

Summer 2008

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University Technical Assistance Program





Montana Manufacturing Conference

Catch the Winds of Success with the Compete Smart favorite since 1998: Montana company leaders sharing their challenges and opportunities for growth.

Hear Company Challenges & Triumphs at Compete Smart October 2 and 3

By Deborah Nash, MMEC

The spotlight will focus on managing growth challenges and opportunities when company leaders from Missoula, Glendive and Whitefish share their stories with manufacturing peers and allies at Compete Smart on Oct. 2 and 3, 2008, at the Missoula Hilton Garden Inn.

Featured in the favorite conference segment "Lines on Success" are Bjorn Nabozney, co-founder of Big Sky Brewing Company, Peter Stark founding partner at North Slope Sustainable Wood, LLC in Missoula, and Laura M. Fleming, President of SRS Crisafulli in Glendive.

The segment offers valuable insights based on real experience within very different industries. It is a regular highlight of the biennial conference. This segment has special sponsor support from First Interstate Bank.

In his humorous style, Nabozney will explain how he and friends started a capital intensive business without cash and grew it into a fully functional brewery in just six months. He will disclose some of the values that allowed the business to grow, building a 38,000 square-foot building after less than seven years in operation. Among the brewery's feature beers is Moose Drool.

Stark, a writer and forest land owner, will tell a compelling story about how the business community and environmental community can work together to the mutual benefit of both. His company uses small diameter larch trees from forest restoration sites in the northern Rockies to manufacture high-quality tongue and

(continued on page 4)





Peter Stark, Founding Partner

North Slope Sustainable Wood LLC





Laura M. Fleming, President

SRS Crisafulli, Inc.





Bjorn Nabozney, Co-founder

Big Sky Brewing Company

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MYTHS, FABLES, and other Part-Truths



When I read "Guide to Innovation" by Michael Stanleigh in the June issue of Industrial Engineer, I noted the author's list of "myths". These particular myths dealt with common misconceptions about innovation and applying innovative solutions to business. But they caused me to think about many misconceptions I routinely encounter. Often, even people

who have visited Montana are astounded to learn that Montana has a wide range of "high-tech" manufacturers or that our state has a significant manufacturing sector. Yet, the Kaufmann Foundation recognized Montana as the state with the most entrepreneurial activity in a 2006 report.

Many Montanans believe the myth that manufacturing isn't an important part of Montana's economy, that very few companies are located here. That may surprise the state's 3,000-plus manufacturers and their 24,000 employees!

According to top economists, manufacturing output (factory shipments) in Montana nearly doubled from \$5.0 Billion in 2002 to \$9.6 Billion (yes, billion!) in 2006. Our exports increased nearly 2 ½ times to \$710 Million in that same period. Doing the math, in 2006 we exported 7.4 percent of our production compared with the national average of about 6.5 percent.

There. I've said it. Manufacturing Matters! It's important to Montana's economy, the nation's economy... indeed, even the nation's security. Without a strong manufacturing base, we can't have a strong military, without a strong military, our national security lapses.

So, how do we bolster our manufacturing businesses so we can gain the jobs, taxes, and other benefits our important sector offers? The answer is basic but critical: Support Innovation.

In Eli Whitney's day, innovation was important. His concept of interchangeable parts changed the course of the 19th century. It changed lives, society, and cultures. This innovative concept

is so integral to our society today, we don't even think about it. You go to the hardware store, you buy a part, and it fits. Prior to 1800, this was not the case.

But the pressures on U.S. manufacturing are growing at an ever increasing rate. Competition is global, and it is fierce. To succeed, today's manufacturer must pursue innovation and must generate and implement more good ideas at a much faster pace than ever before. American manufacturers need to be engaged globally; must find new and creative partnerships; must continually develop new products; must tap into new markets; and must engage in never-ending improvement of their operations.

Learn more about Manufacturing in Montana in a 12-page report on MMEC's Web site:

www.mtmanufacturingcenter.com.

Click Hot Topic Link to 2008 State of Mfg Report.

Looking at the statistics I mentioned above, Montana is on the right track – more output, more exports. MMEC has organized the content for this fall's manufacturing conference to include more tools and insights to help you keep moving forward. Catch the winds of success at Compete Smart Oct. 2 and 3 to connect, build relationships, and ignite your mind and imagination with varied and quality stimuli. Accelerate your marketing, decision-making and workforce skills with important tools to help with continuous improvement. I'm proud to say MMEC and a cadre of committed business supporters have put together another stimulating event ... to electrify your senses. See you there!

