



## Can't We All Just Get Along?

Melding the Worlds of Production and Reliability



"Can't we all just get along?" As the fifth child of eight, I remember my mother saying that quite often. Having four older brothers, it really never happened where we just all simply got along.

Now as an asset reliability educator, I travel around the country providing in-plant training for operators and maintenance personnel. During these training sessions, often times I am reminded by the folks who spend the majority of their day inside these American manufacturing facilities, that I must be living in a different world.

"Everything you are saying about asset reliability sounds great, but we are charged with getting product out the door. We don't have time to do all the best practice things you are talking about."

I completely understand this sentiment. I really do. However, we must find a way to meld our two worlds.

he world of production throughput, asset uptime and maintenance cost reduction must learn to get along with the world of lubrication reliability, predictive and preventive maintenance, and reliability-centered maintenance. So, how can this task be accomplished?

First, recognize that it does not happen on its own. To become world-class in your reliability-centered maintenance program, you must work hard to make it happen. You must have buy-in from the same hardworking people who are charged with production throughput. You must have buy-in from upper management so they can support the people with the grease guns in their hands.

You also must believe that by bringing these two worlds together, your performance in delivering product to the end user will actually improve and, ultimately, your job will be easier and your company more profitable.

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assets to



It stands to reason that if you can keep clean and dry the lubricants you rely on to run interference between two opposing moving metal parts, then you can improve the life of the oil and certainly improve the life of the asset.

## **Where to Begin**

Within plants, there are many opportunities for simple improvements that, in the long run, and sometimes in the short run, will pay back many times over.

The lubricant storage area is always a great place to make major improvements. Ask yourself this question: If the oil in your lube room meets the specifications for the oil in your personal vehicle and the company says it's okay for you to take what you need, would you use it? Most people would say no. Then the question is: Why use that oil in the plant's assets that you are relying on to make a profit?

Replace your drums that have open bungs and rags stuffed in them with an oil containment system that allows the stored oil to be filtered when filled and filtered again when being used to top off a gearbox or hydraulic system.

Get rid of the galvanized opentop transfer can, the repurposed cutoff two-liter soft drink bottle, the bucket and the funnel. Replace them with color-coordinated, closed-top oil containers.

Avoid potentially costly cross-contamination mistakes. Place a color-coded lubrication chart on the wall in the storage room so everyone knows which oil and grease goes with which piece of equipment.

Identify everything with color-coded labels or tags so the trail is seamless from lube room to equipment. Take the guesswork out of which grease is your multipurpose



Figure 2: An individual drum, set up with a desiccant breather, color-coded ID tag and quick connects so oil can be filtered upon removal or filtered while still in the drum, demonstrates a best practice

lithium complex grease and which one is your polyurea electric motor grease by using color-coordinated clear tube grease guns.

Next, take a look at the equipment. Can you outfit gearboxes and hydraulic systems with desiccant breathers to keep moisture and particulates at bay? Is there a need for a bottom sediment and water bowl to check the clarity of the oil and look for water and remove it? Can you replace the standard, flat sight window with 3-D sight glass so you can see from any angle and know for sure that there is oil in the system and at the correct level?

Does the reservoir size warrant quick-connects so kidney loop filtration can be performed when oil analysis shows the oil is still good, but is dirty and needs a good cleaning?

How do you decide which assets need oil analysis? Is it based on asset criticality, reservoir size, or both? What ISO cleanliness code has been set as your goal and what alarms and limits are you measuring to determine whether or not to filter the oil or change it? Are you changing good oil, therefore costing the company unnecessary expense with downtime, labor and oil disposal costs?

Figure 1: Lube room "before" images show what not to do; storage and transfer methods in use in these lube rooms are an open invitation to contaminants that degrade lubes before they even reach your equipment







Figure 3: These lube room "after" images show best practice methods for storage and transfer of lubricants; great care has been taken to ensure that the lubes stay clean and dry, and to eliminate the risk of cross-contamination



Are maintenance personnel and operators receiving the necessary training so they fully understand the detrimental effects of contaminated oil? Are you part of the problem because you don't know what you don't know, or are you part of the solution when discussing world-class lubrication and asset reliability because you are trained to recognize poor lubrication practices and do something about them?

## **Bringing Worlds Together**

The world of getting widgets out the door and the world of lubrication reliability best practices can and do get along, and it is always for the betterment of production efficiency and profitability for the company. It is rare to find a facility operating poorly where reliability-centered maintenance and lubrication best practices are the norm rather than the exception.

Don't wait years to bring reliability and production throughput together.

It's just too costly to keep them apart!



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