

Volume 12, Issue 15 □ **April 11, 2005***Important Dates to add to your calendar...*

- **Apr 12th, HPM Employee Leveraging Tour #10.** Host: Volvo Motor Graders, Goderich. **FULL**
- **Apr 13th, HPM Open House.** Open to readers of the HPM Weekly Update who might consider membership in HPM. Host: Mancor, Oakville. **Call Dave**
- **Apr 20th, 12:00-4 pm HPM GMT Meeting.** All HPM Directors or Alternates invited Host: GE Rep. & Insp.
- **April 26th, HPM Employee Leveraging Tour #11.** Host: Avnet Electronics, Mississauga. **FULL**
- **May 3rd, 9:30-2 pm, Innovation Insights: Celestica Plant Tour, www.celestica.com.** To register: Must call: 1-800-999-4129. Lunch included [Cost \$150.]
- **May 6th AME Leadership Forum** – includes site visits to CTS, Streetsville and Eaton, Milton. www.ame.org – HPM'ers register at AME Mbr rate
- **May 10th, HPM Employee Leveraging Tour #12.** Host: COM DEV, Cambridge, Nabeel Mirza **75% Full**
- **May 18th, 11:30-5 pm, HPM Board Meeting.** Host: Canada Post
- **May 19: Best Practices & Value Stream Mapping Forum** – 1) 4 VSM Best Practices in operations/admin areas 2) 2 Best Practices chosen for Canada's Largest Lean Conference this year in Edmonton June 6-10. They'd appreciate your feedback to tune their presentations!!
- **May 24th, HPM Employee Leveraging Tour #13.** Host: Bird Packaging, Gary Whalen **58% Full**
- **Jun 6-10th: "Implementing & Sustaining Lean Thinking Everywhere."** An AME Canadian Region & CME Western Division practical Lean Conference in Edmonton, Alberta. www.measureupforsuccess.com
- **Jun 14th, HPM Employee Leveraging Tour #14** Host: Samuel Strapping, Daniel Dstancescu. **42% Full**
- **Jun 28th, HPM Employee Leveraging Tour #15** Host: Willow Manufacturing, Dennis Wild **67% Full**

Opportunity for World Class Insights

Japan: Depart May 19 – Return May 30th You will have to act fast as David Chao has only 4 seats left. The last one was sold out. 16 travelers are confirmed – but thanks to the Japanese hosts, they increased the number to 20. Wow, what a trip! You will see:

- Toyota's only hybrid factory + Honda Suzuki Plant
- Two of Toyota's largest suppliers
- Sharp's Kameyama LCD factory
- How Panasonic builds residential homes using takt time - *Daiwa House Nara Plant*
- Asahi Beer – Nishinomiya Plant
- How Mazda builds rotary engines and its flagship RX-8 sports car

Register: ASAP: David Chao – who is fluent in Japanese and will guide the tour (604) 785-1800 ~ F: (604) 667-5211

An HPM Forum ~ May 19th ~ 8-4:30**6 Practical Best Practices in:**

Innovative Outside-the-Box Lean Thinking

Hilton Gardens Inn ~ Cambridge

Transferable Registrations

AM: Value Stream Mapping Exchange

1. **Applying VSM at Corporate Express**
>Streamlining new account setup – 1,000% Red.
>Streamlining the hiring practice – 40% Red.
2. **Applying VSM at World Vision**
>Unusual mindset makes VSM work
3. **Toward the Lean Office – the right Quick Hits**
> Major outcomes – by thinking differently
Cascade Boxboard – Winnipeg Operations

PM: Best Practice Presentations

4. **Selected Best Practice for Edmonton Conference: Stack-A-Shelf.** An Emerson company with a 620,000 sq. ft. facility in Cambridge in a tough North American market
5. Dramatic: **How to make Accounts Payable paperless**... the savings are huge. **Gerrie Electric** with a now proven process – from Share Showcase in November - to share & discuss.
6. **Selected Best Practice for Edmonton Conference: Rockwell Automation.** A global company making global strides by 'thinking globally but acting locally.

