

Bi-Monthly Newsletter

Date: 5/15/2018

Our Mission: "To build a community that develops and promotes excellence in maintenance, reliability, and asset management in Kansas City and the surrounding area"

SMRP Welcomes Our New &/or Renewed Members

New Members

- . 21Tech
- . Amerisource
- . Experitec

We would like to recognize the companies and individuals who have recently joined or renewed with the KCSMRP Chapter:

- Jacob Gunter- *Platte City, MO*
- Steven McNolty- *Olathe, KS*
- Joshua Harris- *Kansas City, MO*
- Kevin Ross- *Lenexa, KS*

Maintenance Tip

Over the years, the value of implementing a Predictive Maintenance (PdM) program has been clearly demonstrated. A common challenge, however, resides in accurately identifying the costs in utilizing internal vs. external resources in a traditional route-based PdM implementation. Costs to consider include:



An Internal PdM Program

Equipment-Related Expenses:

- \$ Purchase of Test Equipment & Software
- \$ Purchase of Support/License Fees
- \$ Purchase of Supporting Equipment

Personnel Expenses:

- \$ FTE Annual Salary, Benefits, Recruiting, Overtime & Bonus

Personnel-Related Expenses:

- \$ Office Expenses, Training/Certifications
- \$ Impact of missed calls due to inexperience
- \$ Time to develop an RFP, Review Proposals, Check References & Select a Vendor

An External PdM Program

Program Establishment Fees:

- \$ Database Set-up Fees, Developing Reporting Procedures
- \$ Walkdown Equipment & Prep Fees
- \$ Time to develop an RFP, Receive & Review Proposals, Check References & Select a Vendor

Program Execution Fees:

- \$ Annual Service Fees
- \$ Time Associated with Managing the Service Partner Throughout the Year

In some instances, the best approach may be a hybrid model.

Member Spotlight



Brian is the owner of HMC LLC, a maintenance and reliability services and training firm. He has over 25 years of experience in maintenance and reliability. Brian has held positions as Maintenance and Reliability Manager, General Foreman, Foreman, Planner, Scheduler and Advisor within the mining, petrochemical, manufacturing and construction sectors. He is a Certified Maintenance & Reliability Professional, a Certified Reliability Leader and a Master Electrician. He is passionate about learning and sharing knowledge to help others improve. Brian has performed training and consulting throughout the US and in several other countries. Brian lives in Prairie Village, Kansas with his wife of 23 years. He has 3 children, 2 boys in college and a daughter in the 5th grade. Brian is a veteran of the US Army where he attained the rank of Captain in the Corp of Engineers.



This edition's Ask the Expert topic is on MRO inventory. The question is: *"How do you determine proper min/max levels based on part history?"* Having just presented a paper at the Reliability Web 2.0 Conference on this topic, Vestanna McGuigan from M&M Mars offers her perspective. Vestanna suggests:

The first step is to determine average monthly usage. (Number of items used in a year divided by 12). The weighted average lead time. (A weighted average of the number of days it took to replenish the part.) The weighted average times the average monthly usage rate rounded up to the nearest whole number gives the minimum stock level. To determine safety stock, calculate the mean absolute deviation of all the absolute values of difference between average and actual usage, and then use that mean absolute deviation in another calculation. Minimum stock level times the desired level of safety stock (this is usually 1, but could be as much as 3) times the mean absolute deviation and all of that is then divided by the average monthly usage. Then round down to the nearest whole number for the safety stock, or maximum stock level.

You then compare the results of that with other factors, like how many need replaced at the same time, what your budget can tolerate, how much shelf space you have, etc. and make a recommendation of min/max levels based on math and history instead of the data-base methodology that most store rooms utilize. It isn't a magic wand, but it is much more accurate than nothing at all.

Example: Say we have a bearing in the store room. Four were issued in February four in June, and four in September. The average monthly usage rate is 0.33. It has a weighted average lead time of 8.070. The mean absolute deviation is 1.167. The new suggested min/max with one level of safety stock is 3/9. However, I know I use four each time I do a replacement. So, the recommendation of a stock level is 4/8.

Be sure to submit your question for our M&R SME's by e-mailing us at: info@kcsmrp.org

SMRP Calendar of Events

Be sure to save the dates for the following upcoming events:

- May:** 15th - *KCSMRP Bi-Monthly Newsletter*
- June:** 6th & 7th – *SMRP Symposium- Memphis, TN;*
- July:** 10th - *KCSMRP Bi-Monthly Newsletter*
- August:** TBD – *CMRP Prep Workshop & Exam: 3-day local event hosted by the KCSMRP. Dates, start-time and fees to be finalized and communicated soon!*
- September:** 10th - *KCSMRP Bi-Monthly Newsletter*





*We hope this information is helpful and we look forward to assisting you on your journey of operational excellence through Maintenance & Reliability transformation. This is a collaborative association where we share lessons learned from our collective breath of experiences. **So, come and join us; we look forward to your involvement.** If you have any questions, please contact one of your local Chapter board members noted below and have a GREAT 2018!*

Paul Crocker-
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Doug Hart-
816-449-8166

Steve Lacey-
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Brian Heinsius-
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For more information, please contact us at:

E-mail: info@kcsmrp.org

OR

Website: www.kcsmrp.org (in progress)

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