



March, 2010 - Spring "Cleaning" Tips

It's Spring "cleaning" time

Spring cleaning involves more than just cleaning, of course. But it was a housekeeping project that sparked the idea for this newsletter. A client needed ProBusS to help them clean up their plant. After close attention to day-to-day production and not enough to maintenance and cleaning, the plant had gotten just plain dirty. No problem. We put a couple of techs right on it.

Spring is a good time to take care of things in the plant that may have slipped in the last few months because of production demands, dealing with a tough economy, and the general rush of business. It's time to shake off the cobwebs from a long winter.

In this issue there are a lot of good **tips you can use in your plant today**. And if you need help with any Spring cleaning, tune ups or repairs, ProBusS is just a phone call away.



Tighten your belt

Belt drive checks are a good first item on the Spring to-do list. Here's how you can prioritize the job so it doesn't have to be a huge chore:

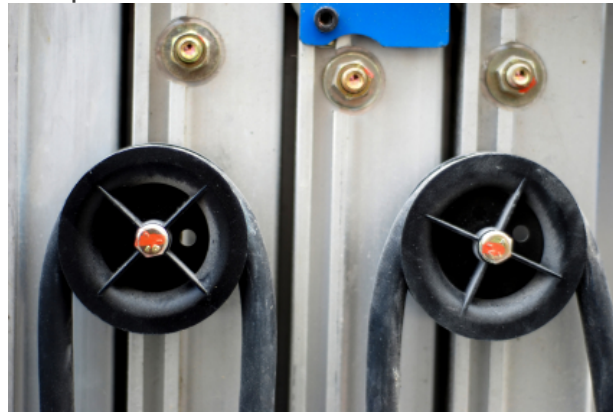
- Belt drives on **critical machines** with a history of heavy service needs: check the maintenance procedures and the quality of the belts.
- Belt drives that are trending toward **higher maintenance demand**: time for a failure analysis on these pups.
- Belt drives on **critical machines with minimal service problems**: consider an extended maintenance schedule (you **do** have a maintenance schedule, right?)

Next on the list:

- Belt drives on active equipment with no history of service problems are probably candidates for deferred maintenance.
- Belt drives on idle or reduced usage machines are candidates for deferred or "no maintenance" status.

No doubt you'll turn up some belt drives that need some attention. **Belts on well-maintained equipment should last two to three years.** If you're changing belts more often, there are a few possible reasons:

- low quality belts
- worn pulleys
- poor alignment
- wrong tension
- accumulated chemicals, dirt, and other environmental stuff



Lube it up

What's the easiest and fastest way to save money today?

One approach is to apply a coating of lubricant on the fan blades of air handlers. This will reduce drag and maintenance, and even **cut power consumption by as much as 4%**. Not a bad return. (If only banks still paid that on savings accounts.)

Other lube ideas:

- use lubricants with release agents in conveyor assemblies and palletizers to prevent sticking, reduce drag, and improve flow
- apply lubricants in pipes to reduce pressure drop
- apply lubricant coatings on air systems to improve air flow, reduce friction and noise, and provide more more power output
- in heat exchangers, use dry or solid lubricants to enhance fluid flow and heat transfer, stop parts from sticking, and reduce evaporator coil fouling



Don't blow a fuse

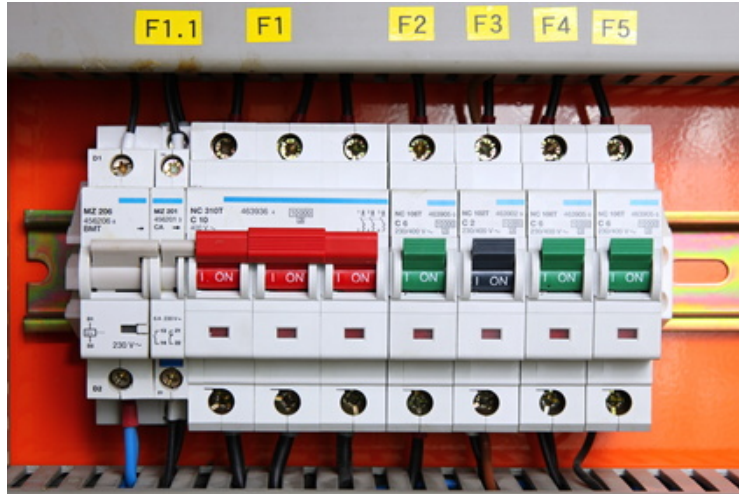
We know what you're thinking: "*Fuses?! Come on, I have bigger issues...*"

We'll bet no bigger than an arc flash incident that injures a worker and costs a company millions of dollars in regulatory penalties, medical expenses, lawsuits, workers' compensation, equipment replacement, and lost production.

Exactly.

This Spring, add fuses to the checklist. **Review different fuse protection options with your staff.** This should include arc-flash hazard mitigation, Type 2 protection of motor starters, and improved short-circuit ratings. Go over the hazards and pitfalls of installing fuses with improper ratings. Assess your existing short-circuit protection requirements, consolidate inventories, and consider if you should upgrade to UL Class RK1, J and CC fuses with superior current-limiting protection.

Properly selected fuses reduce the magnitude of potential arc-flash energies; improperly replaced fuses increase risks to electrical workers and your bottom line. Done properly, these steps can deliver an optimized circuit-protection system, help keep people safe, and ensure that production continues to buzz right along.



Staff Spring check-up

Layoffs in plants have been a fact of life recently. As a result, many plants have lost some of their **best test equipment: machine operators**.

If you have new crew members, or even if you're fortunate to have just old hands on staff, give them a rundown of how they can help you prevent maintenance problems.

Encourage them to closely monitor their equipment.

- Watch for signs of trouble.
- Listen for unusual noise that could signal coming problems.
- Keep a nose out for overheated components.
- Notice strange vibrations that can indicate mechanical trouble.



Give your operators the authority to shut down a machine they believe is likely headed for a major failure. A false alarm is better than a big malfunction that damages other equipment and shuts a line down.

Finally, make sure you've posted who you want contacted in the event of a plant problem. The list should include production staff and outside resources that can be called during off-shifts and weekends.