Company, Inc. • Royster-Clark, Inc. • Russell Pipe & Foundry Company • SAF Corporation • Samuel Strapping Systems • Satterfield Machine & Welding • Scotch Lumber Co • Scroggins Farms • Selma-Dallas County Historical Preservation Society • Selwood Farms • Sexton Can Company, Inc. • Shelton State Community College • SMC South • SMI Steel - Alabama • Smith's Machine • Smurfit-Stone Corporation • Snap-On Tools • Solutia, Inc. • South Alabama Wood • South Central Marketing • South Henry Peanuts, Inc. • Southeastern Bolt & Screw Company • Southeastern Cheese LLC • Southern Research Institute • Southwest Alabama Integrated Criminal Justice System • SpecPro, Inc. • Stamped Products, Inc. • Standard Furniture Manufacturing Company, Inc. • Star Manufacturing • STC Network Services, Inc. • Steelcase, Inc. • Stephen Bradley & Associates • StressCrete, Inc. • SUMMA Technology, Inc. Huntsville • Sumter Health & Rehab Center • Sweet Water State Bank • Syncro Corporation • System Technology Associates • TADS/PNVS/ARROWHEAD • Talladega Health Care • Technical Micronics Control • Technonic Industries, Inc. • Teksid Aluminum Components, Inc. • Teledyne Brown Engineering • Teledyne Electronic Technologies • Teledyne Solutions, Inc. • Temple Inland Forest Products • TEPRO, Inc. • T-H Marine Supply, Inc. • The Boeing Company • The Elvis Presley Foundation • The Eufaula Agency • The Meadows Assisted Living • Thermal Corporation • ThermaMasters • Thomasville Nursing Home • Titan Coatings, Inc. • Tom's Electrical Contractors, Inc. • Trans-Cycle Industries, Inc. • Triana Industries, Inc. • Tunica Chamber of Commerce • Turenne Healthcare Management Co. • Tuscaloosa County School System • Twitchell Corporation • Tyson Foods Inc • U. S. Fertilizer • U.S. Army Space and Missile Defense Command • U.S. Mint • U.S. Sporting Goods • UAB University Hospital • US Army Aviation and Missile Command • US Pipe & Foundry Company • Viscosan USA Inc. • Vonn's Products • Vulcan Group • W. C. Bradley Co. • W.M. Bledsoe Co., Inc. • WABASH ALLOYS • Wade Products Corporation • Webb Wheel Products, Inc. • Webster Industries, Inc. • Wellborn Cabinet, Inc. • Weyerhaeuser Corporation • Whatley Health Services, Inc. • White Knight Engineered Products • Wise Alloys LLC • Woodliff and Associates • Z/I Imaging • ZF Industries, Inc.



**Alabama
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ATN is a certified provider of 360vu, a strategic approach to business to move your manufacturing company above, beyond and ahead.

Partners

