



THE BOTTOM LINE

HIGH PERFORMANCE BUSINESS ASSISTANCE



MAP Offers New Services

MAP has recently added Lean Office Technology and Lean Distribution/Warehouse workshops to its highly successful suite of Lean Manufacturing Technology services that have been implemented with companies throughout the state of Nevada. Lean Office Technology can be applied to administrative and service environments with a focus on eliminating wasteful processes throughout the enterprise. Lean Distribution/Warehouse Technology is designed specifically for those in the warehousing and distribution industries who desire to improve efficiencies. Tremendous results can be realized - from reducing lead times to building in more flexibility and ultimately improving bottom lines.

The success of actual Lean Office projects with companies over the last year has indicated a strong demand for workshops/seminars that provide real time experience with Lean Office implementation.

The first pilot offerings of Lean Distribution/Warehouse have already yielded client successes and look to be a popular initiative.

Check the MAP website for future offerings of both of these new services exclusively at www.mapnv.com.

Another **MAP** Success Story

17.6 to 1 ... In Your Favor! Best Odds In Vegas

By Max Gregorich, Project Manager for MAP, Las Vegas office

That's what Rich and Lori de Heras, owners of Armand Manufacturing, Inc. received as a return on investment on a small Lean Manufacturing project when they engaged the Management Assistance Partnership.



Located in Henderson Nevada, Armand Manufacturing Inc. was established in 1948, and for over 60 years has been making quality plastic bags and covers. Armand takes pride in making quality vinyl and polyethylene packaging, static control and

specialty products that are custom designed.

A variety of products can be viewed on their website: www.armandmfg.com.

Since most of the product made at Armand Manufacturing is custom designed, it was thought too difficult to use Lean principles in addressing process improvements.

Unfortunately, the industry buzz claims "Lean" does not



The cushion bags were a perfect target for a "Lean Manufacturing" prototype project. Armand Manufacturing now produces eight bags in six minutes — a 33% increase in throughput.

or can not address the job shop environment. Well, MAP and Bill Milligan, a MAP consultant that worked with Armand Manufacturing, are here to tell you that the "Lean" philosophy is also continually improving. Lean for the Job Shop and Lean for the Office are becoming quite common. In the case for Armand Manufacturing, it proved extremely successful in demonstrating the process improvement and a high rate of return on the investment: 17.6 to 1 to be exact.

Continued on page 2.



For more business success stories, past newsletters, upcoming classes and convention events visit our website.

www.mapnv.com

Or call MAP toll-free: 1-800-637-4634



[From left to right] Richard deHeras, President, Violeta Garcia, Production Supervisor and Fernando DeLaTorre, General Manager

The cushion bags were a perfect target for a “Lean Manufacturing” prototype project. Is the comparison significant? At a 33% increase in throughput ...you bet it is. So significant that, as a result of this success, Armand Manufacturing applied for and received a grant from DETR (Nevada Department of Employment, Training and Rehabilitation) for financial assistance in training their entire staff, transforming the company into a “Lean” Enterprise. Once the training is completed, employees and management will have the tools to innovate and reengineer their processes for efficiency and effectiveness.



We all know that transformation is a difficult, expensive and sometimes a scary thing. So why would anyone put themselves through such an upheaval? The answer, of course, varies. However, when it comes to Lean, it's usually market pressures that come in to play, one way or another. Market pressures almost always require close attention to pricing and quality. The best way to address this is to reduce costs without reducing quality. The MAP Lean program did just that for Armand Manufacturing. It increased their throughput per man-hour while maintaining, reducing the cost of, and almost automating their usual quality and high standards.

Customers, employees and owners of Armand Manufacturing all won. The odds that you'll be reading about the next Armand Manufacturing success story in some future issue of MAP's “Bottom Line” will probably be even higher than 17.6 to 1.

Take advantage of what many companies are already tapped into. For more information about MAP, go to www.mapnv.com.



Lean Distribution Continual Improvement Program

Presented by: Cheryl Gustafson, CJG Performance Consulting LLC

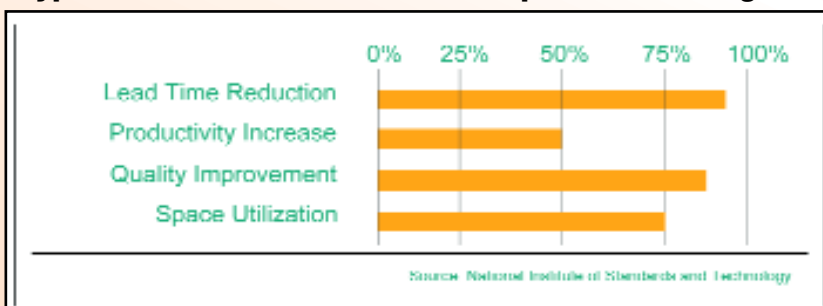
Diane Updegrove, Leading Edge Consulting LLC

October 28, 2008, 8:30 a.m. - 5:00 p.m

UNR Cooperative Extension (I-215 and the Windmill exit)
8050 Paradise Road suite 100 rooms B and C, Las Vegas NV 89123

Who Should Attend: All top and middle management and staff.

