

Custom Solutions for Launder System

A Ball Mill production line in a Mexican mining operation was constantly disrupted due to sedimentary buildup. A complete pipe replacement took place every two to three months. On average, the pipe joints had to be repaired every three weeks, which caused a halt in production. Excessive vibration was also present due to turbulent flow from the cyclone to Ball Mill Cart. After reviewing the current system, it was estimated the **operation was losing \$3 million per year** because the system was not passing material correctly.

The Solution

Valley Rubber designed, engineered, manufactured and supervised installation on a system that included a Vertical Chute, an ST Box Reception Chute, and a Launder System that contained magnetic Rubber-Ceramic Liner insets that are projected to outperform the life of the original system by at least eight times.



Before: The old system required constant maintenance due to the material buildup in the pipes.

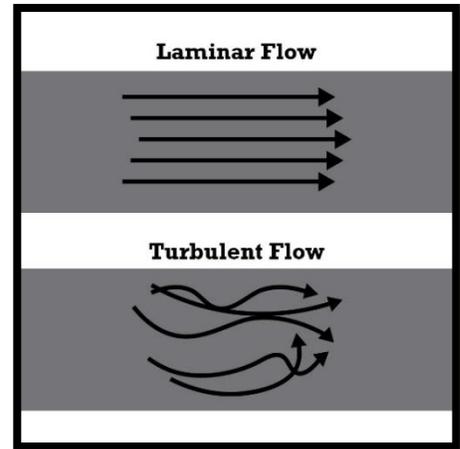


After: Valley Rubber's new system installed.

Benefits from the Solution

- Maintenance: After 8 months of operations, the system has not stopped once for maintenance.
- Production: Because the solution increased production to an all-time high on this line, the operation replaced their existing cyclones to larger capacity units, resulting in a 20% increased output without issues.

- **Guarantee:** Our guarantee covered one year of operations without any maintenance. At the current wear rates, the Launder System will last beyond two years.
- **Stable System:** The issue concerning vibration was resolved by eliminating the turbulent flow; all has been converted to laminar flow.
- **Reduction in Manhours:** Due to the great results of this project, maintenance personnel are not needed in this part of the operation.
- **ROI:** The return on investment was recovered in the first 2.5 months of operations.
- **Noise Reduction:** The installation of the Launder System drastically reduced the noise level.
- **Maintainability:** Due to the ergonomically design of the replacement parts, maintenance will be much easier.



The benefits from the custom project continue to positively impact this operation. For more information on how Valley Rubber can develop a solution for your toughest issues, please visit us online: ValleyRubber.Solutions.