How To Shrink Processing Equipment Maintenance Costs

A key to keeping a processing facility running at optimum performance is routine upkeep on equipment. Preventative maintenance on your plant’s equipment is an excellent starting point to reduce costs, but there are other ways to lower overheads and keep your plant highly efficient. Here are a few questions to ask to do so.

What’s Vital, What’s Not?

Prior to making a decision to purchase processing equipment, speak with its manufacturer and your plant’s operators and engineers about it. Be sure to discuss whether or not suggested preventative maintenance is in fact needed, as unneeded upkeep can cause equipment malfunctions. Further, be sure to review maintenance procedures annually, making any necessary adjustments as necessary. By following this strategy, your company can get the most out of its equipment while minimizing downtime caused by breakdowns.

Is Maintenance REALLY Needed?

Processing equipment manufacturers offer suggested timeframes to perform maintenance and even rebuild machines. However, these recommendations may not be completely accurate with your facility’s needs. If a particular piece of equipment’s manufacturer suggests maintenance every three months, but the equipment is only running for a few, sporadic hours in that time frame, is the effort of upkeep really needed? Make sure your equipment is on a maintenance schedule applicable to its actual use.

When’s The Best Time For Maintenance?

Routine upkeep on your facility’s equipment should be just that: on a scheduled routine. Examine the patterns of productivity of each machine and schedule maintenance around downtimes. This will allow your plant to take equipment out of service at a time that won’t hinder efficiency much.

Can Employees Be More Efficient?

Any time your facility can keep maintenance and repair work in house is a time of cost savings. It may be beneficial to train employees to do these tasks on a routine basis. This will take the weight of repairs off of senior staff, and even a paid third party. Production employees should be able to clean processing equipment, complete inspections of machines and parts, and examine equipment for non-characteristic behavior. Should the machine begin to act in an uncharacteristic manner, an expert should be brought in to examine the machine and plan a course of action.
Is There An Overall Upkeep Plan?
Preventative maintenance is only one form of caring for your facility’s equipment. A complete maintenance plan for your facility's processing equipment should include two other forms of upkeep: predictive maintenance — using best practices and prearranged plans to determine when a machine will need attention — and reactive maintenance — unplanned, but necessary fixes and repairs. By using all three maintenance types together can help control costs while maximizing production times and minimizing downtime.

Here are five tips to keep your equipment in top form:

1. **Upkeep**
   A great place for processors to start is to simply follow the equipment manufacturers’ recommendations for planning preventative maintenance. Regularly inspecting all of the equipment’s components, replacing worn out parts, and upgrading various components to higher-quality alternatives can help to extend the functional life of the equipment and avoid any costly breakdowns. Additionally, by keeping a detailed log for each piece of equipment, processors can ensure that preventative maintenance practices are being properly followed. Don't forget to regularly lubricate your equipment with the proper grade lubricant.

2. **Routine Calibration**
   Equipment gauges can naturally fall out of alignment over time, which can cause issues such as disproportionate mixing or inaccurate weighing of products. By regularly calibrating equipment, processors can bring gauges back into alignment and restore accuracy throughout the production line. To be sure all equipment continues to maintain a high level of performance, processors should aim to regularly calibrate their equipment at least once per month.

3. **Keep Extra Parts**
   Even with diligent preventative maintenance, equipment can still experience breakdowns. In the event of a breakdown, processors can save valuable time and reduce operational downtime by stocking the spare parts recommended by the equipment manufacturer. Having part replacements on hand will enable processors to get the equipment up and running again and limit the losses of any breakdowns that may occur.

4. **Operator Education**
   As with many elements of production, there is a right way and a wrong way for processing equipment to be operated. Incorrect operation will likely cause unnecessary increases in wear and tear, reducing the functional life of the equipment. Worse still, improper operation can result in outright equipment breakage, which can result in costly replacement or repair. Spending the upfront time and cost to properly train employees is an investment that will pay off in the long run. When operators are properly trained in the setup and orientation of processing equipment, production efficiency can be improved and equipment will last longer.

5. **Inspection**
   Aside from preventative maintenance and calibration, equipment needs to be inspected on a regular basis. One of the best ways to approach inspection is to create checklists for what to look for in the way of wear and tear and inspect all equipment components thoroughly. Although inspection may cost time, close inspection can catch potential breakdowns before they happen, limiting downtime and mitigating repair costs.