

Total automation leads to reliable milling

by John Koorn, International Sales Manager, Laidig Systems Inc, USA

Four millers are often faced with significant issues when storing and reclaiming their product that hinder their productivity and decrease their revenue, such as bridging, product infestation, channel flow, not achieving a First-In-First-Out material distribution, and employee safety.

Laidig Systems is a global leader in designing and manufacturing reclaim systems that automate the unloading of “difficult to flow” dry bulk materials from storage silos and domes. The reliability, flexibility, and expertise of Laidig’s reclaim systems have proven to be invaluable for industrial, process-driven applications such as flour milling, and became the perfect solution for Harinas Elizondo’s flour milling operation in Mexico City.

Bran issues

The problems that Harinas Elizondo experienced were problems that Laidig Systems has been solving for almost 60 years. Laidig has and continues to excel in developing solutions and adding

value to combat the issues that Harinas Elizondo was facing.

Their primary needs were to: store product, expand their current capacity, move the product from the silos and domes, and to do so by using a fully automated reclaiming system in an environment that focuses on efficiency, safety and reliability.

Bran is a significant revenue source for Harinas Elizondo and their flour milling operations. It was imperative to find a better silo unloading solution to allow their flour milling process to operate at maximum efficiency.

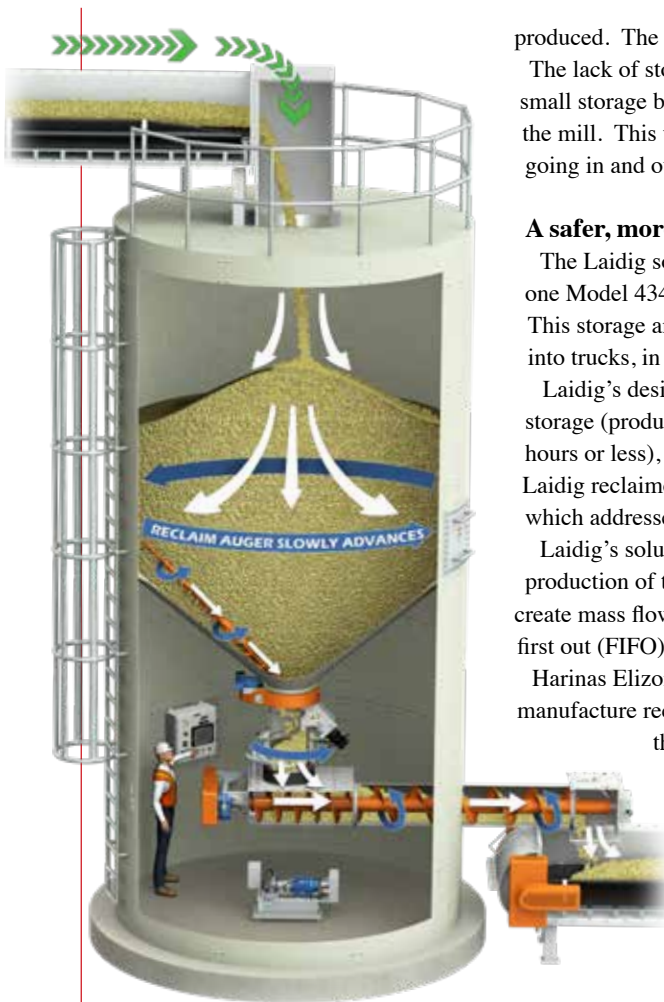
Total automation, reliability and flexibility were primary needs and also key elements that have a dynamic effect on flour mills. Harinas Elizondo was able to satisfy all of these when they chose to work with Laidig Systems.

Consolidation complications

In 2008, Harinas Elizondo made an acquisition that forced them to change all of their equipment. That change increased their capacity to mill more flour, which also increased their bran production.

It was discovered very quickly that there was a lack of both storage space and storage capacity to account for what was being





produced. The increase in product also affected personnel hours and safety.

The lack of storage space and capacity forced employees to manually unload the bran out small storage bins – becoming a 24 hour/seven day/week process in order to keep up with the mill. This wasn't cost effective to the company and it wasn't safe having employees going in and out of the storage bins.

A safer, more efficient solution

The Laidig solution included three silos complete with two Model 8330 Cone Bottom and one Model 4345 Cone Bottom fully automated, hydraulically powered reclaim systems. This storage and reclaim system solution provided faster automated load-out of the bran into trucks, in a tight area that maximized their output and their space.

Laidig's design allowed Harinas Elizondo to accommodate up to five days of material storage (producing flour 168 hours/week), reduced the amount of loadout time per week (40 hours or less), and decreased the amount of employees to perform the work. The unique Laidig reclaimier and silo design also prevented employees from going in and out of the silo, which addressed their safety concerns.

Laidig's solution had an immediate impact on areas that contributed to the efficient production of the mill including: reducing and eliminating silo-bridging fears, helping to create mass flow, decreasing the potential for product infestation, and maintaining a first-in-first out (FIFO) material distribution, which helped increase the quality of the stored bran.

Harinas Elizondo had a major challenge and relied on Laidig to design, engineer, and manufacture reclaim systems to store and reclaim bran to be sold by bulk, without impairing their flour production process. With increased storage capacity and the ability to move the bran out of their silos safely, Harinas Elizondo now has more flexibility in how they store their materials, how it is unloaded, and sold via bulk trucks or in bags.

Laidig Systems was the perfect solution to a problem that had the potential to get worse. Laidig's reputation and expertise in bulk storage and material handling solutions was exactly what Harinas Elizondo needed.

www.laidig.com