OMDEC
OPTIMAL MAINTENANCE DECISIONS INC

Newsletter
Autumn/2008

News:

Special rate for attendance at IMEC (International Maintenance Excellence Conference) to all OMDEC guests!

Join us during the famous IMEC conference again October 22-24, 2008 in Toronto, Canada!

Meet Ben Stevens and Chris Murfin and the best in the global maintenance field in a unique opportunity to network and learn from top industry professionals and research academics. To meet with colleagues and establish new contacts from a selected group of internationally recognized leaders in maintenance excellence makes IMEC a high-quality conference, with broad representation, diverse coverage of topics, and immediate, practical benefits to attendees.

OMDEC is part of this great conference for a couple of years now and is delighted to offer a deep discounted rate for our guests!

Registration Information
Full Conference Registration - $949
(Includes access to conference exhibits, parallel and plenary sessions on October 22 – 23, 2008. Also includes
continental breakfast and lunch on both days of the conference, as well as a ticket to
CN Tower Dinner and Reception).

Workshop Registration
There are a series of half-day workshops taking place on the final day of IMEC 2008. Workshop registration should be completed separately from Conference Registration by visiting the IMEC 2008 website – www.imec.ca and clicking on the "Registration" link.

For the discounted rate please contact Claudia under Claudia@omdec.com .

OSIsoft – User Conference October, 27-30 in Amsterdam, Netherlands

"Empowering Business in Real Time: PI Infrastructure for the Enterprise"

Meet Klaus Krüppel and Tony Lawton at the OSI User Conference and learn more about our partnership with OSIsoft and how our software and PI can add value to your maintenance area.

Please let Klaus know if you are attending this great event and would like to meet. Klaus@omdec.com

---

MFS –Maintenance and Facility – Management Society of Switzerland organizes the second maintenance day "Instandhaltertag" October 30, 2008!

If you would like to learn more about it please let Claudia, Claudia@omdec.com know.

OMDEC
OPTIMAL MAINTENANCE DECISIONS INC

Newsletter
Autumn/2008

Interested in a meeting with the OMDEC specialists?

We are organizing a trip for our experts to visit **US - and Canadian companies** at the end of October and **Australian companies** from mid December till mid January!

If you are interested to personally meet with us and get information first hand please let Claudia, Claudia@omdec.com know!

If you live and work in another part of the world let us know as well and we'll get in contact with you.

Interested in Training Courses or Consulting from OMDEC?

Training Courses:
Some companies came to us and asked for a training tailored to their special needs and requirements. This is no problem at all if we get enough interested people together!

We are organizing a training course in **Nairobi, Kenia** 3 to 7 November 2008 and
a "Physical Asset Management Program" :
"Optimising maintenance and replacement decisions" 13 to 18 December 2008, **Dubai , UAE** held by Prof. Andrew Jardine.

Another very good example is our first "Maintenance Master Class" at the **Sarajevo** Graduate School of Business" November 10-14, 2008!
This five day program will provide an overview of physical asset management as a business and focus on best practices in maintenance and the tools available to help turn them into reality.

Consulting:
OMDEC recognizes that processes and software are only as good as the skills of the people who use them. With this as an operating principle, we have developed a range of Training programs and in addition industrial Consulting services to Utilities, Mining, Oil and Gas, Pulp & Paper, Vehicle Fleets and Rail, Pharmaceutical, Chemical and similar asset intensive industries.

We offer the following consulting services:

- Gap analysis, priority setting, maintenance improvement planning and management, process analysis and upgrade.
- Reliability process implementation, RCM introduction, RCM analysis and upgrade
- RCM/CMMS integration and continuous improvement
- Maintenance investment value enhancement
- Solutions-driven Knowledge Transfer
- Maintenance program optimization – balancing PM's and PdM's with run to failure

Let us know about your ideas and we'll find a way!
As usual please check our website regularly for the latest training courses and events!

OMDEC
OPTIMAL MAINTENANCE DECISIONS INC

Newsletter
Autumn/2008

The latest edition to our software is called SMS – Spares Management Software

A critical issue in spares management is to establish an appropriate level for insurance of an emergency spare whenever a critical long-life component fails.
The question to be addressed is:

"How many critical spares should be stocked?"

The purpose of SMS is to answer this question and:

- to predict the level of Spare Parts required to be kept in stock in order to maintain operations, production, revenue and profit or mission readiness where the Spare Parts failure rate is unpredictable
- to provide for both repairable and non-repairable Spare Parts
- to provide the basis for measuring the costs of maintaining the required Spare Parts
- to show the average arrival rate in the repair shop and the average turnaround repair rate required to maintain the required availability
- to determine the period for which operations can be supported given a specific level of Spare Parts
- to provide options for optimizing Spare Parts requirements based on:

  - overall probability of Spare Parts availability during the planning period
  - specific probability of Spare Parts availability at any time a stores issue is required
  - minimizing cost
  - production line availability

Projects we just completed are for example:

- a Needs Analysis and accelerated CMMS/ERP Selection contract for Mid-East off-shore property development
- EXAKT implementations for two Montreal-based technical colleges
- a Cost and Data Analysis for large Canadian mining company
- RCM training programs in Shanghai and Seoul

If anyone wants more detailed information please let us know!

