Figure 1. Coefficient of Friction as a Function of Specific Film Thickness.¹

Figure 2. Frequency Domain from an Under-lubricated Bearing at Approximately 4,000 Revolutions per Minute.²
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Figure 5. Sensor Sensitivity to Frequency Curves
Figure 6. Effect of Accelerometer Mounting on Frequency Response

Figure 7. Vibration Analyzer with Headphone Output and Headphone Filtering

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Specific peaks typically correlate to
Specific machine faults
Related to machine speed

Figure 10. PeakVue Frequency Domain

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Figure 13. Time Domain Comparison
Figure 14. Frequency Domain Comparison

Figure 15. Autocorrelation of PeakVue Time Domain
Table 1. Predictive Technology Comparison for Lubrication Fault Analysis

<table>
<thead>
<tr>
<th></th>
<th>Ultrasonic</th>
<th>Accelerometer Listening</th>
<th>Conventional Vibration</th>
<th>Advanced Vibration</th>
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<tr>
<td>Qualitative</td>
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<td>Yes</td>
<td>No</td>
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<td>Quantitative/Trendable</td>
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<td>Easy Sensor Mounting</td>
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<td>High Frequency isolation</td>
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<td>Detailed Signal Analysis</td>
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<td>Quick Comparative Checks</td>
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</table>

Figure 16. Lubrication Test Stand

Figure 17. Over-greased Bearing
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