Registration:

- Consortium & AME members \$195+GST
Non-Members \$295+GST
- **Includes:** Lunch, breaks, Content CD
- Register online after Wednesday at www.hpmconsortium.com
- Reserve Spaces Now – Send names later
- Request a full detailed agenda now from Dave or Nicole at 519-893-6260. On website shortly
- HPM reserve the right to decline registrations on behalf of their members

CDN LEAN Conference Taking Off

There are **198 signed up now** for the Edmonton Conference June 6-10 & more coming in. You should sign up now to get the **Workshops and the Tours you want.** Download the full program from the site www.measureupforsuccess.com --- Register online.

Register online at www.ame.org

AME LEADERSHIP FORUM MAY 6, 2005 ~ GE HQ Miss.

First presentation March 1st was sold out
3 presentations ~ 2 Tours ~ Lunch ~ Travel

Recognizing Excellence



Bearing Necessities: Industry Week Best Plants Profile - 2004

**Rockwell's Marion, N.C.,
mounted roller bearing plant**

creatively puts people, production processes and IT software to work with industry-leading results to win America's Best Plants competition. Check out www.industryweek.com

Rockwell has generated industry interest with its aggressive and successful deployment of its company wide Lean Masters program across all facilities. HPM'ers will know that Cambridge has shown much leadership in this initiative with their Cynthia Bruns being the first Lean Master across their 11 international sites. The following was edited from [John McClenahan's](#) Oct. 1, 2004 article in Industry week magazine.

Rockwell's Marion NC Bearing Plant Wins At a Glance

- Total square feet: 174,000
- Start-up: 1996
- Achievements: With nearly 100% of the 102 person workforce participating in empowered work teams, Rockwell Automation Marion has achieved a **99% customer retention rate** for the last 3 years, and has recorded no lost-time accidents since start-up
- Benchmarking Contact: Robert P. Lyon, continuous improvement manager, 828/655-1108, rp Lyon@powersystems.rockwell.com

In the mountains of western North Carolina, just off Interstate 40 near the town of Marion, sits a 174,000-square-foot tool box full of world-class manufacturing practices. Formally, it's the Marion plant of **Rockwell Automation's Power Systems Div.**, a place where they make nearly 3,000 mounted spherical and tapered roller bearings with shaft sizes ranging from 1 3/16 inches to 5 inches. These bearings go into such things as mining machinery,

fans and other air-handling equipment, waste treatment equipment, forest products processing equipment, food processing machinery and metals processing equipment.

In name it's a lean plant. Indeed, on a day in late July several people were wearing "Power Lean" polo shirts. But actually it's a place where 102 employees **put a whole box of tools to work without worrying what a production improvement technique is formally called** or accepting the limits of a piece of software. The result: innovation (wireless and RF systems that allow material handlers, maintenance technicians and quality auditors real-time access to data from anywhere in the plant), industry-leading low costs (Rockwell declines to say just how low), quick delivery (as short as 24 hours) and exceptional quality (first-pass yields of 99.7% for all finished products) in a business that has surged the past few months. The plant, which essentially is a large-scale high-precision cast iron and steel machining and assembly facility, has added 10 production people to keep up with rising demand, particularly from metals processing and air-handling customers.

Walk around the plant and you'll see how more than a dozen production management tools -- including color-coded kanban cards, statistical inventory management, cross-training, value streaming, and electronic data interchange -- have been put to work.

"Having the lean toolbox as full as it is and as complete as it is essentially puts you in a position to where almost never does something come up that we don't have a tool to address," says plant manager Scott Fullbright. Having that toolbox plus the confidence and experience to use it "almost guarantees that you're not going to come up against something that you don't have a resource to address," he stresses.

