



## GPM-Eliminator 30th Anniversary

The year was 1987. Ronald Reagan sat in the oval office, the Minnesota Twins were on the way to winning their first World Series, and industry in northern Minnesota was rebounding after a recession. GPM, Inc. had been selling industrial equipment and supplies to the mining and power generating industries for 10 years, but one specific challenge kept creeping up with customers across the board.

It seemed impossible to find a reliable, heavy-duty submersible slurry pump. Vertical cantilever-style pumps dominated much of the market share at the time despite their drawbacks with design limitations such as their lack of bearing support and an exposed pump shaft. At GPM, we knew we could do better. The task was set: GPM would create a solution that would solve our customers' slurry pumping challenges.

Pete Gemuenden Sr., GPM Founder, President and Chairman of the Board, wanted to design a GPM product that could handle the nastiest submersible slurry applications in the world. These tough applications – like abrasive mine waste or scrubber sludge – wreaked havoc on cantilever pumps as well as lighter duty submersible pumps. Both pump types were known to break down when overworked, causing unplanned outages, costly downtime and issues related to:

- Clogging sumps
- Motor failures
- Cable entry failures
- Premature wear on the liquid end parts
- Shaft, mechanical seal and bearing failures
- Difficulty with installation and removal

The GPM team put their noses to the grindstone to improve key slurry pump challenges, and through research efforts, collaboration, decades of experience and most importantly, listening to customers, Pete knew that solving this challenge would be based on one simple concept.

**“Put the whole thing in the sauce!”**



### A Solution was Born:

Over-engineered. Submersible. Heavy Duty. Reliable. After taking into consideration all the issues and problems that customers were having, GPM wanted to go bigger, stronger and more heavy duty than anyone else in the marketplace. Applications like taconite pellets, lime transfer, flue gas desulfurization, ash transfer, tailings ponds and coal transfer (among others) tend to be incredibly tough on pumps. With the wrong pump in place, equipment is practically eaten alive. GPM began building a pump that was Made Tough. It had to stand up to these conditions and fight back. The newly designed submersible slurry pump included:

- Oversized shaft and bearings
- Class H insulated motor
- High-Chrome liquid end metallurgy
- Spray hole agitation technology
- Double mechanical seal
- Triple compression cable entry

## Liquid End Comes to Life

It was now 1988, and with the pump design firmly in place, it was time to begin the manufacturing process. The first 4" high-chrome liquid end castings for the LH series pump were poured just blocks away from the very mines that were supplying the precious iron. The Staver Foundry, located 60 miles north of GPM, Inc in Virginia, MN, led the charge and supplied our pump liquid ends for many years. Staver ultimately closed in 2006, but they were a critical supplier partner in the early years of our manufacturing history.



## Powered Up

After completing several research and development efforts with motor manufacturers, GPM found the best option to drive power to the newly designed liquid end. We selected KGI motors for production. Once GPM received the motors at our headquarters in Duluth, Minnesota, we modified and re-assembled the individual motor components to incorporate the all-important double mechanical seal and thrust bearing configuration. Completing this critical step meant it was time for liquid end adaptation. Eventually in 1995, GPM decided that to have more control on lead times and overall quality, agreements were made with the Baldor Electric Company to supply bare rotors and stators so that GPM could manufacture and assemble motors in-house. GPM machinist George Papas was instrumental in getting the newly designed pumps completed and ready to be put to the test.

## What's in a Name?

When components started to come together, and the pump began to take shape, we knew it was time for a name. The pump was aptly named the GPMCO (pronounced GEMCO) pump. This name stuck for several years until the pump was

appropriately renamed the Eliminator in 1991. Why? You guessed it. This tough pump Eliminates everything in its path.

## Put to the Test:

The first opportunity for a GPM-Eliminator pump came from a major Power Generation customer in North Dakota. The engineering and maintenance teams at the plant were going back and forth between cantilever pumps and submersibles with undesirable results. Those pumps were lasting less than 1 year, and the submersibles were having continuous problems with seal failures and water getting inside the motor. GPM salesman Mike Haley worked closely with the mechanical maintenance supervisor at the time, Bill Peterka, and it was ultimately decided to give the GPM-Eliminator a chance. Pump #1, a SBLH4S40-4T4, was put into the bottom ash wash down application to pump 400 gpm. After 4 successful years of continuous operation, the pump was pulled for preventative maintenance practices, serviced and eventually reinstalled. Over those 4 years, several other GPM-Eliminator pumps were manufactured and installed into additional power generating and mining applications with great success and the rest as they say, is history!



## GPM-Eliminator 30 years later:

The GPM-Eliminator product line has certainly expanded over the last 30 years from our industry-leading submersible design with new innovative solutions including the EW and GT series liquid ends, horizontal pumps, vertical pumps, extended shaft pumps, submersible mixers and more. Through continuous research and development efforts, advances in engineering and technology, and our tried and tested manufacturing process, we continue to strive to reach new heights and stake our claim as the toughest and most reliable submersible slurry pump manufacturer in the world.