



KLB INDUSTRIAL CORP.
MECHANICAL SYSTEMS & MAINTENANCE CONSULTING

Independent Equipment Reliability & Operating Envelope Review

Prepared by KLB Industrial Corp

Purpose

This engagement identifies why critical equipment is failing prematurely and determines whether failures are driven by operating conditions, design mismatch, installation practices, lubrication strategy, or training gaps — before issues escalate into unplanned shutdowns or capital replacement.

Who This Review Is For

- Operations experiencing recurring or unexplained equipment failures
- Plants with rising maintenance costs and unclear root causes
- Facilities operating with lean teams and limited proactive capacity
- Owners or project managers under pressure to justify capital spend

The Problem We Commonly See

Equipment is often labeled as poorly maintained, cheap, or end-of-life when the actual drivers are systemic: operation outside design envelope, underestimated duty cycles, improper installation, misaligned lubrication strategies, and training gaps that force reactive maintenance.

Scope of Review (Remote First)

Operating Envelope Verification

Comparison of actual operating conditions against original design intent, including load, speed, duty cycle, process variability, and environmental exposure.

Failure Pattern & Mode Analysis

Analysis of failure history to identify patterns consistent with lubrication breakdown, misalignment, overload, contamination, or environmental degradation.

Lubrication Strategy Review

Assessment of lubricant selection, application method, and service intervals relative to actual operating conditions.

Installation & Alignment Practices

Review of installation and alignment procedures to identify practices that introduce preload, stress, or hidden misalignment.

Training & Organizational Risk Factors

Identification of training gaps, procedural weaknesses, and organizational contributors that amplify failure rates.

What You Receive

- Executive Summary with decision-ready findings
- Ranked root cause findings with confidence levels
- Corrective action priorities and sequencing
- Capital versus maintenance guidance
- Risk statement if conditions remain unchanged

What This Review Enables

Leadership gains the clarity to determine whether capital replacement is justified, what must change operationally to stop repeat failures, and where maintenance spending is being misallocated.

Engagement Format

Remote-first, fixed-scope engagement. Typical duration is two to three weeks, with optional on-site follow-up if required.

Independence Statement

This review is independent and does not sell equipment, parts, or services. Its sole purpose is to support correct technical and operational decisions.