How to Protect Your Gyrator and Extend Service Life
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Chances are, you are fully aware that to keep product quality high and minimize downtime in today's processes, every part of the system must operate without fail. It's easy to forget the small hidden-away mechanisms or to take them for granted if they operate dependably for years on end. The Kason gyrator may be one of those "hidden" units that tends to be forgotten.

By reviewing the following sampling of problems that others have encountered, you may avoid them and extend gyrator service life. We have noticed that some customers inadvertently allow the Kason gyrator to struggle with more of a load than it has been designed for. A good rule to remember is: "Never overburden the Kason gyrator!" The maximum permissible load is full load current. If there is excess load it indicates malfunction or a prohibited condition. Typically, a problem such as one of the ones given below, occurs:

1. When the machine fills or is buried by feed, the product downstream may be plugged or the feed system is excessively oversized. The solution may be installing a valve or feeder above the circular screen separator.

When stopping a system, always run the circular screen separator (as well as the upstream equipment, if there's no valve) until it is empty. This prevents excessive lurch and amperage during shutdown and start-up. If a system is cycling on and off, it is usually better to let the circular screen separator run continuously than to cycle it along with the rest of the system.

2. If spillage or trash within the base encroaches on the path of the eccentric, inspect this area more frequently and clean it as needed.

3. It's worth remembering that the eccentric should clear the seal to leave enough room for free motion.

4. If you see the flex connector tugging at the spout or become rigid with accumulation of solids within, then the downstream handling equipment is not taking the material fast enough. Again, carefully examine downstream equipment to speed up the processing rate.

5. If you hear the spout banging... against a stationary structure, relocate the spout away from the structure.

6. If snow, ice, or feed are able to enter the separator while it is idle, make it a habit to inspect the separator and remove any snow, ice or feed before startup.

7. In regions where temperatures may become extremely cold, grease in the gyrator may stiffen during a weekend shutdown. To ease starting, lock out the electricity, rotate the gyrator by hand several times, close the access door and start the gyrator. Although we gave some tips on which types of Kason grease to use and uniform torque values for Kason gyrators in the article, "How to Get Along with Your Gyrator's Bearings," (Screen tips Volume 4 Number 2) we didn't discuss how much should be used. The 48 inch diameter unit, for example, uses 3 grams for both the top and bottom bearings after every 350 operating hours. After 8000 operating hours or two years, whichever comes first, bearings should be cleaned and repacked with Kason Grease. Excessive grease can also harm a gyrator so it's important to inject the specified amount of Kason grease. Information such as this is found in the instruction manual.

8. Other problems that can overtax a gyrator include loose clamp ring(s), broken springs, or excessively worn bearing. Regular inspections and prompt replacement prevent one problem from becoming two problems.

9. A motor cable installed without slack can lead to problems. When the motor is installed, the cable should be threaded into the junction box leaving a lazy "8" curve so that the cable doesn't tug during operation nor when the live frame lurches while coasting to a stop. However, the "8" curve should not be so large or loose as to allow flapping, chaffing or tangling with the eccentric.

10. Unbelievable as it may seem, some separator users are so anxious to put the separator to work that they overlook removing the shipping brackets. This can quickly lead to gyrator or machine failure.

Not every misuse of Kason gyrators is listed here so the most prudent advice is f
to carefully follow Kason instruction manuals and call your representative or Kason in Millburn, NJ, if you have questions. We are all anxious to see you get long service life from your gyrator.