Store

Steve Holland, MMEC Director

Investment in Growth Planning Speeds Up Thrust, Adds Jobs

By Deborah Nash, MMEC

The Jefferson Local Development Corporation (JLDC) in Whitehall put together a team of specialists to assist local manufacturer Mountain States Drivetrain (MSD) with a major growth thrust several years ago. The effort has netted new jobs in the county and increased MSD sales by 60 percent.

JLDC used a unique cost share model to provide needed expertise to CEO Richard Schoenfelder to expedite data gathering and construction planning for a major plant expansion. MSD invested \$5,000 and JLDC matched it with \$7,500 from metal mines taxes to cover the financial planning, marketing research, and optimized facility design needed to move forward quickly. The team met over seven months with direction from Richard on the different aspects for that growth.

JLDC has found that this team approach alleviates concerns that production might grind to a halt if a small business owner takes time away from day-to-day operations for business expansion. The MSD team included members of JLDC staff, MSU Extension, the Montana Manufacturing Extension Cen-

ter and the Small Business Development Center, each providing expertise and experience to augment Richard's vision.

The Client

"Richard was very clear in wanting to grow at a steady and controlled pace and provided feedback on all team recommendations," according to Tom Harrington, JLDC

Assistant Manager and County Extension Agent.

MSD re-manufactures manual transmissions for clients across the Intermountain West and is a sub-chapter S corporation located in Whitehall. Schoenfelder and his wife Nancy started the business in 1995 adjacent to their home. Not wanting to be stuck in first-gear, they envisioned adding more employees and a larger facility. However, demand was keeping Richard, one full-time and a part-time employee more than busy until the JLDC Business Expansion Assistance Program (BEAP) allowed the company to mesh time for growth needs with operations.

"The team's work was definitely a big help to keep me concentrating on busi-



Richard Schoenfelder

ness. It would have taken me four times as long to get all the information I needed," Richard said. "I knew where I wanted to go, but not what steps would get me there."

Business Park Still Underway

"We had hoped to have Rich as a first tenant in a 200-acre business park under development," said Har-

rington, "but he was ready to move ahead before it could be ready."

Instead, Richard purchased land adjacent to the I-90 Interchange and has invested \$365,000 in plant and equipment.

The nearby business park is still under development and is part of an effort to mitigate community impacts from any mine closure.

"Golden Sunlight Mine is a major employer with about 200 jobs in the county. It recently received a seven-year extension to work low grade ore," Harrington noted, giving JLDC some breathing room to complete the park's infrastructure and attract businesses. DEQ discharge permits for the park are expected to be in place by end of summer.

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Get Data, Stories and Why GREEN Makes Sense

You don't have to be the proverbial "tree hugger" to adopt a green focus in your business. Did you know a 2007 survey of 1,066 adults by Cone, a strategies and branding firm, found that 85 percent of Americans would switch brands for environmental reasons and consumers are becoming more "earth conscious"?

Going green makes good business sense. The classic reduce-reuse-recycle is a cost saving measure which equals increased profits. It's only part of the story about why paying attention to environmental impacts can benefit your business.

Get uplift for today's market and gain more insights for your business from the E-3 roundtable session on Leveraging Green at this fall's Compete Smart Manufacturing Conference in Missoula. The session is led by MMEC's Jim Haider, who works on training opportunities with companies in the 32-county WIRED region

as part of Montana's Agro-Energy Plan through the Montana

Department of Commerce.

Montana company owner John Porterfield of Porter Block, Inc., Whitefish, will be on hand to talk about his company product Endura Block™ and how thinking environmentally

and outside the box (or, perhaps, inside the block) has made good business sense. He will share some of the learnings as the company has grown. Howard Haines of Montana Department of Environmental Quality's Pollution Prevention Program will explore how efficient use of resources and sustainability in products and services can enhance marketability along with cost reduction.

Sign up for this session and learn attributes of a rising green customer segment and how staying ahead of regulatory threats can help gain market

share. See real examples of how simple green steps caught on and have positively impacted the entire marketplace.



Reduce – Recycle – Reuse is only part of the picture

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Explore Funding Options and Opportunities

Several options and opportunities for funding growth will be presented in breakout sessions at the Compete Smart Manufacturing Conference Oct. 2-3 in Missoula.

