

**Volume 12, Issue 16 □ April 18, 2005***Important Dates to add to your calendar...*

- **Apr 20<sup>th</sup>**, 12:00-4 pm **HPM GMT Meeting**. All HPM Directors or Alternates welcome **Host: Willow Mfg.**
- **April 26<sup>th</sup>**, **HPM Employee Leveraging Tour #11**. **Host: Avnet Electronics, Mississauga. FULL**
- **May 3<sup>rd</sup>**, 9:30-2 pm, Innovation Insights: **Celestica Plant Tour**, [www.celestica.com](http://www.celestica.com). To register: **Must call: 1-800-999-4129**. Lunch included [Cost \$150.]
- **May 6<sup>th</sup>** **AME Leadership Forum – Tour: CTS, Eaton** [www.ame.org](http://www.ame.org) – HPM'ers get AME Mbr rate
- **May 10<sup>th</sup>**, **HPM Employee Leveraging Tour #12**. **Host: COM DEV, Cambridge, Nabeel Mirza 75% Full**
- **May 18<sup>th</sup>**, 11:30-5 pm, **HPM Board Meeting**. **Host: Canada Post**
- **May 19: 6 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 24<sup>th</sup>**, **HPM Employee Leveraging Tour #13**. **Host: Bird Packaging, Gary Whalen 58% Full**
- **Jun 6-10<sup>th</sup>**: **"Implementing & Sustaining Lean Thinking Everywhere."** An AME Canadian Region & CME Western Division practical Lean Conference in Edmonton, Alberta. [www.measureupforsuccess.com](http://www.measureupforsuccess.com)
- **Jun 14<sup>th</sup>**, **HPM Employee Leveraging Tour #14**. **Host: Samuel Strapping, Daniel Dstancescu. 42% Full**
- **Jun 28<sup>th</sup>**, **HPM Employee Leveraging Tour #15**. **Host: Willow Manufacturing, Dennis Wild 67% Full**

## HPM's Employee Leveraging Tours Gaining Momentum... Presenting Value

**Volvo Motor Graders** opened their doors and brought their president, two Vice Presidents and three operations staff to hear the observations of the 14 visitors ranging from presidents to shop floor and office staff from **COM DEV, Hammond, Rockwell, GE Inspection, Tempress and Orenda Aerospace**.

Their hospitality was first rate & included lunch as the feedback exchange to Volvo's management team transpired.

### The Exciting Challenge

No two of HPM's member companies are even close to being the same... which means good value if your mind can make the mental jump from your context to immerse yourself in the different world you are visiting, and actually see the thinking and the principles being applied there. Among winning companies over the years - **the best tend to be those that can walk into any plant of any kind and come away with value**. Tempress' president **Bill Mclean** was quick to point out 'This was a value day – I am very pleased.' Leaders indicate 87% of manufacturing solutions are going to come from sectors other than manufacturing! Learning to see is an acquired skill & HPM offers the venue.

## Learning Comes In Many Forms...

**And just because a lot of learning takes place doesn't mean there needs to be lots of training!**

This point is powerful if we think of what needs to be learned... **and how it might be learned** considering non-training options as well. **The realization that 'fun' is a powerful driver will probably pop up.**

It is finally becoming clearer that the more successful a competitor is, the more aligned their people are in their thinking. And to be aligned means talking about the vision everyday in regard to the real work around them until the vision becomes 'lived'.

To make that happen the same cultural values should be in both the teams **'work' and 'play'**.

### Golf – 5-S – And Eliminating the Deadly Wastes

The HPM Office received a neat Golf Tournament invitation that was designed to have fun – **yet focus on the key elements of lean** by structuring it to help participants network with each other - and also to get a fun message across that delivers a proven first step to Workplace Organization (5-S).

### The Format... begins with a best practice

The day begins at 8:30 with a **half-day 5-S Simulation** (all hands involved) at the **Rockway Golf Course in Kitchener**. This powerful simulation was proven & used by CTS (Top conference site in TO) with a fun approach you might steal. In the process the power & 'how-to' approach to Workplace Organization is learned. **CTS will lead it**. Following lunch at 12:30 a 'Shotgun' start gets folks on the links. And the learning does not stop as each hole will spell out a different kind of waste in the office or shop using posters & novel ways of driving the points home.

**Interested? It's May 26<sup>th</sup>... to register, Email AME's Barb Jacklin at [bjacklin3@cogeco.ca](mailto:bjacklin3@cogeco.ca)**. My sources tell me the day can be had for less than the training would cost.

