

## Problem

In challenging economic times, those who succeed have to find ways to do more with less. With respect to rotating assets, end-users are often faced with an inevitable "pay a little now or a lot more later" scenario.

How a company manages its rotating equipment assets is what actually determines the cost of operating a particular piece of machinery. The lowest cost with the highest ROI requires addressing certain key elements that directly relate to mechanical breakdown and reliability performance. And, similar to human health care, the lowest costs and highest ROI can only be obtained through prevention.



[Click here to see Update International's full-size ad.](#)

The most destructive force to machinery is vibration: the physical force that constantly wears down component parts like bearings. Therefore, the single most important thing an operation can do to deal with such problems—  
*and maximum life*  
prevent destructive vibration forces from even occurring.

*and ensure solid reliability*  
—is to

## Equipment Health Update: A Better Way To Do More With Less

Written by February

Thursday, 17 February 2011 20:54

---

Everybody will tell you they want smooth-running machines. What does it take to make this happen?

To manage rotating assets most efficiently and create the highest ROI, machinery must be kept in "precision" running order at all times. The main culprits in vibration relate to imbalance, misalignment and the compounding effects of resonance. Addressing these key items upfront (prior to the commissioning of a machine) is the only way to prevent future problems. This requires the correct hardware, software and proper training of people who work on the machinery.

The good news is that this precision approach doesn't demand vast knowledge—*nor expensive, complex instruments*

. It just requires an operation to add a few extra steps to a process that it is typically already being done and being more perceptive, careful and complete going forward.

### **Solution**

Simply put, the implementation of Update International's Machinery Improvement Program (MIP) can help solve your vibration problems. It's designed to incorporate all elements needed to ensure lowest operating cost with highest ROI. Recognizing that machinery improvement is a continual process, our MIP program empowers those who directly impact results with the tools, support and commitment necessary to make it happen.

Why isn't current practice good enough? Moreover, why is "precision" setup necessary?

It's important to understand that asset life, like bearing life, does not increase in a linear fashion with lower vibration. Instead, it will reflect more of an exponential curve, only starting to rapidly rise at precision tolerance levels. This is because when parts experience physical orbits close to their original design parameters, everything works better. The lubrication film is not distorted; the loads are more evenly applied, etc. When machines run in the "precision zone," their historic life can often be more than doubled.

### **Return On Investment**

How much does it cost to shut down a motor pump assembly and replace bearings and seals? Estimates vary from industry to industry, but we all know it can amount to thousands of dollars

## Equipment Health Update: A Better Way To Do More With Less

Written by February

Thursday, 17 February 2011 20:54

---

when labor, parts, downtime and lost production are all factored in. It's easy to see why eliminating these costs fewer times over the life of an asset results can result in a significant savings.

The real money (or ROI), however, often relates back to increased production: the reason for the assets existence in the first place. Doing the job right from the outset clearly saves the most money over the life of the asset. Achieving precision-running machines through Update International's Machinery Improvement Program is an especially cost-effective way to do that. This program is an ongoing, long-term process that will pay substantial dividends over the life of your rotating assets.

To learn more about our proven Machinery Improvement Program (MIP), visit [www.updateinternational.com](http://www.updateinternational.com) ;

call: 303.986.6761; e-mail:

[judy@updateinternational.com](mailto:judy@updateinternational.com).

**Update International, Inc.**  
**Denver, CO**