Typical Benefits of a Continual Improvement Program



\$299.00 per person/per event includes training materials breakfast and lunch. Register online at: www.mapnv.com. For more information, please contact Jeff Englehart: (702) 651-4876, jenglehart@mapnv.com or Lorraine O'Neill (702) 651-4360, loneill@mapnv.com.

“Partner’s Corner”

MAP Awarded \$75K Rural Business Enterprise Grant

The U.S. Department of Agriculture's Rural Development Office has awarded MAP a \$78K Rural Business Enterprise Grant with the goal of providing technical assistance for the benefit of private business enterprises. MAP, the Nevada State Office of Energy, the University of Nevada, Reno, the Desert Research Institute and Sustainable Energy Solutions (SES) are working together on an “Efficient Management through Energy Renewable Goals and Education,” EMERGE project. This innovative approach to technical assistance encompasses problem solving activities such as energy assessments and wind energy feasibility studies, service improvement elements such as expanding energy assessments to include return on investment analysis, and education related to alternative energy practices and awareness of financial programs for energy conservation.

The purpose of EMERGE is to improve economic conditions for Nevada Alfalfa and Cattle farmers by facilitating the adoption of management techniques, best practices and sys-



tematic approaches to conserving energy. Improvement of on-farm energy efficiency will be attained by developing energy audit worksheets, compiling on-farm energy audits and audit processes, dispersing energy technologies and decision tools to farmers, and by field testing the effects of utilizing wind energy on farms.

Save the Date! MAP to Headline at Upcoming FabTech Show

MAP will be a featured presenter at the annual FabTech International Show October 6 thru 8 held this year at the Las Vegas Convention Center. FabTech is North America's largest event with manufacturers in the fields of metal forming, fabricating and welding attending and exhibiting from all over the globe.

MAP will conduct a presentation on “Leadership in Lean Manufacturing,” October 8 from 8:00 a.m. - 10:00 a.m. MAP Project Managers and resident Lean experts, David Steiger and Mary Arbutina, will illustrate the importance of management commitment for successful Lean implementation. John Williams, of Young Electric Sign Co. (YESCO), John Zurn of The Antioch Co. and Tom Fabrizio of Lean Manufacturing Tools, LLC will be featured panelists providing direct examples of management's role in support of successful Lean projects here in Nevada.

More info regarding FabTech including free registration through MAP (a \$50 value) can be found on the MAP website at www.mapnv.com.

Be sure to vist our MAP Booth at FabTech, booth #11277.

A promotional graphic for the FabTech International Show. The top half features a night view of Las Vegas with city lights and a purple-to-red gradient sky. The text "MAP to be featured at FabTech International Show in Vegas" is written in large, bold, white letters. Below this is a red banner with the FabTech logo on the left and event details on the right: "North America's Largest Metal Forming, Fabricating & Welding Event" and "October 6 - 8, 2008 • Las Vegas, Nevada USA".

MAP to be featured at FabTech International Show in Vegas

FABTECH
INTERNATIONAL & AWS
WELDING SHOW

North America's Largest Metal Forming,
Fabricating & Welding Event
October 6 - 8, 2008 • Las Vegas, Nevada USA



NORTHERN AND RURAL NEVADA FOCUS COURSES

Facility Operator Certification For Utility Systems

February 6 through April 24, 2009, 12 consecutive Fridays
Energy Efficiency Training and Certification for Commercial
and Public Building Systems Operators

Learn how to:

- Identify and prioritize opportunities for improvement and savings.
- Measure energy performance, then analyze and interpret the data.
- Calculate ideal levels for services such as temperature, humidity, light and water purity.
- Compete for capital and calculate return on investment.
- Find information and expand your network.

Since 2005 (Program Inception to Present), 159 individual participants, representing 59 different companies and state and local government agencies, completed 10,296 classroom hours. 103 participants achieved and received Focus Certification which is being used by employers as promotion and hiring criteria. Fifty energy-saving project proposals were created for participants and their workplaces, including 45 electrical, 4 natural gas and 1 alternative fuel, with aggregate cumulative savings of 72

billion BTUs and \$1.6 million. Most, not all, of these projects meet or exceed financial criteria for implementation, namely an 18% or greater annualized return on investment and a payback period of 1.5 years or less.