Two experienced equity/venture fund managers will help you unravel confusion about the types of capital providers, investment products and stages of investing in "E-1: Investor Strategies to Help Set Wind Speed and Direction" for future growth. You will get a concise overview of definitions and important factors in assessment, what you need to have in place, and what to expect after the investment. There will be plenty of time for discussion with Curtis Burgess of Mendota Group and Bob Comey of Invest America, as well a chance for dialog with two local company leaders, Jerry McConnell at Spectrum Products and Neil Sheldon from PolyWarehouse, about how growth funding is working in their operations.

Are concerns about internal funding levels or getting a low Internal Rate of Return on R&D keeping you from growing? Looking for possible resources to support your R&D efforts? Plan to attend "E-2: How Established Manufactur-

ers Leverage SBIR/STTR*" to learn about leveraging federal SBIR/STTR* funding to support million dollar R&D efforts. Session instructor Tab Wilkins has been Senior Technology Advisor with the NIST Manufacturing Extension Partnership (MEP) since 2006 and directs the national NIST MEP effort in supporting early stage companies with federal R&D funding. He will share strategies and methods that can increase funding chances by 25 percent and tips for minimizing government paperwork and auditing requirements. You will gain an understanding SBIR/STTR as they relate to existing versus early-stage companies. And get take home tools to evaluate whether your firm should pursue such a path as a means of leveraging internal funding.

Wilkins brings over 20 years of experience in forming and leading non-profit organizations which fund new technology development and consult with small and mid-sized manufacturers in business development.

*SBIR/STTR = Small Business Innovation Research & Small Business Technology Transfer

Compete Smart (continued from cover)

groove flooring and trim under the "Treadlight" brand.

Fleming runs a 40-year-old firm located in Glendive, a much more rural setting in eastern Montana. The

company builds versatile, rugged high-

> capacity pumps, dredges and power units. Its original product was used in high capacity pumps to irrigate family farms along

the Yellowstone River. Today, selling highly engineered products worldwide presents the company with challenges in locating enough local talent to fill growth needs. Fleming's story will explore methods of developing regional talent and recruiting nonlocals in a way that integrates them into the eastern Montana landscape. Her story will resonate with many Montana companies that struggle with limited workforce and skills shortages.

The two-day event is organized by the Montana Manufacturing Extension Center, a Montana State University outreach center in Bozeman, and cohosted by NorthWestern Energy with support from other firms and organizations

During the closing luncheon on Oct. 3, Ken Green, President of Timberline Tool in Whitefish will share the results of several growth initiatives the company embarked on late last year.

An energizing keynote address by America's #1 growth expert, Doug Hall will officially launch on-site activities at



noon on Oct. 2 along with a Montana Product Showcase and Exhibitor Hall.

Area manufacturing plant tours highlight activities prior to the keynote luncheon. Three multi-site options will be available: Spectrum Products, CM Manufacturing and American Eagle Instruments; Roscoe Bridge, GTC Nutrition and Diversified Plastics; and a shorter walking tour to both Diversi-

fied Plastics and Felco
Industries near the
conference facility.
The tours are sponsored by two peer
manufacturers in
Montana – Montana
Hydraulics in Helena
and General Distributing, headquartered in Great Falls.

The sixth biennial event will offer more workshops and seminars than previously with 25 topics to choose from in marketing. Lean Manufacture

from in marketing, Lean Manufacturing, workforce resources, plus decisionmaking and growth tools.

making and growth tools.

A special dinner with menu items

grown and produced in Montana will be provided by feature sponsor Montana Department of Agriculture.

Registration for the two-day event is \$195 with team and early signup discounts. More information and online registration are available at www.mtmanufacturingcenter.com.



Investment in Growth (continued from page 3)

Lands Financing

Richard appreciated having access to people with specializations and experience. "Competitor analysis would not have been something I would have thought to look at. And working on the financing part is always a bit scary, taking on debt," he added.

A sound financial package that included information a bank needs to make loan decisions was prepared and submitted for financing the move and expansion.

"Actually, Dan Anderson and John Donovan [with SBDC at the time] went with me to the bank," Richard noted.

Financing was approved for equipment, additional manufacturing assistance and a 7,000 sq. ft. building with a 2,000 sq. ft. mezzanine. The steel building is approximately five times larger than the previous shop. Today, productivity is up and MSD has seven full time employees and several part-timers, with room for more

MMEC's Mark Shyne, Al Deibert and the University Technical Assistance Program crew assisted in a variety of ways throughout the process. A ratio analysis comparing MSD to similar companies' financial performance helped Richard with decision making. Work was done with Value Stream Mapping, efficient layout, equipment search and inventory analysis for recommendations on ideal inventory level for key parts, cores and

finished transmissions. MMEC also helped Richard with employee growth planning, construction cost estimates and training.

