



Alemite Oil Mist Improves Reliability of Roto-Clones Used in Tire Production



At a major tire company in the Southeast United States, frequent failures of the motor bearings used to drive their Roto-Clones would shut the operation down until the repair was completed. The maintenance supervisor commented, “We tried everything. We used bearings with tighter tolerances and various types of grease lubricants without much success. These are expensive and critical bearings, each costing about \$6000, and they lasted only three to four months. The problem was so serious because we have to shut down this section of the plant and send people home until repairs are completed.” After research and discussion with Alemite’s district manager and distributor, the decision was made to try Alemite Oil Mist technology.

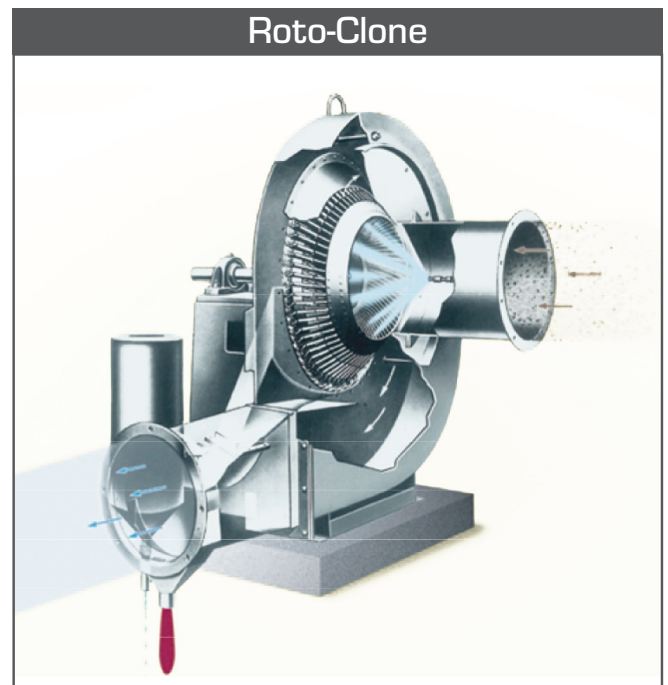
“I have never seen anything like that in my life. The bearing temperature went down by 30 degrees within minutes and there were no bearing failures after two years of continuous operation” noted the maintenance supervisor.

On a scheduled maintenance outage, the bearings were evaluated by an outside bearing house, who reported that these bearings still have six to eight years of bearing life left in them.



Results of Using Alemite Oil Mist

- Bearing temperature reduced 30°F within minutes
- Bearing life extended from 4 months to over 2 years and still running flawlessly





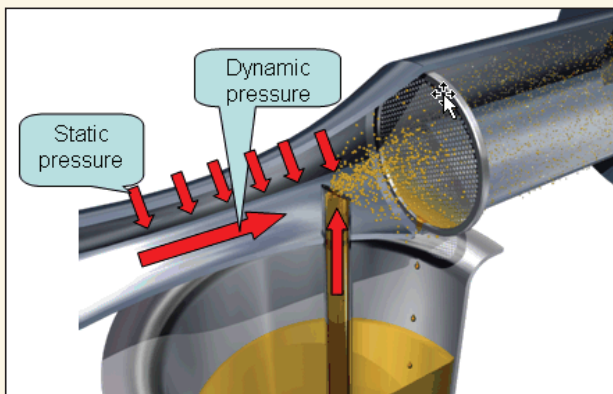
When mechanical performance is vital..... **Alemite Oil-Mist Lubrication Systems deliver!**

What is Oil-Mist?

Oil-Mist is a cost justified, environmentally clean, safe, centralized lubrication system that continuously and efficiently atomizes oil into small particles and then conveys and delivers the correct amount of the pressurized lubricant to the surfaces requiring lubrication. Oil mist is the only lubrication system that can be used to continuously lubricate several different classes of operating or stand-by equipment in widely dispersed physical locations within the same facility using only one type of lubricant.

What can Oil-Mist do for you?

Alemite Oil-Mist Lubrication Systems deliver controlled, continuous lubrication to bearings, gears, chains, and other moving parts that are vital to the service life and productivity of plants and machinery. Alemite oil mist systems have been in operation for over 50 years. These systems are reliable, safe, green, and require minimum maintenance.



How it works?

As compressed dry air passes through a venturi at very high speed; oil is introduced into the air stream by siphoning it from a reservoir. The resulting atomized oil particles average 1-5 microns. The suspended oil particles in the air resemble smoke and are dry enough to be transported at low pressure and velocity to distant machine elements.

Reclassifiers are used to introduce turbulence in the dry mist flow, causing the oil particles to coalesce and produce larger droplets which wet the interacting surfaces.

Carbon particles disassociate from these oil droplets when they meet the interacting surface leaving a solid carbon layer. Due to lower surface tension on the carbon layer than metallic surfaces, oil collects easier. The combination of a liquid lubrication layer and a continuously replenished solid lubrication layer leads to a powerful lubrication technique.