Fee waivers may be available on a first-come, first-served basis, subject to the limits of our available funding. Visit our website at www.nvfocus.com and click on the Northern Nevada link to see if you qualify. CEUs are available through Truckee Meadows Community College.

The cost is \$1,800 for the entire series, or \$175 per 8-hour workshop.

Registration fee includes instruction and handouts. Continental breakfast, lunch, and break snacks are included at our Carson and Reno locations, possibly others.

For more details or to become involved as an advisor or instructor, contact Bob Bricca, MAP Project Manager at 775-772-9824 or bbricca@mapnv.com.

Workshop 1 - Building Systems Overview, LEED Certification and Building Commissioning: 4 hours, Feb. 6, 2009

Gain an overview of energy efficiency principles, building systems fundamentals and how systems interact and affect overall building performance. Hear best practices from local practitioners. Learn how these workshops will be conducted, what to expect and what's expected of you. For retro-fit and new building construction, learn about LEED Certification and Building Commissioning and incentives.

Workshops 2 and 3 - Electrical Systems and Power Quality: 16 hours, Feb. 13 & 20, 2009

Learn the fundamentals of electricity and its application in the workplace. Find out about common distribution problems and how electricity is distributed. You'll also hear about public address, fire alarm and low voltage systems and discover the "need-to-know" power quality issues you may have at your facility. Find out how to prevent most power-related problems.

Workshops 4 and 5- HVAC Systems and Controls: 16 hours, Feb. 27 & Mar. 6, 2009

Learn about the operation, maintenance and preventive maintenance of equipment and components typically found in commercial buildings, including central heating, cooling, air and ventilation systems.

Workshop 6 - Plumbing and Water: 8 hours, Mar. 13, 2009

Gain an overview of chemical water treatment, where water waste occurs and backflow contamination. In addition, learn about maximizing water cycles and minimizing evaporation in cooling towers.

Workshop 7 - Maintenance Management and Practices: 8 hours, Mar. 20, 2009

Become familiar with the underlying fundamentals for both manual and automated systems for energy efficiency and equipment operating reliability. You'll also find out about generic algorithms, low voltage, work order systems, maintenance checklists, sourcing and purchasing.

Workshop 8 - Code Compliance for Efficiency and Safety: 8 hours,

Mar. 27, 2009

Improve efficiency by learning how to use energy and maintenance-related codes. Find out how to comply with important health and safety codes to prevent accidents and near misses. Also, gain an overview of energy, environmental, health and safety codes that impact facility operation.

Workshop 9

Energy Efficiency Techniques and Efficient Lighting Fundamentals — 8 hours, Apr. 3, 2009

Learn the basics of energy accounting, fuel options evaluation, operation and maintenance strategies and energy management planning techniques. You'll also hear about lighting fundamentals, evaluation of lighting levels versus needs, economical and energy-efficient lighting. Find out about comprehensive, organization-wide ongoing energy efficiency awareness activities.

Workshop 10 - Energy Assessments and Student-Submitted Real-Work Scenarios: 8 hours, Apr. 10, 2009

Find out how to measure the energy performance of your facilities, what you need to measure and how to do it. Find out where your facility uses energy and how it compares to other similar users. You'll also find out about the pros and cons of internal versus external assessments, and take part in interactive review of real-work scenarios provided by you and your peers. In addition, you'll learn about root cause analyses and how to develop an action plan.

** Pre-requisite workshops 1 through 9 **

Workshops 11 and 12 - Into Action — 16 hours, Apr. 17 & 24, 2009

Get tips on how to compete for capital. You'll also find out about return on investment and payback period calculations using your and your peers actual workplace scenarios. Develop your communication skills by learning how to make presentations to decision makers.

** Pre-requisite workshops 1 through 10 **



SOUTHERN NEVADA FOCUS COURSES

Facility Operator Certification For Utility Systems

This series of courses can lead to facility operator certification. One day courses include continental breakfast (begins at 7:00 a.m.), lunch, refreshments and free parking. Each course begins at 7:30 a.m. and concludes at 4:00 p.m. and is held at the UNLV Stan Fulton International Gaming Institute, 801 E. Flamingo Road, Las Vegas, Nevada. NSHE awards 0.7 CEU and 7 PDH per course with certificate. Discounts may apply. Register online at www.nvfocus.com, and select the Southern Nevada link.