Inside the New Facility

"My inventory approach changed because of Lean training; I'm trying not to acquire more than I need," Richard said. "The equipment acquisition was a time saver. I now have a dynamometer and foam packer system, an inside forklift which has been very handy, more washers, and I added a bunch more racking and work bays."

He said he definitely has more room for tools and better proximity to washers, paint booth and presses.

"Overall, I am very pleased with things I have gotten done with MMEC; it's a very worthwhile tool," he said. MMEC has provided occasional assistance since MSD's early days.

To help retain employees, MSD is now offering health insurance, vacation, sick leave, and a retirement plan. The bigger influence, Richard said, is how he runs the business, more "family-like. I'm not a big person to micro-manage. I try to give them freedom on decisions; show interest in the families and activities."

He admits it was difficult for a while to manage more employees. "Having enough information, like policies, in place and managing cash flow, which we did address." He estimates he now spends at least 80 percent of his time in management, "so not much time to do rebuilds."

He found the BEAP program was very



Richard double checks a difficult fitting in a transmission re-build.

worthwhile. "If I had to do it by myself, it would have taken a lot longer."

The Jefferson BEAP was ground-breaking in its unique combining of community development and economic development, using the cash match approach and providing team expertise. Jefferson is a rural county, population just over 10,000 in 2006.

"Not all rural counties have access to this kind of resource [with support from metal mines taxes]," Harrington said. "The state is currently exploring our model to replicate in other rural areas of state."

Camp Introduces Girls to Technology Careers



Sixteen young women from junior high schools across Montana participated in the first ever Girl's Technology Camp to encourage future careers in welding, CNC machining, and manufacturing, etc. The Camp was directed by Jim Weber, industrial technology teacher at Helena Capital High. Workshops were held for designing and producing wood plaques, metal flowers, rings and charms. Elizabeth Skousen, an MMEC University Technical Assistance Program (UTAP) engineer (standing with Jim in photo at left), taught a Lean Paper Airplane simulation to convey concepts on Lean Manufacturing. She also spent time talking with the group about her education and choices in the manufacturing arena. Weber was awarded a grant to conduct the camp and hopes to make it an annual event. Tours of Summit Aeronautics in Helena and Gibson Guitar in Bozeman were included. Snacks and other items were provided by Cream of the West in Harlowton; Yellowstone Bees near Bozeman and MSU College of Engineering.

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SPECIAL FEATURE

Discipline, Strides Create Showcase Pull System at **Timberline Tool**

By Deborah Nash & Bill Nicholson

Timberline Tool in the Flathead Valley has become an MMEC showcase for how a Pull System works. Field Engineer Bill Nicholson, who guided the implementation, has taken several area companies through the facility since last year to give them a clear, visual understanding of how the system works.

Somewhat counter-intuitive, Pull is a Lean strategy that starts with the customer and end process – shipping – rather than being pushed from a front office forecast.

"Timberline is an ideal candidate for a complete Pull System because throughout the year it manufactures just eight proprietary tool types, which made implementation straightforward compared to a job shop environment," Nicholson said. "The discipline they've shown and the strides forward have really been awesome."

Timberline Tool casts and fabricates its own product lines, aluminum tools, some with a customizable sleeve for the utility and firefighting industries. Its innovative tools have revolutionized the way utility operators squeeze-off polyethylene (PE) gas and water pipes for repairs and maintenance, eliminating the need for multiple operators and costly under-the-pipe excavation.

Opportunity from the Ashes

Last year, after a catastrophic fire destroyed its former building, the operation was in a leased facility while a new building at a different location was under construction. Company President Ken Green asked Nicholson if he could help get some flow going for a new layout.

"I took it a step further and said we should get Pull going," Nicholson said. He worked closely with Production Manager Bryan Osborne and his team to optimize layout, getting a flow that would not continually criss-cross itself. He helped implement Point of Use Storage (POUS) and 5S (sort, set-in-order, shine, standardize, sustain) and Kanbans, a visual, customer-driven Pull System.

"Bill did a fabulous job," Green said. While the fire prompted the change, "it was great to have an opportunity to really put a system together with a new building and a design for better flow."



Bryan Osborne holds green Kanban used at intervals in finished goods to trigger another order to the factory floor, as tools are shipped.

Somewhat counter-intuitive, Pull is a Lean strategy that starts with the customer and end process — shipping. In terms of cost reduction and continuous improvement, it was a "good litmus test for us," he said. He was able to reduce tool prices by about five percent, despite a significant jump (est. 32%) in the cost of aluminum.

