Converting Your Storage Tank to Another Lubricant: What to Consider

Converting a storage tank to a different lubricant type, brand, or viscosity?

1

ARE THE TWO LUBRICANTS COMPATIBLE?

Compatibility is not an automatic guarantee!

If **incompatible, problems may occur**:

- Base oils might separate
- Additives might "fall out"
- Lubricant might not perform as desired

If the lubricants are designed for the **same application** (e.g. engine oils with engine oils) they are *probably* compatible.

If the lubricants are **not** designed for the same application (e.g. engine oil & hydraulic oil), it is best to consider the lubricants incompatible.

If the lubricants have **different viscosities**, it is important to make sure the blended viscosity of the lubricants is appropriate for the application.

2

CONDITION OF CURRENT LUBRICANT

Is the current **lubricant in the tank** in good **condition**? If contaminated or degraded over time, compatibility claims may be invalid.

3

CONDITION OF THE TANK

Has the **tank** been **contaminated** over time by water, dirt, additive fall out, etc.? Once you put your lubricant in the tank, you are responsible for everything in the tank.

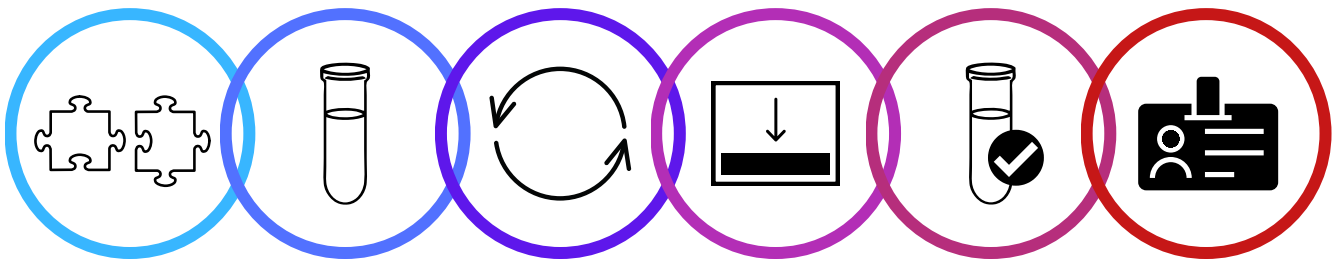
4

LIMIT RISK BY LOWERING TANK BEFOREHAND

Even if the lubricants are compatible, the tank should be **drawn down to ~15% of capacity** before being topped off with the new lubricant. This ensures there is a sufficient amount of the new lubricant for the mixture to provide the proper level of performance.

From a **liability standpoint**, if there is a performance issue & the percentages are closer to 50% of each, it may be more difficult to assess & resolve the issue.

Converting Your Storage Tank to Another Lubricant: Recommended Steps



1 COMPATIBILITY CHECK

Check with your supplier: Have lubricant A & B been historically **compatible**? (If sufficient information is not available, you may want to request compatibility testing.)

A. If the answer is **NO**: Drain & flush the tank before introducing the new lubricant. (Your lubricant supplier can provide appropriate recommendations for these procedures.)

B. If the answer is **YES, but the viscosities differ**: Your supplier should be able to provide the percentage of each lubricant required to reach acceptable blended viscosity.

2 SAMPLES FROM THE TANK

A. Secure a **sample of the lubricant** from the tank and have it tested to confirm that it is representative of the lubricant it is claimed to be.

B. Secure a **sample from the tank bottom** to determine the amount & type of contamination present. The sample can be tested by a lab, but a simple visual check may be sufficient. If appropriate, drain & clean tank or have the tank bottoms (the contaminated fluid which has settled to the bottom of the tank) removed by a vacuum truck.

3 PROCEED TO CONVERTING TANK, IF...

- The lubricants are **compatible**
- The lubricant in the tank is **representative**
- The contamination level is **acceptable**

4 DRAW TANK CAPACITY DOWN...

Draw tank capacity down to **~15% of capacity** and **top off with the new** lubricant

5 ESTABLISH A NEW BASELINE

Secure an oil **sample** and have it **tested** to establish a **new baseline**

6 UPDATE IDENTIFICATION

Update identification on tank, lines, and hose reel to **reflect new lubricant**