FOCUS TRACK II

Thursday September 18, 2008 HVAC - Part I

- Central Plant Boilers, Chillers, Coolers
Air Handlers – Constant & VAV
- Hydronics Systems, pumps, & Treatments
- TAB – Air & Water Systems

Thursday October 16, 2008 HVAC - Part II

- HVAC Systems & Controls-Elect.
- Ventilation
- Indoor Air Quality (IAQ)
- Housekeeping & Cleanliness

Thursday November 20, 2008 Energy Management Systems (ECMS)

- Why EMS – What it can do for you
- Data Visualization – Optimizing EMS Capabilities
- Energy Management –
Optimizing Utility Rate Structure
- Computerized Maintenance
Management Systems (CMMS)

"Every time I show up for a class I end up learning about newer and better ways to do things... and learned how to make my facility and operations more efficient and smooth."

— Rafe Cordell,
Assistant Chief of Engineering, Circus Circus

Thursday January 22, 2009 CX Commissioning and Operating to Code

- Code Interpretation – UMC, IBC/UBC, NEC, UPC and ADA
- Understanding Theory Behind Fire and Life Safety Codes
- Code Requirements for Indoor Air Quality – ASHRAE
- Fundamentals of Design _ Electrical, Mechanical, and Plumbing Systems

Thursday February 19, 2009 Energy Conservation

- Energy Conservation Measures that work for you
- Identifying Common Energy Waste
- Water Efficiency for Building Operations
- Compressed Air Systems

Thursday March 19, 2009 Innovative Management Principles

- Identifying What Motivates People – Behavioral Modification

- Managing for Energy Efficiency – Eliminating Wasteful Practices
- Project Management Systems – Software that works
- Project Scheduling Fundamentals

Thursday April 23, 2009 LEED and Green Building concepts

- Design goals and Project Objectives
- Integrating Concepts into Projects
- Alternative Energy Sources
- Passive Energy Conservation Measures – Thermal Envelope Systems

Thursday May 21, 2009 Project economics, ROI, and Cost Benefits

- Cost Benefits Analysis
- Life Cycle Costing – Energy Assessments
- Value Beyond the Building
- Investments/return on Investments (ROI)

Thursday June 18, 2009 Operation and Maintenance (O & M)

- Preventive Maintenance – Operations, Educations, and Training
- Thinking beyond your specialty – Extending Equipment Life
- Building Support for your Cause – Increasing Awareness
- Emergency Power Operations, and stand by Generation

Thursday July 23, 2009 Building Quality into your systems

- Continuous Quality Improvement – Ongoing Evaluations
- Inspections and Standard Practices that works for you
- Functional Testing – Developing a Deficiency list
- Safety in the work place – your primary consideration

Thursday August 20, 2009 Energy Conservation Through Coil Efficiency & Stewardship

- Energy Conservation Through Coil Efficiency/Codes
- Stewardship – Sustaining the Effort
- How to Commission a Building
- Thinking Out of the Box



\$578 Million

Positive Impact for State of Nevada

In the last 6 years (2002 through 2007), the Management Assistance Partnership (MAP) program has generated more than \$578 million in positive industrial economic impact for the State of Nevada.

This number is supported by an independent survey of MAP clients, conducted by MAP's federal sponsor, NIST/MEP.

NIST/MEP holds MAP accountable for producing strong results and they rate MAP on a national level with the other MEP centers across the United States.

In 2007, Nevada's industrial companies reported the following as a result of MAP's services:

Increased sales of \$12.9 million

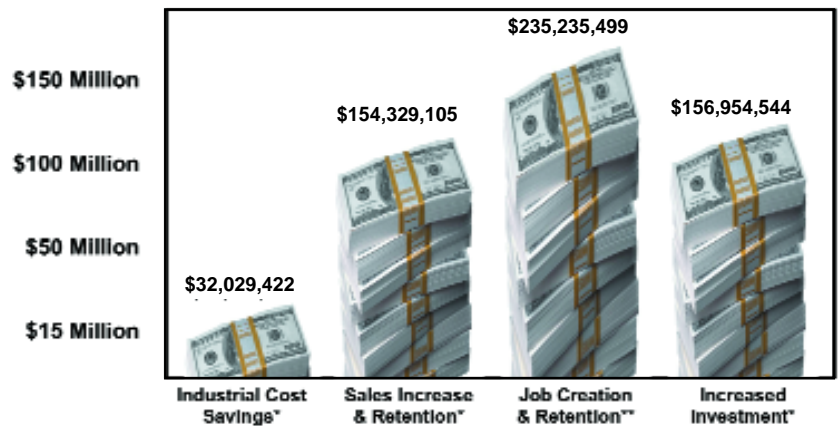
Sales retention of \$9.9 million

Cost savings of \$7.4 million

Job creation and retention of 435 jobs

Increased investment

(in plant & equipment, IT, and education) of \$27.4 million



* Direct from Synovate survey of MAP clients. Synovate is independently contracted by NIST/MEP.

