

EQUIPMENT RELIABILITY LINKED WITH LUBRICATION & LUBRICANTS

KNOWING EQUIPMENT RELIABILITY

Equipment reliability is a maintenance strategy also referred to as culture which, when implemented successfully, will help in reducing maintenance cost, improving equipment up-time and lowering the overall costs of production. Actually, the real meaning of equipment reliability is hidden behind terms like Proactive Maintenance, Asset Efficiency, Lubrication Management, Lean Manufacturing and even 5S.

Let us understand more about how Lubricant & Lubrication can help in increasing plant and equipment reliability.



MANAGING LUBRICATION TASKS FOR GREATER RELIABILITY

More than 50 % of all bearing failures are due to inadequate lubrication practices as declared by the Lubrication Engineers. One other survey states, 80 % of the respondents stated lubrication was a problem. Such equipment failures continue to prove very costly in terms of lost production, labour and equipment life. As the limits of existing lubrication tracking methods become more apparent, separating lubrication from traditional Preventive Maintenance and Corrective Maintenance efforts to focus on lubrication reliability is increasingly being adopted as a solution.



LUBRICATION METHODS FALL SHORT

Performing lubrication is elementary. It has been approached in the same way for many decades. However, it is much more complex than it is given credit for when a single plant can have thousands of pieces of equipment, multiple lubrication points and lubrication done at different intervals. From daily tasks to semi-annual oil sampling to yearly tank draining or replacement; the required lube tasks can number in the hundreds of thousands per year. While lube tasks are considered routine and often assigned to the newest technicians at the plant, it is critical to get the right lubricant in the right place at the right time using the right technique and also by the right person, every time to ensure machine condition and equipment reliability. Yet it is far too easy to miss lube points, mix up industrial lubricants and over or under lubricate when relying on traditional lubrication-tracking methods.

TRADITIONAL LUBRICATION PRACTICE

Many plants rely on a technician armed with a grease gun and human memory to track lube points. Although these technicians do a stellar job with the tools they are given, human memory is fallible and mistakes can be made and lube points might be missed. Also, what happens when the technician is absent, or leaves the company or retires, Replacing his expertise and knowledge can take considerable time, training and expense. Even the best technicians may not remember that one pump takes a certain type of oil because it is running hot and another pump takes different oil because it is not. This is even more of an issue when a technician is filling in for someone else and is not familiar with the equipment. Missing or getting lubrication tasks wrong for any reason can cost a plant unnecessary wear and tear, repair and ultimately production downtime.

Although computerized maintenance-management systems (CMMS) work very well for managing Preventive and Corrective work at the equipment level, they are not built for detailed tracking of individual lube tasks, particularly at high volume. Even so, CMMS programs are often utilized for this very purpose, and this is where the difficulty begins. CMMS programs can also fail to record if an individual lubrication task is completed or not since such information is usually embedded in block Preventive Maintenance lists of many tasks. If a technician completes several of the lubrication tasks but not all of them, he must decide to clear the entire work order or leave it open. If the work order is cleared, which is often the case, once again human memory comes into play and lube points are missed. "We need lubrication data not only for each piece of equipment but also for each lube point, when it's due and who did it. If it's late, we need automatic follow-up so nothing is missed."



ROLE OF LUBRICANT

As we now know about the Lubrication practices that have a direct impact on plant and equipment reliability. But when Specialty Lubricants are running through machines with no chemical degradation and with less contamination within them, the equipment reliability is improved. The key to increasing equipment reliability is clean and uniform lubricating film offered by industrial lubricants.

MOSIL Lubricants is a leading specialty grease manufacturer which offers perfect and application-based lubricating solutions that help the plant and its equipment with the required uniform Lubrication film, which on the other hand some how helps in increasing the equipment reliability.