GIW’s MDX Pump Achieves 4,000 Hours of Continuous Operation

At GIW Industries, Inc. we don’t just manufacture pumps, we deliver slurry transport solutions to your industry every day. That’s because everything we do revolves around supporting you. When you choose GIW, you gain a partner that will support you through your most complex slurry transport challenges.

A Dedicated Partner
Operators at a Chilean copper mine got to experience this partnership firsthand. They turned to GIW after years of dealing with poor performing mill pumps. These pumps required a costly mill outage every 800 hours. Leaders of the mine began looking for an alternate supplier that could help them achieve a reliable shutdown schedule, minimize expenses, and meet a high safety standard.

GIW responded by custom-designing an improved suction liner and impeller to be installed inside the existing competitor pump, providing improved hydraulics and wear life. During the initial run of the new GIW technology, the customer was astonished to see an “almost new” suction liner after first inspection at 1300 continuous hours. Keep in mind, the customer was accustomed to failures at 800 hours with their old supplier.

The mine operators were so impressed they decided to replace the entire competitor pump with a complete GIW MDX-750, the world’s largest mill pump, which provided 2,000 hours of reliable wear life and reduced plant outages to just four per year.

Raising the Bar
Since that time, the professionals at GIW have successfully installed seven total MDX-750 pumps in the mine’s concentrator plant. Once the lines were upgraded to GIW technology, the customer set yet another new target for success: To extend the operational cycle and reduce plant outages from four to two annually.

To accomplish this goal, they would need cyclone feed pumps that could run 4,000 hours between shutdowns with no operational interruptions.

Due to the size of the pumps and severity of the mining conditions, this was a huge undertaking — one that had never been accomplished in the industry. However, GIW experts put their knowledge of the customer’s systems and their advanced metallurgy to good use to find a solution.

GIW engineers developed a brand-new material technology called Endurasite. This innovative material is capable of resisting the effects of abrasion for extended periods. When applied to the MDX-750 high wear wet-end parts, this specially processed, ultra-wear-resistant white-iron alloy vastly improves pump wear life and, in turn, extends time between shutdowns.

GIW experts not only achieved the customer’s goal of 4,000 hours of continuous operation, they also managed to exceed it! Annual shutdowns were cut in half, drastically improving the total cost of ownership with an estimated savings of $6 million USD per mill line.

GIW’s continual development mindset has taken the Chilean copper mine’s pumps from 800 to 4,000+ hours of continuous operation. It’s an achievement — and long-term responsibility — that GIW doesn’t take lightly.

Your Success Is Our Priority
GIW is dedicated to making your job easier, safer and more efficient with innovative product features. Our focus on system analytic technologies and new wear programs allow us to solve problems in the field. You can count on GIW to provide personal assistance when and where you need it — either on the job site or at one of our service centers. This means you can spend more time running your business and less time worrying about equipment malfunctions.

Discover what your business can do when dedicated support revolves around you.