Workshop Gets Them Started

To get started, the entire production staff plus engineering went through MMEC's Lean 101 workshop.

"The workshop does a great job of establishing a vision of what

the overall production system can look like after they complete round 4 of the simulation," Nicholson said. "I firmly believe the class gets the entire team on the same page for understanding the overall impact Lean can have."

Without it, the additional time to get employees to understand Lean's potential and really commit to implementation in their areas delays the positive impact to the bottom line.



Yellow and orange kanbans trigger replenishment actions for parts.

Once Osborne's team got the layout nailed down with the best flow possible, work on the Pull system started, including Kanban—Pull System training. The entire team was involved from day one. Each was assigned action items within their own area of responsibility. And they were responsible for helping create the plan and giving a status each week on their progress.

Nicholson suggested scheduling the shop based upon consumption (orders being shipped). "We established a finished goods supermarket and then created the signals that, once a certain amount of product was shipped, would trigger an order to the factory floor (see p. 6 photo of green kanban). No other paperwork or order or traveler is used."

The Kanban card acts as the order and the shop reacts accordingly. It is a color coded, movable card (or signal) that contains the product details and other relevant information. It is used to control inventory and help with production planning.

Today, in the new facility, this simple card triggers activities throughout the plant that keep orders flowing, helps manage inventory effectively and even triggers an incoming order of aluminum alloy all the way from California.

How It Works

At Timberline Tool, when six tools of any one type ship, a green Kanban pops up in the row of finished goods, triggering the card to be moved to a FIFO (first-in-first out) board (see photo bottom right) hanging in the production area. The card tells operators what product model needs to be replenished and to go back to component shelves (see photo above) and grab another six-piece batch to begin the polish and assembly process.

The board follows a basic rule of working the board top to bottom, left to right.

"Green cards are finished goods" Nicholson said with a smile. "We picked green because it's the color of money, and shipped finished goods mean sales and money coming in."

Other Kanban colors prompt different actions or movement.

For instance, orange cards are internally made details. When those cards are dropped in a Kanban drop box (see photo p. 8), it signals Osborne that the component has reached its reorder point. He then places the card on the FIFO board based on the priority that he wants the items produced. The card is re-staged with completed components until another reorder point is reached.

Shipping work station has a

orders go out.

collection box for kanbans that

enable production manager to schedule the shop by placing them on the FIFO board as

Yellow cards represent purchased components; as parts are pulled, reaching a level where the Kanban reorder pops up, the card is placed into a drop box on Osborne's desk where he tracks what to order and what has been ordered.

Done properly, a Kanban system controls the amount of inventory. "They won't run out, but it puts a cap on what they can have while protecting production and fulfillment," Nicholson said, noting that with more seasonal products, it took a bit more time to establish correct inventory levels.

FIFO Board Value

The FIFO board allows the production manager to schedule the shop making adjustments when it makes sense (based on experience), leapfrogging forward when larger orders than normal come in or for seasonal demand change. It is the heartbeat of the operation, acting as a communication tool for the entire shop.

They don't need to run down the production manager to ask what to build anymore. The schedule is posted on the board for all to follow.

"When that board is full, I could be sick or on vacation for a few days and not skip a beat in production; the staff knows exactly what to do," Osborne said.

The Pull System has been very beneficial for Timberline Tool. It eliminated overstock with a 65 percent

Bill Nicholson stands by the visual FIFO board, the heartbeat of the production floor.

reduction in finished goods without delaying deliveries. This cut inventory carrying costs by more than \$135,000 dollars on just two high-demand tools and decreased needed storage space.

In fact, the new building decreased in size by about 1,000 ft; and Green noted, "We can operate in less space because it's

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SPECIAL FEATURE Timberline Tool (continued)

designed for flow; we actually have more room."

The machines are set up so that one operator runs both CNC mills, setting one up, getting it going, and then starting setup on the other.

Raw material storage that was previously scattered is now consolidated and orderly. Some raw material and components inventory actually increased, Nicholson noted, but this eliminated running out of supplies and stopped waiting time (one of the 8 deadly wastes targeted by Lean) and rush shipping costs.

Other Benefits

Long lead times, which can be masked by too much inventory in finished goods, also dropped. One operator credits POUS, having components when needed and streamlined layout for a 17 percent reduction in assembly time on the TC1 tool alone.

