

# The 4 Reasons Why We Accept Lubrication Failure

## "Death by Lubrication"



**By Ricky Smith CMRP, CMRT**

Why do professional maintenance management teams accept lubrication problems which could account for a large majority of equipment failures in their plant? Recent studies have shown that over 80% of maintenance managers' say lubrication is a major problem. Failures are more frequent than most maintenance managers even know.

So what are the reasons for Lubrication Failure?

### **1. Improper lubrication practices are at the heart of many equipment reliability issues.**

Studies have shown that 70-85% of equipment failures are self-induced, meaning that maintenance practices and processes are directly responsible for the failures.

In a recent survey companies responded saying poor lubrication practices represent about 40% of maintenance-related self-induced failures.

A problem with these failures many times begins with the standard Original Equipment Manufacturers (OEM's) lubrication recommendations.

- Lubrication recommendations are time based

Example: Changing oil in a hydraulic system, changing oil in a hydraulic system should be a rare occurrence.

- The amount of lubrication introduced into a bearing is not defined by the OEM

Example: Conveyor Bearings – Grease all over the place (more grease the better)

**Solution:** Utilize formal processes to determine lubrication requirements for equipment such as FRACAS, RCM, FMEA, etc. It is all about preventing a Failure Mode from occurring.

### **2. Root Cause Analysis is not utilized effectively in most companies. If so they would find lubrication to be a big problem and resolve them.**

Solution: Make RCA a key part of your maintenance process (Bad actors)

**3. I have found consistently that full time lubrication specialist and operators induce failures into their equipment.**

**Recent studies support my claim. In fact, one study found that over 45% of all personnel who perform lubrication have not been formally trained.**

Example 1: (True Story) Lubricator lubricating without grease in grease gun. Reason for the problem, No management oversight

Example 2: Lubricator introducing hydraulic fluid into a reservoir with a dirty funnel and open container. A closed hydraulic system is a requirement, along with filtering hydraulic fluid before introducing it into a reservoir.

**Solution:** Develop Repeatable, Effective Lube Procedures and train your technicians and operators using these procedures.

**4. Maintenance and production personnel do not perform lubrication on their equipment to standard and have only been given on the job training by the previous person who was in that position.**

**Solution:**

1. Develop Effective, Repeatable Lube Procedures and then ensure people follow them.
2. Formally train all personnel who perform lubrication practices to equipment
3. Make lubrication procedures mandatory
4. Have a percentage of personnel in maintenance and operations certified in Lubrication.

| WO # 12033  |  | Asset # 12332 – Line 1           |                      |             |               |
|---|--|----------------------------------|----------------------|-------------|---------------|
| Job Description:<br>Lubricate Bearings  |  |                                  |                      |             |               |
| Frequency: Monthly  |  |                                  |                      |             |               |
| Estimated Craft Hours: 1 x 1.0  |  | Estimated Production Downtime: 0 |                      |             |               |
| Originator: Bill Hill   | Origination Date: 01/12/2020                               |                                  |                      |             |               |
| Owner: Maintenance Dept   | Version #: 1   |                                  |                      |             |               |
| Previous Version(s) Modifications:  |  |                                  |                      |             |               |
| Approval: RAS   | Version #: 1.0   |                                  |                      |             |               |
| Cautions: Failure to follow PM Requirements could result in equipment failure                           |  |                                  |                      |             |               |
| Personal Protective Equipment Required: Gloves, hearing protection                                      |  |                                  |                      |             |               |
| Part # (Stores ID)  | Part Description   | Quantity                         | Quantity Description |             |               |
| C-1395  | Synthetic Lube   | 1                                | Each                 |             |               |
| Consumables Needed:<br>Lint Free Towels   |  |                                  |                      |             |               |
| Special Tools Required:<br>Single Pump Grease Gun - Type 237 (Synthetic Grease Gun)                     |  |                                  |                      |             |               |
| Mobile/Special Equipment:<br>None   |  |                                  |                      |             |               |
| Required Departmental Coordination:<br>Production Lead will be notified before execution of Lubrication |  |                                  |                      |             |               |
| ID  | Description  | Craft Type                       | # of Crafts          | Craft Hours | Initial Steps |
| 1   | Ask Operator if any issues with asset                      | M                                | 1                    | .3          | KL            |
| 2   | Inspect asset for any leaks or abnormalities               | M                                | 1                    | .3          | KL            |
| 3   | Clean grease fitting with lint free rag                    | M                                | 1                    | .1          | KL            |
| 4   | Insert grease into 4 "Zerk fittings" (2 Pumps per fitting) | M                                | 1                    | .1          | KL            |
| 5   | Notify Production work is complete                         | M                                | 1                    | .1          | KL            |
| 6   | Complete Work Order  | M                                | 1                    | .1          | KL            |
| Total Hours   |  |                                  |                      | 1           | KL            |

|   |
|---|
| Condition (As Found): (Required)<br>Leaks coming from #1 Gearbox                                      |
| Condition (As Left): (Required)<br>Clean up oil, notified production leader to keep area clean of oil |
| Comment(s): (Optional)<br>None  |
| Craft's Feedback on Procedures: (Optional)<br>All Good  |
| Craft's Signature(s): (Required)<br><i>Jim Limbo</i>  |
| Date:<br>10/11/2019   |

**“Repeatable Procedure Example”**

**Conclusion:** Stop your maintenance and operations staff from doing the wrong things in lubrication. This requires procedures, training, and discipline and only then the results will appear. If you have questions or comments send them to [rsmith@worldclassmaintenance.org](mailto:rsmith@worldclassmaintenance.org)

Check out my new website at for more information att: [www.worldclassmaintenance.org](http://www.worldclassmaintenance.org)

# BEST MAINTENANCE TECHNICIAN PRACTICES

THREE DAY WORKSHOP

DATE: August 31-Sept 2, 2021

PRICE: \$750 USD/PERSON

RSVP OR REQUEST MORE INFO BY EMAILING  
[RSMITH@WORLDCLASSMAINTENANCE.ORG](mailto:rsmith@worldclassmaintenance.org)

**Course Objectives**

- To enhance communication between Maintenance / Reliability / Production / Plant Leadership and Maintenance Technicians
- To provide the vision of Proactive and Maintenance to all Maintenance Technicians
- To increase knowledge and skills for Maintenance Technician through education and knowledge sharing
- To define Roles and Responsibilities between technicians and management
- To reduced turnover of Maintenance technicians because of lack of understanding between management and hourly technicians

**Course Outline**

- Benefits of the CMRT Exam and Certification
- Review of Certified Maintenance & Reliability Technician – CMRT - Candidate Guide for Certification and Recertification
- Definition of Maintenance of Reliability Best Practices
- SMRP Body of Knowledge and the Relationship to
- Definition of Maintenance and Reliability “Best Repair” Practices
- Causes of Equipment Failures
  - Inconsistent Execution of Work
  - Lack of effective Processes
  - Lack of Knowledge
  - Lack of Repeatability
  - Lack of proper aligned Leading and Lagging KPIs
- Preventive Maintenance / Prediction Maintenance
- Maintenance Planning and Scheduling
- .... And so much more

“Virtual via Zoom” (Internet)