## Lean Wins Again... Kodiak buys Terra Footwear – Brings Offshore Production Back Home

**Kodiak Group Inc., Canada's leading distributor of outdoor and work industrial wear, has just purchased Terra Footwear. Kodiak plans to bring some of its current offshore manufacturing back home.**

Folks in Waterloo County will remember with a tear as Kodiak (Gebb Shoes), and a large number of long-standing Kitchener jobs began to fade away. Kodiak makes no footwear in Canada right now, as their production is primarily in Thailand and Vietnam. But that is about to change thanks to one Canadian company's commitment to its people and to Lean thinking.

Anyone attending HPM's **"Intro to World Class Fundamentals"** workshop will remember the references to Terra Footwear in Harbour Grace, Newfoundland and their march to World Class. Today they sell into 23 countries.

Terra, through its remarkable leadership (unlike that of its counterparts in North America), simply hunkered down and got deadly serious about implementing lean superbly.

**And they did it by not idolizing 'lean' but just focusing on the common-sense stuff that really mattered, by regularly asking questions such as "How can we make your job easier so we can do more for our customers?"** The outcome was the development of the finest and most hi-tech footwear manufacturing company in Canada. Their approach produced a workforce that was fully involved and took ownership as you may remember from those delightful Wal-Mart ads which talked about the difficulty in making good boots because, as operations manager, and good friend, Dave Gill put it on the ad clip – "cows don't come square". All the folks in the ad were Terra employees.

### What has happened?

Kodiak, after abandoning Canada, and moving its production to Thailand and Vietnam, began to assess the impact of its decisions in light of global competition, which makes you look at the total cost of doing business and the cost of maximizing production efficiency at a specific location. Another factor was having to face freight costs that had increased by some 300 per cent in the past year because of oil prices.

According to Kevin Huckle, CEO of Ontario-based Kodiak, **"Made-in-Canada products all of a sudden aren't such a bad idea."** Kevin added that "The major impetus for the move is the quality of boots produced at Terra's high-tech plants. Kodiak will continue to have some goods made offshore, he said, but the company plans to expand into foreign markets and "other countries realize the value of Canadian-made goods."

Kodiak plans to maximize production at Terra plants in Harbour Grace, Nfld., and Markdale, Ont. Because, Huckle stated, **"They have two world-class mfg facilities in place.** Our plan is to bring some of our Kodiak production from offshore into these facilities to realize further operating efficiencies for both plants."

Terra's 280 employees will start producing both brands of footwear within four months, increasing Canadian production by 50,000 to 100,000 pairs of boots initially.

**A tip of the HPM hat is due to Terra Footwear who is an active member of our sister Mfg Consortium in St. John's coached by Sean McCarthy**

Ref: Dene Moore, Montreal Gazette, Tuesday, April 5, 2005, P. B5

### Caution, Gentle Update Readers ~~ some similarities lie ahead... but a ton more value...

After reading Gary Kerr's personal account in his Aussie Newsletter, of his unique tour of Toyota, the Update is pleased to have **Australia's Gary Kerr as our guest Editor this week.** The caution is just mine, as some of Gary's words will remind you of a previous article which followed my recent conversation with Gary.

*Because he shares his perspective here – I suspect you will find both value in his view but also in the re-enforcement of some of the issues that we as manufacturers must become hungrier in consuming.*

*Without a doubt the Cambridge plant is the most decorated in North America – and because it is Lean Thinking-based, what you see is understandable. Here is Gary's perspective after seeing one of the finest automotive manufacturing facilities in the World.*

*Gary arranged a tour of Toyota most of us can only dream of. A tour where the guide was Ray Tangay, president of the entire 3 million square foot Toyota facility, along with LEI guru, Mike Rother. I thought it a treat to ask Gary to be our guest editor for this issue and he has agreed. His account of what he saw is captured below. Thanks, Mate!*

## Toyota Cambridge Opens Up

Gary Kerr, Guest Editor

"On Monday 21 March, I accompanied Rick Fleming and Mike Rother on a rare tour of Toyota Canada's Lexus plant. The name Mike Rother is well known throughout the Lean community and his name ensured that the good folk at Toyota gave us the red carpet treatment with Toyota President Ray Tanguay acting as one of the tour guides.

**All employees enter the plant through a mock-up Lexus show-room complete with Lexus RX330.** This is to remind all employees who they work for every day – the customers of their beautiful product. The Cambridge plant produces the Lexus and the Corolla and has 4,300 employees.