The Marion plant makes mounted roller bearings under the Dodge Bearings brand, a brand with a logo that's particularly appropriate to the Marion plant with its circle of motion. Indeed, plant manager Fullbright will tell you that one of the practices that make Marion unique, one of the things that give it a competitive edge in the marketplace, **is the circle of analysis and improvement that's always underway in the plant.** This cycle begins with product data analysis, moves to describing the current value stream, then to charting the future flow

of the value stream, proceeds to achieving the goals by taking tools from the toolbox and comes back to data analysis again. Along the way, product and process priorities get set and action timelines are established. Management and other employees are intellectually and emotionally involved, which reinforces the can-do culture of the plant. Says Fullbright of the people in the plant: "They're just good. . . . Everybody has access to all the books and the literature on all this stuff. **But having the confidence and the experience to use it is what makes the difference.**"

In fact, very good people are exactly what you see when you leave the Marion plant's conference room, don safety glasses and head onto the amazingly clean production floor. It's here that people doing machining and those doing assembly -- with all but the newest hires cross-trained to do at least three jobs -- make as much of a difference as do the sophisticated machine tools. The production floor is organized into two areas. Immediately in front of you are the **16 manufacturing cells making the 351 products** that account for 80% of the plant's total sales revenue. The output of these cells is always in stock. To the rear are the **four BOD (build-on-demand) manufacturing cells**, which turn out any of the 2,288 products that account for 20% of sales revenue. Every day, demand is communicated to the assembly line, and **each item on the list is built and shipped that day**. And, yes, the BOD assembly lines and **employees readily handle lot sizes of one**.

How well does BOD work? Fullbright relates the story of a customer of a customer -- the plant sells mainly through distributors -- in Houston who called at 4 p.m. on a Friday, seeking a replacement for a bearing that had just failed in an industrial air conditioning unit. The Marion plant produced the bearing, packaged it and shipped it ready for the Texas customer to install at 7 a.m. on Saturday -- **just 15 hours after the call for help was received**. "We're proud of that one," says Fullbright.

Why the 80/20 arrangement on the production floor? "It's really easy to lose track of what's important, particularly when you've got nearly 3,000 finished goods that you produce. And it's easy to let the exceptions dictate the process," notes Fullbright. The big downside to that, he

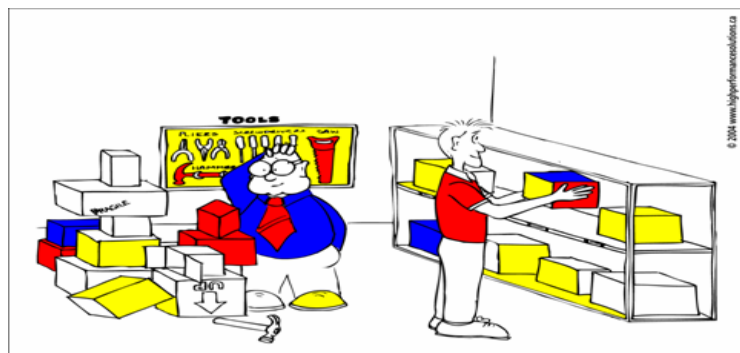
says, is that exceptions drive up cost. **"So by focusing on 80/20, it allows us to design our processes for the rules rather than the exceptions and to drive the cost to the lowest possible level that we can,"** he explains.

"When you try to do everything with the same tool, and the only tool you got is a hammer everything starts looking like a nail," Fullbright quips. "It's so obvious, but that is an amazingly frequent mistake that people make."

Out on the floor, day-to-day operations are carried out by management teams consisting of an engineer, a supervisor and a planner. From an office literally on the production floor, the teams have complete responsibility for material purchases, staffing levels, overtime, customer service and the maintenance of current production processes. Senior management uses a set of metrics; including order fill rates, stock percentages, plant productivity, inventory dollars, and customer complaints, to keep track of trends. "Basically, when we have an unfavorable trend in any of those metrics, it would require an upper management review of what's going on. It doesn't necessarily mean we would intervene and change their direction. We're going to look and see what's going on," says Fullbright.

Any Interest Out There in 5-S Posters?

Nothers Awards in London was very interested in the cartoons that HPS produced that appeared in the Calendar for the Edmonton Conference. Apparently, as they installed reward & recognition systems more and more firms kept asking about 5S posters, reminder boards etc. Hence, Bob Kerr has been working with Nothers and they now have several poster systems in development. If you are interested you can call Jim Nother at 519-663-9440 x226. Here's one example.



S2: Set-in-order

Find a place for everything & keep everything in its place