"LivingRCM " www.livingrcm.com

A new version of LRCM will be released very shortly – and the first live installation went in with no problems in a Canadian Power Utility – anyone wanting more details please contact Murray Wiseman, murray@omdec.com!

Murray has put more thoughts about RCM and LRCM (Living RCM) into writing:

"RCM is a fundamental technology whose practice exposes the basic principles governing harmonious

long-term human-machine interaction. Yet its hidden strength can be easily missed in a cursory reading of the textbooks on the subject. One may, using the living RCM (LRCM) approach, validate against real work order data, each task executed within the RCM developed maintenance program to a particular failure mode, its effects and its consequences in order to ascertain that the right job is to be performed.

Living RCM (LRCM) is a process implemented in software, whereby work orders represent knowledge records and are occurrences of failure modes. This link between the work order system and the reliability knowledge base facilitates subsequent reliability analysis of the instances (i.e. occurrences) of failure modes. LR contrasts starkly to a traditional reliance by maintainers on failure codes for this purpose. The living RCM process requires that a significant work order, prior to closure, contain two specific information elements.
They are:
1. a reference to the relevant RCM knowledge record, and
2. the life ending event type (usually one of PF, FF, or S).
An automated software procedure uses the combination of these two elements to generate an Events table. This table constitutes the sample for reliability analysis processing.

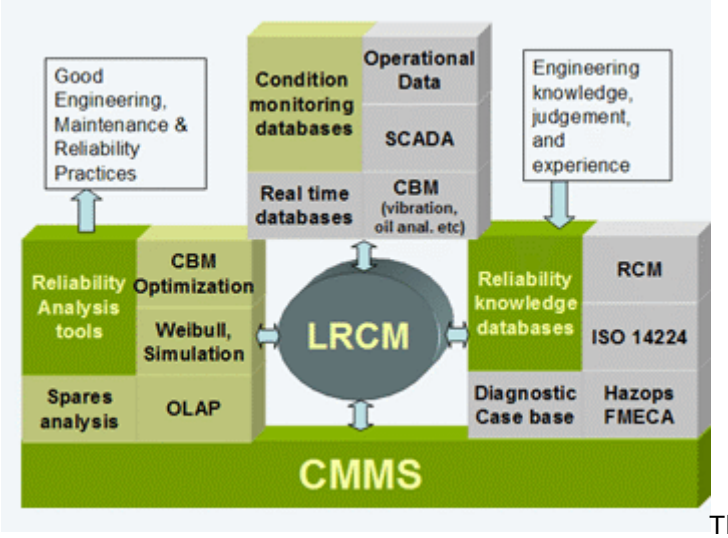
In the living RCM procedure, the maintainer, planner, engineer, or supervisor, prior to closing the work order, looks up the RCM record (in the RCM knowledge base) that covers the current situation. If he finds no appropriate RCM record describing the failure mode or if the RCM record is incorrect or incomplete, he will propose an update to the knowledge base. Subject to a quality control procedure the knowledge base is duly updated by a designated verifier or RCM facilitator. Implementing a living RCM process in a maintenance department requires a careful and stepped approach such as that described in this Living RCM pilot project.

RCM thinking, though absolutely scientific and logical, is in many critical respects, counter-intuitive. Therefore maintenance professionals, tradesmen, and managers, in order to benefit, must shed their long held views and habitual reactions regarding maintenance. They accomplish this difficult feat through phased education and precisely managed training. RCM education uncovers the realization that the right maintenance activity addresses the preservation of function. An obvious proclamation, yet, to his astonishment, the maintenance professional discovers that the functions of the machinery under his control were inadequately or incompletely identified. Consequently the failures of those functions and their causes have by-in-large escaped his conscious effort to deal with them. That reality has excluded him from transacting directly in the currency of maintenance - the failure mode, the cause of a specific failed state.

RCM transports our attention to previously ignored functions, their functional failures, and their failure modes. Then it reconstructs our entire philosophical framework using a precise language and methodology of logical inference. Old practices, familiar experiences and intuitive notions begin to coalesce around this new skeleton and the eminent appropriateness of RCM to our own situation dawns upon us. The education of RCM is an experience of self-discovery.

The astonishing power of RCM lies in its ability to unleash previously unused strata of intelligence and unravel the combined knowledge of years of observation by operating and maintaining staff. The vehicle for accomplishing the miracle, the facilitated review group, is formed around a master plan aimed at a set of specific corporate improvement objectives."

For the ones who haven't seen the description of the block diagram on the LivingRCM.com website yet, here it is….



The diagram illustrates that effective physical asset management depends on several categories of information and knowledge. Information comes from databases such as those of the CMMS and of condition monitoring applications. But knowledge derives from the combination of information and analysis. The analysis tools and knowledge bases are represented by the left and right diagram blocks respectively.

To provide feedback on this newsletter, including ideas for future articles, or to remove your name from distribution of this newsletter, please e-mail me at Claudia@omdec.com
Please feel free to contact us to discuss any of your requirements
See our web site at: www.omdec.com for other information

If there is someone you know who would be interested in receiving this newsletter, please feel free to forward the newsletters to them, or forward their e-mail address to me and I will include them in the distribution of future newsletters.