Another benefit over past operations is that the production manager now takes physical inventory in roughly 5 hours each month; before the entire crew (5-6 people) would shut down for a full day to complete the task. It has removed the headaches of inventory and reordering.

"What it's done for us is increased the flow through the foundry and factory. The parts are in order and put away," Green noticed. "You go out on the shop floor and can see the system at work. Things go easier; there are no surprises."

He has found that the crew is happy and proud of what they're doing, knowing they have made a difference.

"We like working with Bill. When he gets his teeth into something, he doesn't quit. He probably had his moments of frustration but in his kind manner kept after us to stick with it. His guidance and good questions really kept us on task."

Editor's Note: Having the Pull System successfully in place will help Timberline Tool focus on top line growth. Ken Green is the featured speaker at the Compete Smart closing luncheon where he will report on the progress of several growth initiatives that are underway.



Orange kanbans from inhouse parts area go to collection box to trigger builds when inventory levels drop to a fixed point.



Polished 650 tool parts are staged for further production.

Traderoots Program Encourages Exports for Growth

Ambassadors from five countries gave U.S. Senator Max Baucus kudos for the Big Sky Country welcome they received at the Traderoots program held in Kalispell on Aug. 13, according to a press release from Webb Brown, President of the Montana Chamber of Commerce. The five had been touring with Sen. Baucus, weighing Montana as a place to do increased business. Ambassador Carolina Barco of Colombia announced a trade mission to Montana during her visit, and Ambassador Le Cong Phung of Vietnam announced a university exchange between

his country and Montana. Ambassadors from Morocco, New Zealand, and Peru were part of the contingent. The event was organized by the Traderoots program of the U.S. Chamber of Commerce, an advocacy organization for trade promotion, with support from The Montana Chamber of Commerce and the Kalispell Chamber of Commerce. The event included panel discussions on export resources and Montana companies that say exporting is essential to their businesses: Milky Whey of Missoula, Timeless Seeds of Conrad, Timberline Tools of Kalispell.

Compete Smart Feature Dinner

Electrify Your taste buas

Thursday, Oct. 2 – Reception 6:00-6:45; Dinner 6:45 – 9:30 pm in the Ballroom

"Montonoco's" special menu featuring Montana Grown & Raised Foods.
Co-hosts NorthWestern Energy, MMEC and feature sponsor Montana Department of Agriculture.

Get lift from peers and allies as you network, make deals and taste Montana's agricultural heritage with local beverages and delicious foods prepared in the Executive Chef's Kitchen at the Hilton Garden Inn.











352NJ3

Missoula - Hilton Garden Inn Conference Center - 3720 North Reserve St.

Two Stimulating Days w/peers & allies for \$195 (plus team & earlybird savings!)

MANUFACTURING EXTENSION CENTER



















thursday - October z day one

7:20 am - NOON	Registration in Lobby	
	ROAD TOURS - Choose from 3 multi-site plant visits	
8:25 - 9:25 am	Option A: Early Walking Tour to Diversified Plastics & Felco Industries	
	(back in time for pre-sessions II & III & great option for Exhibitors or appt. with Doug Hall)	
8:45 - 11:10 am	Option B: Bus to Spectrum Products, CM Manufacturing & American Eagle Instruments	
	Option C: Bus to Roscoe Bridges, GTC Nutrition & Diversified Plastics	
8:05 - 11:20 am	Pre-session 1: LEAN Lego, a simulation	
9:30 - 11:00	Pra-sassion II: LEAN Office	
10:00 - 11:00	Pre-session III: New Markets with Govt. Contracting	
10:30- 12:00	Exhibitor Hall w/ refreshments	
NOON - 1:50 pm	Opening KEYNOTE Luncheon - "Made in the USA: Choices for Growth"	
	with "Truth Teller" & Growth Expert Doug Hall	
1:50 - 2:25	Network/Visit Exhibitors/Break	
2:25 - 3:25	Concurrent Breakouts	
	A-I The Business of Customer Service, Gary Bishop, MSU College of Business	
	В-I The Beer Game: Avoid Supply-side Whipsaw (2-part), Kreg Worrest, MMEC	
	C-I Key to Alternate Workforce, facilitator Bob Hietala, Prospera Business Network	
	D-I Steer Intellectual Property Assets to Best Advantage, Marti Elder, MTIP	
	E-I Investor Strategies, Curtis Burgess, Mendota Group & Bob Comey, Invest America F-I Baldrige Criteria to Defy Gravitational Pull, Andy Roche, Nutritional Laboratories	
3:25 - 4:05	Exhibitors Hall/Networking/Break A-2 Guide Decisions with Market Research, Jakki Mohr, Award-winning UM Professor	
4:05 - 5:35	A-2 Guide Decisions with Market Research, Jakki Mohr, Award-winning UM Professor B-2 The Beer Game (cont.)	
	C-2 Job Matching for High Performance, Steve & Vicki Wilson, Willow Creek Consultants	
	D-2 Cost Analysis: Check the Winds for Product Launch, Al Deibert, MilTech	
	E-2 How Established Companies Leverage SBIR, Tab Wilkins, NIST MEP	
	F-2 Technologies to Manage Customers & Growth, Doug Sire, InterDyn BMI	
5:35 - 6:00	Short Break	
6:00 - 6:45	Exhibitors/Networking/Reception & no-host bar featuring Montana beers & wines	
6:45 - 9:30 pm	Dinner w/ "Montonoco's" Special Menu in Ballroom	
,		