Nevada Companies May Be Eligible For Funding Assistance

MAP has had strong success in helping Nevada companies get funding for a variety of initiatives over the last few years.

MAP has connected with federal programs in the Department of Labor and Department of Energy to assist a number of companies throughout



Nevada in training, Lean manufacturing and energy savings initiatives. In addition, MAP has had strong success assisting Nevada companies with state initiatives in career enhancement training.

Contact MAP at www.mapnv.com or call 1-800-637-4634 to make it happen for your company.



MAP Lean Manufacturing Programs That Work!

NORTHERN NEVADA - LEAN MANUFACTURING WORKSHOPS

LEAN SERIES 101 (One day)

Location: UNR Redfield Campus, Nell J. Redfield Building (A),
18600 Wedge Parkway, Reno, Nevada 89511

October 16 - 7:45 a.m. - 4:30 p.m.

Fee: \$299.00 includes materials, resource guide, continental breakfast and lunch. Register online at www.mapnv.com. For more information, call Jeff Lawrence at 800-637-4634 or 775-856-5315.

SOUTHERN NEVADA - LEAN MANUFACTURING WORKSHOPS

LEAN SERIES 101 (One day)

Location: CSN SAHARA WEST CAMPUS,
2409 Las Verdes Street, Las Vegas NV 89102

November 5 - 8:30 a.m. - 5:00 p.m.

Fee: \$299.00 includes materials, resource guide, continental breakfast and lunch. Register online at www.mapnv.com. Discounts available for multiple attendees. For more information call Mary Arbutina at (702) 592-4569 or Lorraine O'Neill (702) 651-4360

Are you interested in becoming more profitable?

The purpose of Lean Manufacturing is to strengthen manufacturing firms by helping to reduce material waste, time and processes. Some manufacturers who embraced Lean Manufacturing systems experienced: productivity improvements, reduction in work-in-progress, increase of space utilization, improved quality and reduction in lead times.

Reinvent PROFIT MAKING OPPORTUNITES. Salvage lost

profits that already exist in your company through this popular "hands on" simulated Workshop. World Class companies use these LEAN MANUFACTURING principles to gain a competitive edge and higher profit.

**** LEAN OFFICE WORKSHOPS****

SOUTHERN NEVADA (one day) **LEAN SERIES**

UNR Cooperative Extension (I-215 and the Windmill exit)
8050 Paradise Road suite 100 rooms B and C,
Las Vegas NV 89123

September 24 and November 13 from 8:30 a.m. - 5:00 p.m.

Fee: \$299 per person includes training materials & lunch. Come early for a complimentary continental breakfast! The full-day Lean Office Training workshop involves a mix of classroom style learning with an interactive live simulation. Learn LEAN techniques, hands on Value Stream Mapping and implementation to eliminate waste and capture more profits.

Who should attend:

- All Top and Middle Management ... without fail
- Manufacturing Support Services
- Design and Engineering
- Distribution and Logistics
- Financial and Information Technology

Register online at www.mapnv.com (event #NV0000231EV). Discounts available for multiple attendees. For more information, call Mary Arbutina at (702) 592-4569 or Lorraine O'Neill (702) 651-4360.

**Complimentary
Financial Analysis**
((\$300 value)
for the first 10 businesses
who contact
Max Gregorich,
Project Manager
at 702.895.4998



Need A Speaker At Your Next Event?

Let one of our professional staff members present up-to-date valuable information that will benefit your company or organization.

Contact Terry Culp, in Southern Nevada, at (702) 895-2615 or Jeff Lawrence, in Northern Nevada, at (775) 856-5315 today!



MAP provides business and technical assistance to improve Nevada industries' profitability.

4505 Maryland Parkway, Box 451076
Las Vegas, Nevada 89154-1076

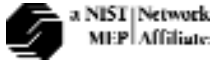
Call MAP toll-free: 1-800-637-4634
from within the 775 or 702 area code.

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The Industrial Extension Program of the
Nevada System of Higher Education.
MAP is an affiliate of NIST MEP.



High Performance Business Assistance
For Small and Medium Sized Manufacturers,
Construction and Mining Companies.

MAPNV.COM
800-637-4634

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State of Nevada



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