

APOLLO OIL LUBRICANT FUNDAMENTALS TRAINING

Products you need...Experience to save you money!



1. Rights of Lubrication
 - a. Type
 - b. Quality
 - c. Amount
 - d. Place
 - e. Time
2. Lubricant Functions
 - a. Reduce friction and wear
 - b. Reduce heat
 - c. Seal out contaminants (grease)
 - d. Prevent Rust and Corrosion
 - e. Remove contaminants
 - f. Transmit Power (hydraulics)
3. Lubricant Components
 - a. Base Stock
 - b. Additives (12 or more)
4. Industrial Lubricants Properties
 - a. Viscosity
 - b. Viscosity Index
 - c. Oxidation stability
 - d. Flash/Fire point
 - e. Pour Point
 - f. Foaming
 - g. Demulsifiabilty
5. Temperature affect on oil life
 - a. Life of oil is halved for every 10°C or 18°F
 - b. At 86oF oil life is about 25 years – At 212oF life is 11.25 weeks
6. Viscosity equivalents
 - a. ISO 220 = SAE 50 engine oil = SAE 90 gear oil = AGMA 5 gear oil
7. Synthetic oils
 - a. Problem solvers – high temp stability
8. Bearings
 - a. Effects of over greasing
 - b. Oil lubricated bearing levels
 - c. Do not use silicone sealant

9. Gears

- a. Worm gear – use non-EP compounded
- b. Yellow metals – no EP
- c. Heavily loaded – use EP

10. Hydraulic Cost savers

- a. Use desiccant breathers
- b. Install Magnetic drain plug
- c. Maintain fill strainer
- d. Use proper filter size
- e. Pre filter new oil
- f. Oil analysis

11. Storage

- a. Outside covered
- b. Bung openings at 9 and 3

12. Problem solving

- a. When filling equipment be aware of surroundings
 - i. smells
 - ii. sounds
 - iii. obvious leaks
- b. Properly labeled containers
- c. Open discussion

13. Reduction of volume

- a. Open discussion