Friday - October a day two

7:00 - 8:00 am	Breakfast with Exhibitors and Sponsors
8:00 - 9:45	Lines on Success with Montana Company Leaders
	Session in Ballroom: North Slope Sustainable Wood, SRS Crisafulli & Big Sky Brewing
9:45 - 10:10	Exhibitors/Networking/Break
10:10 - 11:40	Concurrent Breakouts
	 A-3 Market Research in Tech Product Development & Commercialization, John Balsam, MTIP B-3 Benefits of Cellular/Flow Manufacturing, Lloyd Taylor, Sterling Savings Bank C-3 Training within Industry to Standardize & Sustain (2-part), Terry Cox, ND MEP D-3 Pre-flight Check with Business Valuation, Paddy Fleming, MilTech E-3 Leveraging GREEN: Uplift for Today's Market, Roundtable with Jim Haider, MMEC F-3 Communication Skills Matter w/ Simulation, Bryan Peterson, AEM
11:40 - 11:50	Networking/Break
11:50 am - 1:20 pm	A-4 Catch the Trade Winds to Exporting, Carey Hester, US Commercial Service
	B-4 Mixed Model Production to Untangle Bottlenecked Resources, Bill Nicholson, MMEC
	C-4 Training within Industry (TWI – cont.)
	D-4 On Solid Ground with Process Modeling, Todd Daniels, MMEC
	E-4 Set Sail with Optimal Distribution Channels & Pricing, Leesa Nopper, M2TAP
	F-4 Rapid Product Development: What's Up, Quest Integration & Rob Kinzle, MilTech
1:20 - 1:30	Short Break
1:30 - 2:45 pm	WRAP UP 8 Closing Luncheon, Feature Speaker Ken Green, Timberline Tool (Don't Miss It!)











10 Forward Focus

Manufacturing News

Stevensville Firm Aims at More Growth

Bitterroot Tool & Machine (BTM) LLC *(www.btm-mt.com)* in Stevensville has been awarded a \$33,000 from the USDA, Rural Business Enterprise Grant program, to obtain ISO 9000 Certification, an important step for attracting sales and adding jobs to the community. BTM is a supplier to the aerospace industry. The grant was announced by the Bitterroot Economic Development District.

Positive Sales Secured to 2014

REC Silicon (www.recgroup.com) located in Butte has secured \$1 billion in sales contracts in a number of long-term agreements with existing customers, most of those running through 2014, according to the *Big Sky Business Journal* "Hot Sheet," July 28, 2008.

Manufacturing Strong in Montana

Montana is one of the top five states leading the nation in increased manufacturing production from 2002-2006 according to a new U.S. Census Bureau report. During that time U.S. production increased by 22.1 percent. The four other top performers by percent of increase were Louisiana, Wyoming, Delaware and Hawaii.

Idea Evolves into Promising Product

Billings firm **J&R Enterprises** (www.neuro7.com) has introduced a revolutionary multi-tool for conducting neurological exams, according to the August issue of Billings Business, moving from the research and development phase to marketing and educating potential users.

Grants Available for Eureka! Projects

The Montana Department of Commerce and the Montana Department of Agriculture are offering training awards to pay for up to \$1,750 for qualified Montana manufacturers to sign up for a Eureka! Winning Ways project with the Montana Manufacturing Extension Center. A limited number of grants are available. Contact August Uhl, WIRED Event Coordinator for MMEC at 406-994-5785 for information or an application.