The Cambridge plant produced its first vehicle on November 30<sup>th</sup> 1988 and 50,000 more by the end of its first year. Today they produce around 300,000 vehicles each year in this 3 million square foot facility.

In year 2000 they were chosen to be the only site outside of Japan to produce the prestigious Lexus. Every day in this World Class plant, 1000 people build 270 Lexus automobiles over two shifts – from 7:00 am to 4:45 (plus overtime) and 5:45 pm to 2:30 am (plus overtime) according to a 190 second Takt time. Corollas are manufactured to a 59 second Takt.

**First Impressions.** My first impression upon entering the production facility was one of extreme cleanliness and orderliness. The aisles are wide, the plant is extremely well-lit and quiet. All spot welding occurs behind Lexan panels and the excellent dust extraction ensures that the environment remains uncontaminated.

**Quality Focus.** The chassis forms the main platform around which the rest of the car is built. The engineering tolerance is +/- 1.5 mm anywhere on the chassis; however, the team hold a tolerance of +/- 1 mm measured at over 300 points to ensure the close fit of all body panels, doors

## Canadian Lean Conference is Rating Top Marks for Value of Program Quality

**Attn: Readers of HPM Weekly Update:** Check out [www.measureupforsuccess.com](http://www.measureupforsuccess.com) for the latest details on the June 6-10<sup>th</sup> Conference being held in Edmonton at the Westin Hotel.

You will need to register now to stand a chance of getting into the Workshop or the Tour that you wish as they are filling right now. If cost is an issue – and yet acceleration along the path to World Class is an urgency – the “Buy 4 and the 5<sup>th</sup> person goes free” deal can be of good value.

In terms of the quality of the program – there are 11 Keynote presenters in addition to the 32 practitioner presentations that are all from companies your colleagues will respect. This unusual emphasis on Keynoters is to shed a **‘hard laser light’ on that one entity every one of us needs more of in our plants...** it’s that entity, that at the end of the day, determines success or failure - **LEADERSHIP**. If you are CEO or President you will be getting an invitation to network on June 6<sup>th</sup> with Jim Clemmer and 80 + leaders at a large networking gala that will be sponsored by Edmonton Economic Development. Like most of us, if you are not a CEO, you will have access to folks like yourself who you can learn from and share your best practice. This conference is assembled by Volunteers with a real concern for increased manufacturing competitiveness.

and boot lid. The main chassis jig has been manufactured to a tolerance of +/- 0.2 mm.

Most manufacturing control-limits are set at just 30% of the engineering tolerances. Throughout the entire build process there are critical inspection points which are called “Circle L Points” (See the Lexus Logo) These points are inspected by the operators as the vehicle is built and over 120 Circle L Points are inspected each day on a finished vehicle. Features such as panel fit, door closure feel, paint finish and interior finish are inspected each day and it has been over 4 months since a defect has been discovered!

**Robust Processes.** As the chassis jig is a critical piece of equipment the Lexus team has built a spare. Most manufacturers would have their spare jig boxed up and put away in case it is needed however, this is not the Toyota way. How do you ensure that a jig is in good working order and conforms to spec? You use it! Thus, their two jigs are rotated each week with a 5 minute change over. The jigs are changed each Sunday to be ready for service on Monday. A chassis is taken to metrology for CMM measurement each Monday and Thursday to ensure that the jig is doing its job within spec. The removed jig undergoes its preventative maintenance each Tuesday and is sent to metrology for complete recertification every 6 months. Evidence of Poka Yoked (Goof-Proofed) processes is everywhere. There are torque sensors on the air spanners and the vehicle can only progress to the next station once the correct torque has been achieved and the corresponding green light has illuminated.

**Batch Size of One** I witnessed a silver blue Lexus being followed by a white one followed by another silver blue one exiting the paint shop. I asked my tour guide why they didn’t batch the two silver blue ones together and I was met with a quizzical look. “We only build to end customer order and in the sequence in which those orders arrive”. Perfect FIFO – no batching.

**World Class Paint Shop.** Everyone entering the paint shop must wear anti-static clothing and enters through an air lock where they receive an “air shower” to remove any trace of particulate matter which could compromise the beautiful finish of the paint. Each vehicle

entering the paint shop is also air showered and the dust is collected in a wet sump below the floor. Toyota currently retrieves just 4 grams of dust, weld spatter and particulate matter from each vehicle! To achieve zero change-over time in the paint shop, just the right quantity of paint is held in a series of small spinning paint pots which the robot arms pick up from their stations. These spin up to atomize the paint which is then applied electrostatically to the vehicle. The paint pots are sequenced to match the build sequence.

