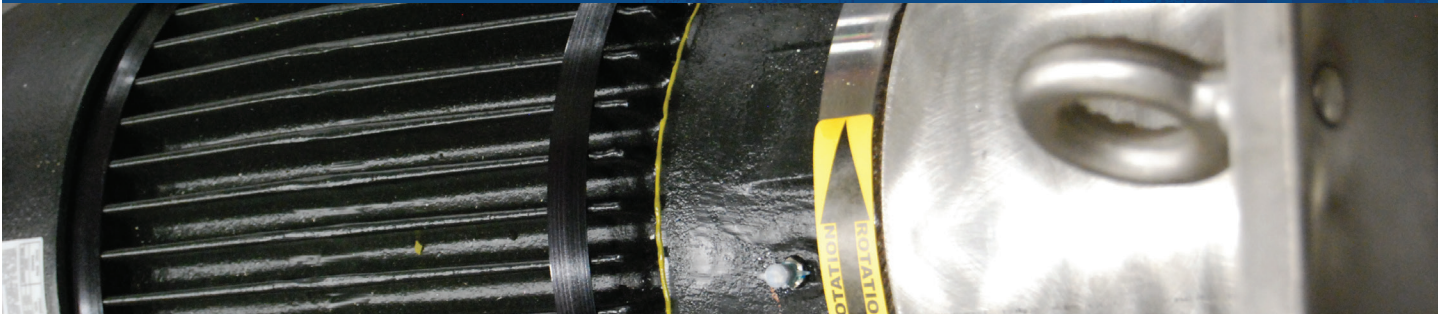




## Repair or Replace?



### How to know when it's time for a new industrial pump:

To repair or to replace a malfunctioning pump? A question that arises at an untimely moment. Having reliable advice is critical. Your decision will not only have immediate implications for the bottom line, but also for safety, operational efficiency and long-term cost-effectiveness.

GPM serves companies across a range of industries – from mining and manufacturing to aerospace and power generation. We represent world-class manufacturers like Flowserve, Sundyne and Tsurumi; offer unparalleled repair services; and manufacture the GPM-Eliminator, the world's toughest slurry pump.

#### Diagnosis

The symptoms of a pump problem can be obvious or subtle. The most obvious symptom is, of course, loss of performance (or no performance at all). No performance indicates a major problem.

Subtler symptoms of an issue include excessive heat, noise, or vibration. These are indicators of something wrong with the pump and/or with the system. Address the issue proactively to avoid a surprise failure.

Record the symptoms and document what was happening in the time preceding its onset. Did you change anything with the system? Has the pump been noisier than usual? Was the pump sized and installed correctly? Review past performance logs, if available.

Performance issues are often due to improper installation, faulty sizing, or internal problems like an imbalance or damaged shaft, bearing, or seal. (Watch for a future report on surprising things that can make your pump fail). Unfortunately, it's difficult to discern at a glance what the problem is and what will be required to remedy it.

After a pump starts acting up, you have two options that will significantly increase your chances of determining the root cause of failure. (GPM would be happy to assist you with either option). One, have the pump properly inspected by a trained field service technician. Two, pull the pump and send it to an authorized repair facility.

Under no circumstances should you disassemble the pump in an attempt to “find the problem” unless you are a trained field service technician. Doing so will drastically reduce the odds of being able to diagnose and repair the problem.

## Considerations

After you’ve got a definitive diagnosis, determine whether repair is an option.

If you have a GPM-Eliminator, the answer is usually “yes.” Our pumps are so durable and so overbuilt we can almost always repair them. With other pumps, it depends. Many common pump issues can be fixed with a minor repair or with replacement of a small (yet critical) part.

Common fixable issues:

- Electrical problems
- Damaged bearings
- Damaged or worn shaft
- Failed seal
- Renew clearances
- Imbalance

With an older pump, you may run into the issue of part availability. (This is not an issue with GPM pumps. We stock over \$3 million worth of parts in our inventory).

There isn’t a year or age cutoff for when a pump must be replaced. In fact, GPM recently repaired a pump manufactured in 1948. The repair cost \$7,500; replacing the pump and modifying the system could have cost nearly ten times that much.

Compare the time and cost estimate for repairing the pump with the time and cost of replacing it. Don’t forget to factor in the expense of down time when working out the cost of each option.

For reference, typical repair time for GPM is 2-3 weeks. Emergency jobs can be turned around more quickly. Ask about warranty on repairs. Does the repair shop or service perform work to OEM specs? Can they measure and show that? What kind of warranty do they offer on repaired equipment?

GPM works to OEM specs and give the same warranty on our repairs as on our new pumps.

Finally, would a new pump be more effective than the one you’ve got now? [Read this case study showing how the GPM-Eliminator increased safety and decreased costs in one of the most challenging industrial settings: a steel mill.](#)

**Contact us for more sales and service information.**

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