

# SUCCESS STORIES

## Automotive Industry



## Observing Two Months of Permanent Monitoring & Automated Lubrication Data

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The LUBExpert ON-GUARD from SDT Ultrasound Solutions is the latest edition to a line of best-in-class, precision ultrasound condition monitoring data collectors.

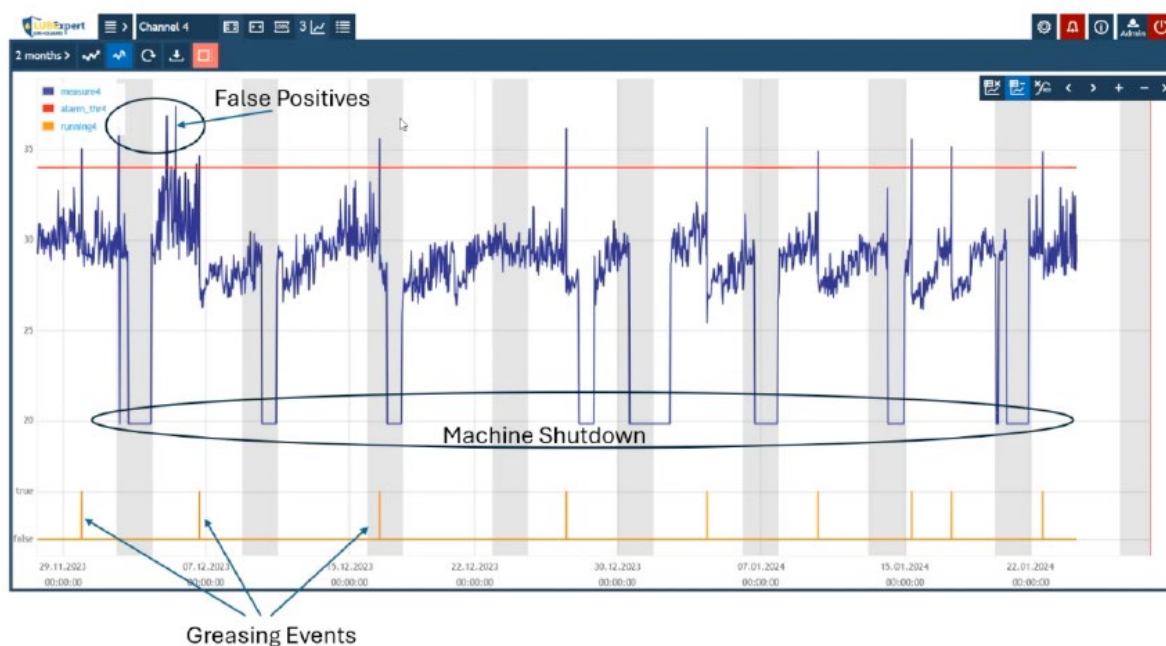
The ON-GUARD is an automated precision lubrication system designed to monitor friction levels of critical rotating production equipment and inject grease precisely as needed to ensure an optimal separation of surfaces.



**Figure 1 – Supply Fans being monitored by the LUBExpert ON-GUARD**

The following Case Study looks at an ON-GUARD installation at an Automotive Manufacturing Facility located in Canada. The ON-GUARD was installed to monitor friction levels on two supply fans. The assets can be seen in Figure 1.

The ON-GUARD was installed on these assets roughly six months ago. This case focusses on a two-month snapshot of these assets. In Figure 2 we can observe the two-month trend of one of these fan bearings. In the two months, the ON-GUARD triggered nine greasing events when the asset surpassed its designated alarm threshold.



**Figure 2 – ON-GUARD Dashboard – Asset 2 Month Snapshot**

The *Red Line* represents the *Alarm Threshold* designated by the Condition Monitoring Team at this facility. The *Yellow Line* along the bottom of the trend graph displays *Greasing Events* and the *Blue Trend Line* represents the continuously monitored *RMS Data*, a representation of the friction inherent in this asset.

With the ON-GUARD, we can set a rule requiring the asset spend a certain amount of time in the alarm state before a Greasing Action is initiated. In doing so, we can avoid false positives, such as the two depicted in Figure 2.

We ask lubricant to do a lot for our rotating machinery; reduce friction, dissipate heat and provide a seal that protects against contamination. But after millions of pounding rotations, a lubricant's additives are spent, therefore requiring replenishment.

By closely monitoring friction levels (The leading indicator for lubricant replenishment requirement), the ON-GUARD knows when to automatically and precisely inject a bearing with the exact amount of lubricant required to return it to optimal operating conditions. Thus, saving maintenance and reliability teams expensive grease and precious time, all while providing continuous feedback on the condition of your most critical rotating machinery.