**Continuous Improvement.** C.I. is a way of life at Toyota. Mike Rother puts it best: “*it’s in the air they breathe*”. Employees fill out a C.I. Kaizen form and seek agreement from both shifts, Engineering and Management. They conduct the implementation of their improvement ideas on overtime.

Continuous Improvement is guided by their Toyota Production System training, ensuring that everyone understands and can work towards the goals of the system. Last year the 1000 employees suggested and implemented over 100,000 improvements. Now that’s **CONTINUOUS** Improvement! When improvements are achieved that reduce the need for staff in a given area – the folks no longer needed are ‘Reinvested’ into other Kaizen teams. People feel valued, and they feel safe.

**Structure.** Each Team Leader will have around 5 team members and each Group Leader around 5 Team Leaders. Group Leaders report to Assistant General Managers. Group Leaders carry “Blackberry” PDA’s to ensure that they are in constant contact with their people to ensure immediate support when needed. As you walk throughout the facility, the common dress code provides evidence of an egalitarian culture. If you did not know who our tour guide was, you wouldn’t have

realized he was the Toyota President. Everyone wears the same dress and eats in the same cafeteria.

**Training.** The respect for people built into the culture ensures they get all the functionality training they need to make the parts and TPS education to work in this ever improving system. All are treated with respect. What I thought particularly interesting was the stress put on the thinking that **Skillset** (functionality) is provided through training – and **Mindset** (TPS Culture) is imparted through education. The TPS “Basic Training” includes Standard Work, Visual Controls, Waste Reduction, Continuous Flow and Pull. **Skillset** is provided by a minimum of 20 hours initial training followed by ongoing “Mastery Skills” training ensuring that the person who fits the door seal is able to do the perfect job every time.

**Leadership Abounds – everywhere:** The approach to ‘Respect for People – and Continuous Improvement’ is legendary as is their public pronouncements confirming ‘Respect for the Environment’. Many meetings are ‘standup’ – and the typical day commences with a 5 minute toolbox talk followed by 2 hours work, 15 minute Kaizen opportunity, 2 hours work, lunch, 2 hours work, 15 minute Kaizen opportunity and 2 hours work. The workforce comprises around 25% casual employees and all employees enter permanent ranks through this casual system.

In working together with such precision, it is not surprising that problems that cannot be solved quickly must be escalated. Here’s how it works: if a Team Member (employee) cannot solve a problem within 3 minutes he/she then escalates it to the team leader who has 9 minutes to find a solution. If that does not work it is escalated to the Group Leader who, if a solution cannot be found within 15 minutes, will escalate it to Engineering.

**Supplier Responsibility.** The provision of parts to the assembly plant is via a 5-hour window – some 300 minutes. Some parts go directly line side – and others are staged in supermarkets and delivered by “train” on a milk-run. The relationship between suppliers to this company and other OEM’s is a collaborative effort. Suppliers are encouraged to honestly expose their problems so that they can be solved collaboratively.

One begins to see why suppliers want to provide their best work to OEM’s such as this, based on the respect they are afforded as well as the opportunity they have to become involved in a joint venture that

draws international respect. One Toyota parts supplier told me that they have never had a customer like Toyota before and that their experience as a supplier has strengthened their company enormously.

I came away with the belief that Toyota is a community unto itself – a community complete with its own hockey, baseball, and other teams plus a major fitness centre and more. **But it all comes together with every aspect aligned & laser focused on the making of automobiles that are second to none - made by people who each believe they played a very real part in the achievement.”**

## What is a Customer?

A CUSTOMER is the most important person to “enter” the office... whether in person, by mail, or by telephone.

A CUSTOMER is not dependent upon us...we are dependent upon them.

A CUSTOMER is not an interruption of our work...they are the purpose of it. We are not doing them a favor by serving them...they are doing us a favor by giving us the opportunity to do so.

A CUSTOMER is not an outsider to our business; they are a part of it.

A CUSTOMER is not a cold statistic... they are flesh-and-blood human beings with feelings and emotions like your own, and with biases and prejudices.

A CUSTOMER is not someone to argue or match wits with. Nobody ever won an argument with a customer.

A CUSTOMER is a person who brings us their wants. It is our job to handle them profitably for them and ourselves.

Thanks to our good friend Dave Deskur,  
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