EcoStar Award Nominations Deadline Sept. 30

In its ninth year, **EcoStar**, a Montana State University Extension Pollution Prevention award program, recognizes Montana businesses and organizations that are moving towards sustainability by surpassing state and federal requirements to reduce solid and hazardous waste generation, conserving resources and serving as role models. Gov. Brian Schweitzer will host an awards ceremony at the Capitol in Helena for EcoStar pollution prevention award winners on Nov. 17. People and businesses who want to be considered or nominate another should complete an application before Oct. 1. Details about the program and an application form are available on the MSU Web at www.mtp2.org/ecostar.html or contact Jenny Grossenbacher at 406-994-4292.

Updated Trade Finance Guide Available

The **U.S. Department of Commerce** has published an updated version of the "Trade Finance Guide: A Quick Reference for U.S. Exporters." This second edition includes a new chapter on foreign exchange risk management and other updates. It is a concise, easy-to-understand tool created specifically to help U.S. small- and medium-sized enterprises (SMEs) navigate the often difficult but essential landscape of trade finance. Complimentary copies are available from the Trade Information Center at 1-800-USA-TRAD(E) or download an electronic version at www.ita.doc.gov/media/Publications/abstract/trade_finance_guide2008desc.html



MilTech to Provide Technology Scouting

MilTech was recently awarded a small contract from the Marine Corps Special Operations Command (MARSOC) at Camp Lejeune, N. Carolina, to do technology scouting services and readiness assessments for its force modernization team

MilTech will work closely with TechLink and the national Manufacturing Extension Partnership, searching MEP's information network, Department of Defense labs network, university labs, and private industry for potential sourcing to fill capability gaps identified by MARSOC.

MilTech will evaluate technology readiness levels for existing technologies that are outside normal supply and for technologies in development. The findings will be used by MARSOC to help determine what to include in requests for the next procurement cycle after they are matched to its Training Tactics and Procedures.

Al Deibert is the MilTech program manager for this project. MilTech is a collaboration between MSU's Tech-Link and the Montana Manufacturing Extension Center.

Family Business Day Set in September

The Montana State University College of Business is hosting the 15th Annual Family Business Day & Awards Luncheon at the Holiday Inn in Bozeman on Friday, September 26. This year's top family businesses in Montana are St-Char-Ro Floral & Event Rental of Ronan, in the very small business category (fewer than 10 employees); Owenhouse & Associates of Bozeman (10-30 employees category), Wyo-Ben, Inc. of Billings, (more than 50 employees category) and Montana DataSure of Bozeman, in the new business category. Hofeldts of Chinook won the Judge's Special Recognition Award. The MSU College of Business and State Farm Insurance, host the program in honor of Robert Jaedicke. Stockman Bank is underwriting the awards, with additional support for the program provided by the Montana Chamber of Commerce. To register for the day or for the luncheon and related fee information, call Karen Beach 406-994-6796.

Free! Webinars — Marketing Tools You Can Apply Now

Learn to create more effective customer pull for both new and existing products and see from a customer's eyes in a free 30-minute MMEC Marketing Webinar Monday, Sept. 8 from 11:30 a.m. to noon covering the "Laws of Marketing Physics."

Find out how to get your product to market five times faster in a second webinar on Monday, Sept. 15 using four principles that real-world entrepreneurs use to "Fail Fast — Fail Cheap — Get Smart" to get their products to market quickly. Those principles incorporate the scientific method developed by Dr. W. Edwards Deming.

Todd Daniels and Bill Nicholson, Field Engineer with the Montana Manufacturing Extension Center, will present these easy-to-use, easy-to-remember tips in short sessions near the lunch hour to allow you to learn with less impact on your busy schedule.

"These are simple, effective tools

that you can walk away and apply now," Daniels said.

Easy-to-use, easy-to-remember tips will be offered in 30-minute Webinars that are easy on your schedule.

Manyare simple, effective tools you can apply now.



On Monday, Sept. 22, a third webinar will show you that Growth is not random as you discover the proven

scientific method for growing your organization reliably. You will hear more about "Eureka! Winning Ways," a simple, direct and systematic approach to quickly identify and validate new ideas to increase top-line revenues. It is based on 20-years of research on realworld success factors by Doug Hall and Eureka! Ranch.

You can sign up for one, two, or all three sessions at MMEC's website www.mtmanufacturingcenter.com. Click on "Free Webinars" on the home page for a link to pre-register in order to receive call-in instructions that will be emailed to you for using a handy "Go-To-MeetingsTM" conference calling system that enables you to follow along with web-based presentation material, add comments or ask questions and interact with other attendees. Your normal long distance charges will apply. You may invite several people to participate through one phone connection.

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